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Experiences of Domestically Qualified Nurses and Internationally Qualified Nurses of Workplace Integration into the German Nursing Workforce in the Context of Nursing Workforce Shortage

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To my daughter Freya Ruth.

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LIST OF ABBREVIATIONS

ADLs	Activities of Daily Living
ADN	Associated Degree in Nursing
AI	Artificial Intelligence
BMFSFJ	Bundesministerium für Familie, Senioren, Frauen und Jugend [English: Federal Ministry for Family Affairs, Senior Citizens, Women and Youth]
BSN	Bachelor of Science of Nursing
CEFR	Common European Framework of Reference for Languages
CNA	Certified Nursing Assistant
COREQ	Consolidated Criteria for Reporting Qualitative Research
CT	Computer Tomography
DKFZ	Deutsches Krebs Forschungszentrum
DNP	Doctor of Nursing Practice
DQNs	Domestically Qualified Nurses
e.g.	Exempli gratia (for example)
EHR	Electronic Health Records
EU	European Union
FADA	Federal Anit-Discrimination Agency
GDP	Gross domestic product
GHCS	German Health Care System
ICN	International Council of Nurses
IQNs	Internationally Qualified Nurses
IT	Information Technology
LPN/LVN	Licensed Practical Nurses or Licensed Vocational Nurse
MRI	Magnetic Resonance Imaging
MSN	Master of Science of Nursing
NCT	National Centre for Tumour Disease
OECD	Organisation of Economic Cooperation and Development
QCA	Content-structured Qualitative Content Analysis
USA	United States of America
WHO	World Health Organization

PREFACE

This dissertation titled "*Experiences of Domestically Qualified Nurses and Internationally Qualified Nurses of Workplace Integration into the German Nursing Workforce in the Context of Nursing Workforce Shortage*" was written in the field of Health Services Research at the Medical Faculty of Heidelberg University between August 2019 and January 2024. It explores the integration of internationally qualified nurses in the German nursing workforce in the context of nursing shortages. The dramatic shortages of highly qualified nurses pose significant challenges to healthcare systems globally. Healthcare systems will only be able to face future challenges, such as an increasing number of multimorbid patients due to an ageing population and scientific advancements in medicine and other related fields with an adequate number of qualified nurses and other healthcare professionals. Recruitment and integration of internationally qualified nurses is one strategy many high-income countries have adopted to address the shortages. However, successful workplace integration is influenced by a variety of factors. By identifying factors that can facilitate or hinder successful workplace integration from the perspective of both domestically and internationally qualified nurses may improve the integration process and minimise nursing turnover. Therefore, this dissertation explored the experiences of domestically and internationally qualified nurses of workplace integration to identify what is needed to successfully recruit, integrate, and retain internationally qualified nurses. The research included a Survey Study (Part A) and an Interview Study (Part B) conducted at four hospitals in South Germany. The literature used in the context of this dissertation refers to the period up to February 2024.

1 INTRODUCTION AND BACKGROUND

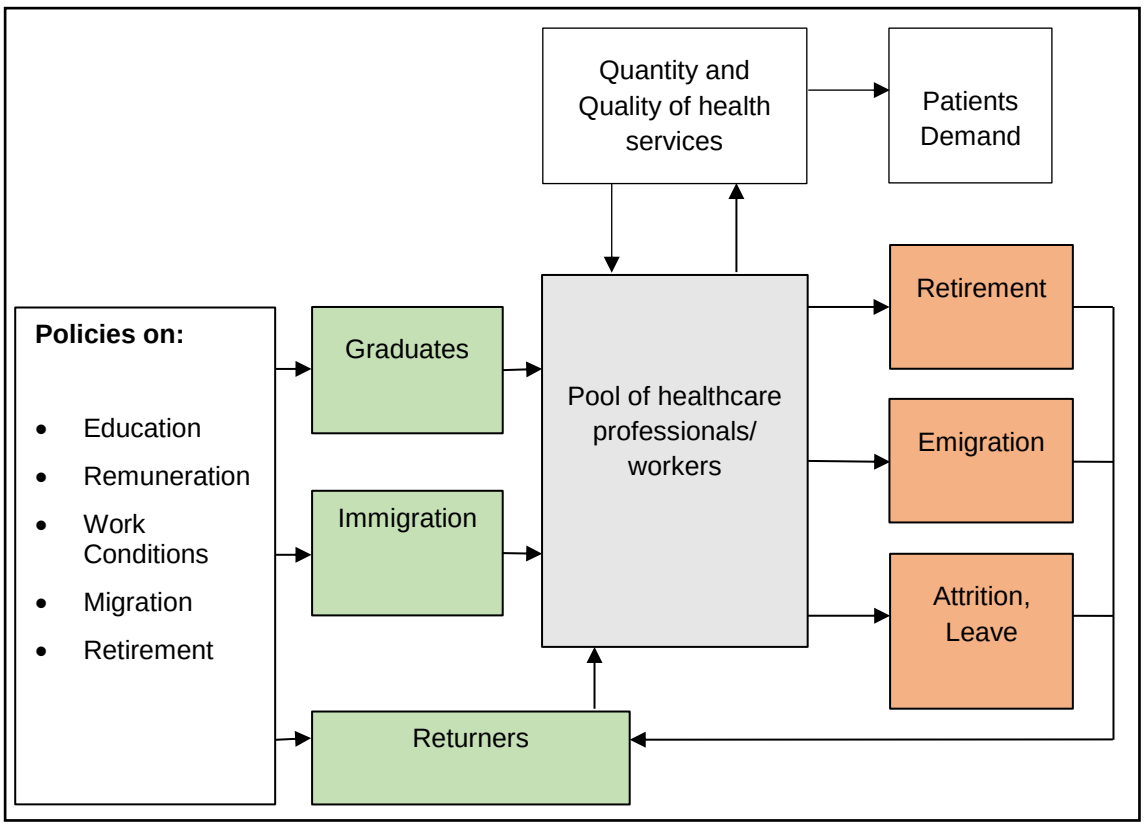
This chapter introduces and explains the purpose of this research undertaking and provides background context for the subject matter examining workplace integration of internationally qualified nurses (IQNs) into the German nursing workforce in the context of nursing shortages in Germany.

1.1 Overview

In 2007, the World Health Organization (WHO) published its *Health Systems Building Blocks Framework* (WHO 2010a) intending to enhance a shared understanding of what a healthcare system is and what was needed to strengthen it. According to this framework, healthcare systems are conceptualised as consisting of six building blocks: (I) service delivery, (II) health workforce, (III) information, (IV) medical products, vaccines, and technologies, (V) financing, (VI) and leadership and governance as well as process elements such as access, coverage, quality and safety and outcomes measures such as health and health equity, responsiveness, social and financial risk protection and improved efficiency. Each block has interconnecting roles and functions, yet the interactions of the six building blocks affect the effectiveness of healthcare systems. The WHO recommended supporting and strengthening a healthcare system based on this framework. The aim of healthcare systems strengthening is to manage the interaction of the six building blocks in a way that leads to more equitable and sustainable improvements across health services and health outcomes. Block II (Health Workforce) can be seen as the most critical part of the system: healthcare systems can only function with an adequate number of health workers. In order to improve health service coverage and ensure the right to equal access to healthcare, healthcare systems depend on the availability of health workers. Numerous studies showed a positive link between the supply of health workers and a population's health outcomes. However, the need for more human resources to deliver essential health services to achieve specific health outcomes is characteristic of increasing numbers of countries across the spectrum of low- and high-income nations.

The need for more and better qualified health workers is currently one of our most significant societal challenges. The problem is complex and has impacted the healthcare industry for decades (Liu et al. 2017; Zurn et al. 2004). Managing the healthcare workforce is a complex task and evolves according to the changing dynamics of demand and supply (Bourgeault et al. 2019; Lopes et al. 2015). *Demand* is defined as the number of health workers a market can absorb. It is influenced by how many health employers

are prepared to hire and how many people are ready to pay for health services. Service demand and service need are not equivalent. *Need* refers to how many health workers of a specific type are required to achieve healthcare objectives. Unemployment in low-income countries is due to low demand, not a decreased need for health services. Workforce shortages in high-income countries are driven by higher demand, not due to a greater need for health services. *Supply* is defined as the national stock of health workers, including all health workers who are active in the health labour market, whether employed or not at the present moment or at a future point in time based on assumptions on workforce flow (Dreesch et al. 2005; Dussault et al. 2009; Lopes et al. 2015). The primary source of human resources is graduates of national training institutions, followed by migrants. In addition, returns, e.g. professionals who left the labour market at some point and later become active again, contribute to the stock of health workers. They may leave their profession for family, health, or other reasons. The pool of health workers is declining due to a number of factors including: retirement, attrition due to ill health or death before retirement, or professionals leaving the healthcare sector for another sector or leaving the country to work elsewhere (Dussault et al. 2009) (Figure 1), these factors create supply shortages limiting a healthcare systems capacity to meet demand for health services.



Boxes in green contribute to the pool of healthcare professionals/workers; boxes in light orange reduce the pool of healthcare professionals/workers. Inflow and outflow are influenced by different factors such as policies on education, remuneration, working conditions, migration, and retirement. Quantity and quality of health services is dependent on the pool of healthcare professionals. The pool of healthcare professionals in turn has an impact on the quantity and quality of health services. Quantity and quality of health services influences patient demand for health services (Dussault et al. 2009; Simoens et al. 2005)).

Figure 1: Simple model illustrating the evolvement of the pool of healthcare professionals based on Dussault 2009 and Simoens 2005

1.2 Drivers for Nursing Workforce Shortages

To improve the performance of healthcare systems and enable them to provide accessible, efficient, safe, and effective healthcare, it is crucial to strengthen the healthcare workforce. In recent decades, numerous publications and reports have alerted policymakers to the need to invest in a solid healthcare workforce. Nevertheless, the WHO predicts a 15 million healthcare personnel shortfall by 2030, with the greatest need for qualified health professionals in upper middle-income countries (Liu et al. 2017). European estimates predict a future need for one to two million healthcare professionals and call for urgent policy reforms (Dussault et al. 2010). However, nations at all levels of socioeconomic development fail, to a varying degree, to adequately educate, employ and retain healthcare professionals to meet their population's healthcare demands (Dubois and Singh 2009; Liu et al. 2017; WHO 2016).

Over half of the overall health professionals are qualified nurses, providing essential services throughout the healthcare sector. Nevertheless, according to a report by the

WHO, the International Council of Nurses (ICN), and the Nursing Now Campaign, there is a global shortage of up to 5,9 million nurses, with the greatest gap between supply and demand in Africa, South East Asia and the WHO Eastern Mediterranean Region as well as some parts of Latin America (WHO 2020a; WHO 2020b). Evidence is clear that without a well-performing healthcare workforce, healthcare systems struggle to deliver quality safe services. Not only workforce shortages but also imbalances in the geographical distribution of healthcare personnel (Dussault and Franceschini 2006), poor skill mix, low productivity and poor motivation have been identified as factors that weaken healthcare system performance internationally. Furthermore, in Europe, the population is aging steadily, and there is an increasing burden of chronic illness and the incidence of multimorbidity. These factors are exacerbated by recent technological and organisational innovations advancing diagnostic procedures and generating new treatment possibilities, further extending life expectancy and increasing healthcare service demands. (Liu et al. 2017). Consequently, the need for more and better qualified health workers including highly qualified nurses will increase further.

Different factors influence the demand and the supply of qualified nurses. Evidence shows that demand will likely increase due to economic expansion (Cylus and Al Tayara 2021), increased number of people with chronic diseases (Bonin et al. 2015), population growth, an ageing population (Bonin et al. 2015; De Maeseneer et al. 2019; Nowossadeck 2012), technological advances, and higher patient expectations (Simoens et al. 2005). The supply of nurses is likely to decrease due to an ageing nursing workforce and societal trends towards reduced work hours, and early and partial retirement (Simoens et al. 2005). One key problem causing the global shortages of nurses is that demand for healthcare is increasing; while in parallel the supply of nurses is steadily decreasing. Approximately half of the WHO Member States report to have less than three qualified nurses/midwives per 1000 inhabitants, and about 25 % of the Member States have even less than 1 per 1000 inhabitants (Dal Poz et al. 2007). According to a report of the Organisation of Economic Cooperation and Development (OECD), in the European Union (EU), Ireland has the highest number of nurses (14,7 nurses) per 1000 inhabitants, followed by Finland (13,6 nurses) and Germany (12,6 nurses) (OECD 2023). Although Germany has a relatively high number of nurses per 1000 inhabitants, it has been struggling to meet its the increasing demand for qualified nurses (Reiff et al. 2020). A study predicted a shortage of 520,000 full-time nurses in Germany by 2030 (Prognos, 2012). The main reason for this is the increased demand for healthcare services and the decreased supply of qualified nurses (Kordes 2019). Internationally, different strategies have been generating improvements in the labour market. This includes large-scale

nursing training campaigns (Girts 2019; Janiszewski Goodin 2003), improving working conditions, expanding the recruitment base, targeting qualified nurses who have left the nursing profession to return, improving remuneration (Buykx et al. 2010), the academisation of the nursing profession (Fealy and McNamara 2007) and recruiting internationally qualified nurses (Buchan 2001; Girts 2019; Li et al. 2014; Risse 2018). Although these strategies may have improved the labour market slightly, healthcare systems still struggle to meet their population's demand for qualified nurses and other healthcare professionals.

Historically, changes in healthcare service delivery have been driven by different factors such as the changing pattern of diseases, technological innovations and advances, professional norms (e.g., attitudes to hierarchies), shortages of healthcare professionals, and the drive for increased efficiency and cost-effectiveness. In recent years, infectious diseases have declined due to modern therapeutic interventions, while an increase in chronic disease has been observed. Medical advances have led to people living longer, increasing the number of patients living with complex health needs and multimorbidity (De Maeseneer et al. 2019; Simoens et al. 2005). In addition, many formerly terminal illnesses have taken on a chronic nature due to advances in medical science (and other related fields) and technology (Simoens et al. 2005). Furthermore, clinical practice is changing; the ambulant sector and home care are expanding in part due to a higher number of longer-living seniors requiring health services (Simoens et al. 2005), interprofessional teamwork has become a core element (De Maeseneer et al. 2019), constant performance pressure, and changes within work processes due to technological innovations and digitalisation are just a few factors contributing to a changing work environment (Dubois and Singh 2009; Dussault et al. 2009). Nowadays, tertiary settings such as university hospitals provide care for patients that previously would not have survived. Critical care beds are full with only the sickest patients and patients that would have been treated in intensive care units (ICU) are now cared for on general hospital wards. Many of those former ward patients now receive care in day stay or outpatient settings as well as long-term care facilities, rehabilitation and home care settings (Simoens et al. 2005). These changes and the generalised increased acuity and complexity of patient healthcare needs across health systems will increase the demand for skilled nursing services across healthcare sectors.

Hospital care comprises a major driver of healthcare costs. Average length of stay in a hospital is an indicator of efficiency in healthcare delivery. Cost per discharge can be reduced if the length of hospital stay is short. In addition, shifting care from inpatient to

less expensive settings such as outpatient care reduces healthcare costs further. Therefore, average length of stay in hospitals is one of the most widely used measures of resource utilisation and efficiency in healthcare delivery. Average length of hospital stay has decreased dramatically in the last decade, leading to higher patient flow through hospital care units and environments (Simoens et al. 2005; Stone et al. 2022). Since 2000, the average length of stay in hospital has decreased in almost all European countries. In 1992, for example, patients stayed on average 13,3 days in the hospital in Germany. Whereas in 2020, patients only stayed in hospital for about a week (7,2 days) (OECD 2020). The reduction in the average length of stay in hospital has a direct impact on nurse workload and work demands (Aiken 2008a; De Maeseneer et al. 2019). It is linked to higher patient turnover, which involves increased admission rates, transfers, and discharges. These procedures are labour-intensive and thus increase care demands significantly (Unruh and Fottler 2006). In international comparisons investigating factors that contribute to nurse burnout, burnout rates were found to be highest in countries with a shorter average length of stay in hospital (Aiken 2008a). Excessive workloads and high work demands are associated with the intention to leave the nursing profession, further exacerbating the nursing shortages (Aiken et al. 2008b). The decreased average length of stay in hospital, along with higher patient turnover and thus increased work demands, consequently require more nursing staff.

Moreover, populations are better informed due to mass media sources such as television or the internet and have, therefore, increased expectations concerning standard of health services and healthcare delivery (Simoens et al. 2005). Healthcare delivery is now shaped by patients who demanding faster access to more and better health services; particular demand for more diagnostic services (e.g., computer tomography (CT) and magnetic resonance imaging (MRI) scanning), screening and monitoring (e.g., cancer screening), surgical procedures (e.g., hip and knee replacements), transplant options and elective cosmetics (Simoens et al. 2005). These changes have had profound implications for health services and healthcare delivery (De Maeseneer et al. 2019). These developments have increased demand on healthcare systems and this changes how the healthcare workforce needs to respond and, thus, how well healthcare systems will function in the future (De Maeseneer et al. 2019; Dussault et al. 2009). In order to meet the demands of future generations not only a higher number of qualified nurses but also other allied health, scientific, and technical occupations such as physiotherapists, occupational therapists, radiologic technologists and many more is needed.

Recent technological innovations and digitalisation in the healthcare sector improve the efficiency and quality of healthcare. *Efficiency* can be defined as the relationship between resource inputs and output. It can be distinguished into (a) allocative efficiency, providing the highest value healthcare services for available resources (doing the right things) and (b) technical efficiency, the use of resources during service provision (doing the things right). In order to maximise the use of available resources, the healthcare sector has to be efficiently organised, meaning the least amount of resources is used to produce the most outputs (Cylus et al. 2017). Implementing information technology (IT), for example, reduces the number of complications and adverse outcomes, provides social and economic benefits, and improves the quality of life (Huma et al. 2022). Technological developments such as surgical robots increased diagnosis and treatment options. Artificial Intelligence (AI) have the potential to analyse and identify patterns in complex data and support healthcare professionals in the delivery of care (Ashrafian et al. 2015; Hazarika 2020). Thus, technological innovations can increase the efficiency of healthcare services. In the context of healthcare workforce shortages, increasing the efficiency of the healthcare sector may mean ensuring healthcare delivery with fewer healthcare professionals by implementing technological innovations that reduce workforce requirements. Time-consuming routine tasks such as gathering health information from different healthcare providers and keeping patient records can be simplified through digital solutions and may re-organise the way in which healthcare is delivered. Electronic Health Records (EHR), for example, can improve healthcare delivery by improving accessibility of information, timeliness of response, reducing duplication of tests, reducing delays in treatment, and enabling patients and their healthcare providers to be well-informed and support better decisions (Hoover 2016). Thus, healthcare professionals could be relieved from some time-consuming routine tasks and this would in turn free up time available with patients (Socha-Dietrich 2021). Therefore, technological innovations and digitalisation in the healthcare sector may contribute solutions to decrease the demand for nurses.

Although digitalisation in the healthcare sector may be associated with a more efficient workflow, on the other hand use of eHealth application may create additional work for healthcare workers (Frennert et al. 2023), which remains invisible at the organisational level, for example, teaching patients how to use and manage eHealth applications and resolving technical issues. These additional tasks are often performed by nurses. Additionally, eHealth application can only reduce workload if they can be integrated to pre-existing obligatory documentation systems (Frennert et al. 2023). Technological innovations such as AI should be implemented with caution. Technology can fail, and

healthcare professionals who are not able to recognise errors or carry out necessary tasks without computing assistance can lead to a decrease in the quality of healthcare delivery. Moreover, introducing technological innovations such as surgical robots into healthcare practice is increasing the demand for new skill sets and competencies. Providers of healthcare professionals' education and training programmes are challenged to adapt their curriculum to match the labour market needs in terms of technological advancements (Hazarika 2020; Socha-Dietrich 2021). Healthcare workforce planning should therefore consider that future technological innovations and digital transformation may re-organise healthcare delivery.

Demographic changes over the next 20 years will have a significant impact on society and economy. While demand for health services continues to rise due to an aging population and scientific advances, a large group of nurses from the baby boomer generation will reach retirement age (Buerhaus et al. 2000; Mossburg 2018). In Belgium, Germany and New Zealand, for example, the number of nurses has declined by up to 10 % by 2011 and by more than 15 % by 2021 (Simoens et al. 2005). The gap in the nursing workforce left by the retiring baby boomer generation need to be met by the resource of a shrinking pool of younger people entering the (nursing) workforce (Buerhaus et al. 2000). Furthermore, healthcare workers, including qualified nurses, are at an increased risk for occupational injuries and illnesses due to pressures and risks in the work environment (Karwowski et al. 2005). In addition, older workers become restricted as physical (and sometimes cognitive) limitations due to ageing arise (Silverstein 2008). Research, suggests nurses between 40 and 60 have higher workload demands than other professions (Gabrielle et al. 2008). The combination of extensive physical job demands (e.g., heavy lifting), shift work, an overall stressful work environment and underlying physical and cognitive changes such as a decline of visual and hearing acuity due to ageing places limitations on employees remaining in work as they advance in years (Lee et al. 2012). Nurses have to manage workplace physical and mental demands while experiencing the natural ageing process (Gabrielle et al. 2008). Furthermore, the frequent introduction of new technologies and process innovations adds additional responsibilities and work-related stressors in ageing nurses (Santos et al. 2003). Healthcare systems internationally are reliant on an ageing nursing workforce, who are slowing down. Nevertheless, at the same time they are more experienced and able to offer invaluable professional knowledge and mentorship to junior staff. The supply of highly experienced nurses is likely to decrease as the baby boomer generation is about to retire and the number of graduates in nursing is declining.

Consequently, the healthcare workforce is changing; as the baby boomer generation is about to retire, new healthcare professionals including nurses from a generation that behaves differently than the retiring generation, e.g. they have higher expectations concerning their work-life balance and aspire to a professional life that allows for lifelong learning and development is about to enter the healthcare workforce (Barhate and Dirani 2021; Bencsik et al. 2016). Trends towards more leisure time, part-time work, early and partial retirement are expected to reduce the lifetime of hours worked by nurses during their professional career (Simoens et al. 2005). In recent years, in France, Germany, Greece, Italy, the Netherlands, Portugal and Spain, for example, number of weekly hours worked by nurses decreased gradually (Simoens et al. 2005). The number of weekly hours worked by nurses vary by age following a pattern that is typical of a largely female workforce. Younger nurses tend to decrease weekly hours and increase them again after childbearing age, compared to nurses aged 50 years and above who tend to work a relatively stable number of weekly hours or decrease the number due to partial retirement or other reasons (Simoens et al. 2005). Given the development of society and intergenerational differences within the nursing workforce, nursing managers need to be mindful that nurses from all age groups are recognised as valuable to the nursing workforce. In order to retain nursing staff, duty rosters need to be adapted to the new needs and lifestyles of these differing generations in the workforce

In conclusion, the demand for nurses will increase worldwide, particularly in upper middle-income countries, due to for example, an ageing society, technological advances, economic expansion, and higher patient expectations. In addition, healthcare systems are confronted with a decreasing supply of nurses. The declining supply of nurses is due to, for example, the high number of nurses reaching retirement age, fewer new entrants to the nursing profession, and trends towards part-time work and reduced hours. In addition, many nurses leave the profession for various reasons. Policymakers must implement new strategies to stabilise the labour market in the healthcare sector. History has shown that the migration of international health workers is one strategy to address labour market challenges.

1.3 Migration of Health Workers

International nurse migration is an old phenomenon. Nurses and other healthcare professionals have been moving around the globe for more than a century (Kingma 2007; Mejia 1978). In the WHO European Region, the migration of healthcare professionals has been observed since the 1940s, when healthcare professionals started to migrate to the United States and the United Kingdom from other parts of Europe (Dussault et al.

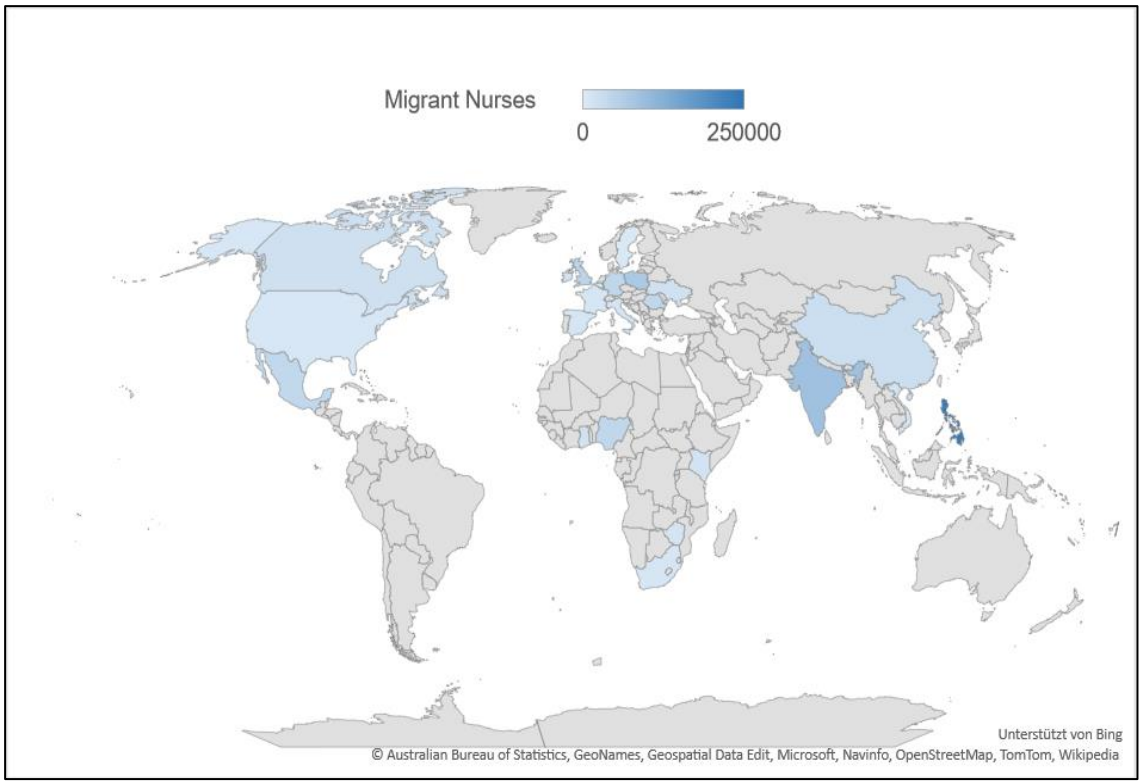
2009; Kingma 2007). Since the 1960s and 1970s, nurses and doctors from Commonwealth countries have migrated to the United Kingdom (Likupe 2006). The Commonwealth is a voluntary association of 56 countries in Arica, Asia, the Caribbean, America, Europe, and the Pacific (Britannica 2022). Nurses from the Philippines, India and South Africa started to migrate to the United Kingdom in the late 1980s. Additionally, nurses, midwives and doctors from sub-Saharan Africa mainly migrated to OECD countries such as Canada, Denmark, Finland, Ireland, Portugal, the United Kingdom, and the United States. Between the 1960s and the 1970s nurses and nursing aides from South Korea moved as “guest workers” to the former West Germany under the Federal Republic of Germany’s Guest-Worker policy. The first bilateral agreement on nurse migration was formed between South Korea and former West Germany in 1963. The agreement aimed at transferring a labour force from South Korea to West Germany and to offer economic aid to South Korea by former West Germany (Jeon 2021). Other migration flows of healthcare workers between high-income countries have been documented. For example, nurses and doctors qualified in Australia and New Zealand started to migrate to the United Kingdom and Ireland or from the United Kingdom and Ireland to Australia, New Zealand, the United States, and Canada (Dussault et al. 2009). In addition, doctors have started to move between Germany, France, the Netherlands, Ireland, Sweden, and Norway. Movements of healthcare professionals among Nordic countries to generate a common Nordic labour market has been documented since 1954. In addition, since the signing of the European Economic Area agreement in 1994 (Blanchet et al. 1994), healthcare professionals from new member states (e.g., Poland, Romania and the Czech Republic) have migrated to older ones such as Germany and Austria (Dussault et al. 2009). The different migration flows show that the migration of doctors and nurses is not a phenomenon of the 21st century. Healthcare professionals have always been a mobile profession.

Fundamental labour market factors mainly determine the international migration of health workers (Kordes et al. 2020). Nevertheless, healthcare professionals migrate for various reasons, and the decision to migrate is usually individual. Although the relative importance of factors influencing the decision to migrate varies from person to person, there are common patterns. Examples are professional development, better working conditions, a better-managed healthcare system, or improved or realistic remuneration (Squires and Amico 2014). Family wealth may also influence the decision to migrate from a low-income country to a higher-income country. Many (healthcare) professionals migrate intending to support their families in their home country financially (Connell 2007). A variety of economic and social context factors can influence a decision to

migrate to another country, e.g. wars, deprivation, and social unrest may all provoke waves of migration (Stilwell et al. 2004). Changes in conditions for visas and work permits also encourage the immigration of (health) workers in specific occupational categories (Findlay 2002). In addition, active recruitment of healthcare professionals from countries such as India (Khadria 2002) and the Philippines encourages migration (Stilwell et al. 2004; Thompson and Walton-Roberts 2019). Thus, the decision of health worker to migrate to another country is influenced by shared intrinsic and extrinsic factors, as well as individual considerations.

1.3.1 Recent Nurse Migration Flow to and within OECD Countries

Although that the number of domestically qualified doctors and nurses has increased in most OECD countries over the past decade, internationally qualified nurses and doctors significantly contributed to this rise (OECD 2019). According to a recent OECD report on the international migration and movement of nursing personnel to and within OECD countries (Socha-Dietrich and Dumont 2021), the Philippines has the highest number of nurses (237,700) leaving their country to work elsewhere. In comparison, this is nearly three times as much as India, which is the origin of the second largest group of migrant nurses (87,821). Poland (70,323) is country three on the list of countries that train a high number of nurses who then emigrate to practice in other countries (Socha-Dietrich and Dumont 2021). The high number of nurses emigrating from the Philippines can be explained by national policy and the education system, which aims to train nurses for the international labour market (Masselink and Lee 2010; Montayre et al. 2018). India has a large population which may explain the high number of nurses emigrating from India to other countries. The high number of Polish nurses emigrating is due to Poland's accession to the EU in 2004 and the associated automatic recognition of nursing qualifications that enable the free movement of the nursing workforce (Socha-Dietrich and Dumont 2021) (Figure 2). Overall, the data shows that internationally qualified nurses (IQNs) contributed significantly to the growth of the nursing workforce in most OECD countries in the last years (OECD 2019).



Countries coloured blue on the world map represent the countries most nurses emigrate from to work elsewhere. Source: OECD Health Statistics 2019; data is from 2017/18 (or nearest year), (Socha-Dietrich and Dumont 2021)

Figure 2: Countries of origin of IQNs who migrate to and within OECD countries

Globally, the top destination countries for migrant nurses are the United States (198,058), the United Kingdom (111,138), Germany (93,000), and Australia (56,927). Within the WHO European Region, the United Kingdom is the country with the highest number of IQN, followed by Germany, Italy, and France (Table 1). These countries are considered high-income, politically stable countries with strong economies. Thus, they can offer a range of incentives to migrant health professionals, such as higher quality of life and personal safety, as well as growth opportunities (Dywili et al. 2013). In addition, high-income countries actively recruit IQNs to address their domestic nursing shortages. According to the WHO, one in eight qualified nurse works in a different country where they received their nursing training. The migration of nurses creates a complex system as it can contribute to nursing shortages in countries of origin and address them in destination countries.

Table 1: Number of IQNs in selected countries of the WHO European Region in 2020/21

Country (Year)	DQNs* n (%)	IQNs** n (%)	Total number of nurses (DQNs + IQNs) n (100%)
Austria (2020)	89,986 (87.7)	12,662 (12.3)	102,648
Belgium (2020)	209,674 (95.9)	8,990 (4.1)	218,664
Estonia (2020)	14,410 (99.8)	26 (0.2)	14,436
Finland (2020)	114,919 (98.6)	1,598 (1.4)	116,554
France (2020)	741,350 (97.1)	21,849 (2.9)	764,260
Germany (2020)	**910,000 (90.7)**	**93,000 (9.3)**	**1.003,000**
Hungary (2020)	63,162 (98.4)	1,035 (1.6)	64,197
Ireland (2021)	34,231 (53.4)	29,834 (46.6)	64,072
Italy (2020)	287,830 (92.7)	22,610 (7.3)	310,440
Latvia (2020)	7,760 (97.4)	208 (2.6)	7,968
Lithuania (2020)	26,134 (99.5)	121 (0.5)	26,255
Netherlands (2020)	190,525 (98.6)	2,681 (1.4)	193,206
Norway (2020)	89,179 (89.4)	6,086 (6.1)	99,749
Poland (2020)	302,896 (99.9)	315 (0.1)	303,211
Slovenia (2020)	8,858 (96.3)	341 (3.7)	9,199
Switzerland (2020)	48,978 (63.9)	19,947 (26.1)	76,663
United Kingdom (2020)	561,514 (83.5)	111,138 (16.5)	672,652

*Domestically qualified nurses (DQNs); **Internationally qualified nurses (IQNs); Source: Data extracted on 01 Feb 2023 11:43 UTC (GMT) from OECD.Stat

The movement and migration of nurses impact both the originating and destination country and the individual nurse, their family, and their community. The contribution of migrating nurses include political, cultural, societal, and economic benefits. The migration of nurses and their families brings new cultural diversity, influences, and professional competencies. In addition, IQNs offer unique language abilities and cultural knowledge that may improve patient care. Migrant nurses benefit their host countries economically (e.g. contributing to national Gross Domestic Product (GDP)) and filling workforce shortages in the destination country. Furthermore, by sending remittances back home, they benefit their home country (Connell and Brown 2004). The migration of nurses promotes and enhances the implementation of policy at national, regional, and international levels, e.g. bilateral agreements for nurse mobility (the United Kingdom and Kenya) or high-level multilateral agreements such as the UN High-Level Commission on Health Employment and Economic Growth, UN Global Compact for Migration and on Refugees, and the WHO Global Code of Practice (Taylor and Dhillon 2011). These agreements aim to address labour rights, mutual recognition of qualifications and integration into destination countries; however, in most cases, these are not well enacted (van de Pas and Mans 2018).

1.3.2 WHO Global Code of Practice on the International Recruitment of Health Personnel

Over recent decades, the migration of health workers has been increasing internationally, especially from lower-income countries with unstable healthcare systems to high-income countries. Migrant nurses typically move from low-income to high-income countries and from rural to urban areas (Kingma 2001). They migrate to more developed countries for different reasons, including better career opportunities, high quality of life, personal safety, and to provide better income and security for family members back in their home countries (Dywili et al. 2013). This phenomenon is not new and has consequences for the healthcare systems of the countries from which nurses are migrating (Kingma 2007). However, the movement of health workers, particularly nurses, from less developed countries to more developed countries is a part of globalization.

To regulate the migration of health workers, the WHO developed the *Global Code of Practice on the International Recruitment of Health Personnel*. This WHO Global Code was approved by Member States in the 63rd World Health Assembly on 21 May 2010 and is the core element of the bilateral, national, regional and global response to the challenges of health worker migration and health system strengthening (WHO 2010b). The WHO Global Code contains ethical principles that apply to the international recruitment of health personnel to strengthen the healthcare systems of developing countries, countries with economies in transition and small island states. It was developed to guide Member States who actively recruit internationally qualified health workers (WHO 2010b). The Code is not mandatory. Nevertheless, Member States and other stakeholders are encouraged to use it. Furthermore, the WHO Global Code facilitates the exchange of information on health personnel and healthcare system issues in the context of migration. As required by articles 9.2 and 7.2(c) of the Code, Member States are encouraged to submit national reports to WHO every three years on measures taken to implement the Code (WHO 2010b).The objectives of the Code are the following (WHO 2010b):

- to implement and promote voluntary principles and practices for the ethical international recruitment of health personnel in consideration of the rights, obligations and expectations of source countries, destination countries and migrant health personnel;
- to guide Members States who aim at implementing or enhancing the legal and institutional framework required for the international recruitment of health personnel;

- to provide a framework that can be used to develop and implement bilateral agreements and other international legal instruments where necessary;
- to facilitate international discussion and advance cooperation on issues related to the ethical international recruitment of health professionals in the context of health system strengthening, with a particular focus on developing countries.

Adopting the WHO Global Code of Practice on the International Recruitment of Health Personal called for more ethical recruitment of health personnel to avoid recruitment in countries with acute shortages of qualified health workers. Monitoring the international mobility of health workers was also a part of adopting the WHO Global Code of Practice. The Code supports countries adhering to ethical principles and not widening the gap between high-income and low-income countries.

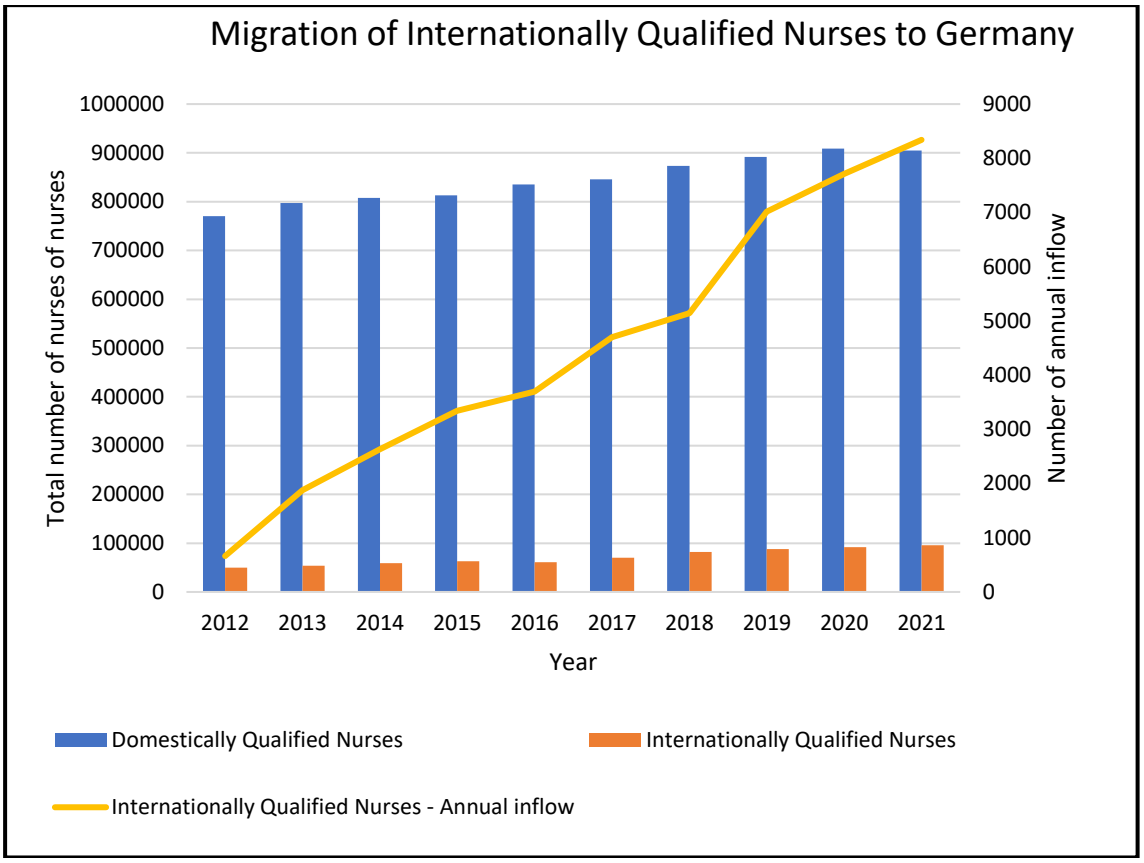
1.3.3 Nursing Shortage and Nurse Migration in Germany

The global shortage of health workers also poses significant challenges for Germany. Calculations of future nursing staff requirements are usually subject to significant uncertainties due to the various parameters that have an impact on the demand and supply (Bonin et al. 2015). Nevertheless, depending on the scenario, the shortage of qualified nurses is estimated to range from 152,000 to 520,000 full-time jobs between 2025 and 2030 in Germany (Afentakis et al. 2012; Bonin et al. 2015; Prognos 2012). In particular, the shortage of a highly skilled nursing workforce in clinical and outpatient sectors has led to the application of new strategies to recruit and retain nursing staff. In June 2019, Germany launched its initiative “Konzentrierte Aktion Pflege [Focused Action for Nursing]”, which included goals and concrete measures to improve working conditions for nurses and nursing aides as well as to enhance the nursing training curriculum. Specifically, this included the following goals: improve working conditions, expand the recruitment base, attract new trainees, target qualified nurses who have left the nursing profession to return, improve remuneration, digitalisation to reduce workload, and significantly, recruitment of internationally qualified nurses (Girts 2019).

Although the number of IQNs currently employed in Germany compared to those who graduated from a German nursing program is low, international recruitment is increasingly being pursued to address nursing workforce shortages (Buchan 2001; Reiff et al. 2020). Migration flow to Germany is mainly from Eastern Europe, Southern Europe, the Philippines, and African countries (Sell 2020; Zander et al. 2013). A large part of those IQNs is from other European countries and thus enjoy freedom of movement. However, requests for the recognition of foreign credentials from outside the European

Union increased (Kordes et al. 2020). In Germany, to be recognised as a qualified nurse, several credentials and qualification requirements must be fulfilled: the recognition of nursing registration/qualification, proof of professional practice, sufficient knowledge of the German language, and health status. If IQNs do not have an EU-wide harmonised nursing qualification, they must prove their professional eligibility in an examination in accordance with the requirements of German education and training legislation (Slotala 2019).

Nevertheless, recruiting nurses from abroad has become a key strategy in Germany (Bonin et al. 2015; Braeseke et al. 2013; Girts 2019; Lauxen et al. 2019). The number of IQNs in Germany increased steadily between 2012 and 2021 (from 50,000 to 96,000 IQNs). The annual average inflow of internationally qualified nurses between 2012 and 2021 was 451 nurses. While in 2012, 663 IQNs migrated to Germany; the number almost quadrupled in 2014 (2,631 IQN). In 2018, this number almost doubled again (5,142 IQNs) and it peaked in 2021 (8,340). In comparison, the number of DQNs in Germany increased steadily between 2012 and 2021 (from 770,000 to 905,000 DQNs). On average per year, 1,500 nurses were domestically trained between 2012 and 2021 (Figure 3).



The blue bars show the number of nurses domestically qualified in Germany. The orange bars show the number of nurses who completed their training abroad and immigrated to Germany. The yellow line demonstrates the annual immigration flow of internationally qualified nurses to Germany (Source: Data extracted on 17 January 2024 16:28 UTC (GMT) from OECD.Stat).

Figure 3: Migration Flow of IQNs to Germany between 2012 and 2021

Although historically some IQNs have been employed, targeted international recruitment of IQNs in Germany began on a larger scale in 2010. A legal framework condition enabling the increased international recruitment after 2010 was the free movement of workers within the framework of the EU internal market, which extended in Germany from 2011 to 2015 for the new EU member states in Central and Eastern Europe. With the reform of the German Ordinance on the Employment of Foreigners in 2013, employers were allowed to recruit skilled workers from non-EU countries where there were identified shortages, which included nursing. Targeted agreements for the international recruitment of nursing professionals were initiated with selected countries, for example, Bosnia-Herzegovina, Serbia, and the Philippines (Theobald 2022). These reforms introduced different public programs and state-driven recruitment initiatives that paved the way for recruiting IQNs from overseas. The most well-known program for the recruitment of nurses from non-EU countries is probably Nachhaltig ausgerichtete Gewinnung von Pflegekräften – Triple Win [Sustainable recruitment of Nurses], which was implemented by the Gesellschaft für Internationale Zusammenarbeit (GIZ) [Association for International Cooperation] with the collaboration of Germany's Federal

Employment Agency. The Triple Win Program involves bilateral placement agreements with the Philippines, Bosnia-Herzegovina, Serbia, and Tunisia, countries with an over-supply of nurses. This program offers German language support in IQNs countries of origin and professional orientation to nursing in Germany for recruited IQNs (Merten 2019; Smith et al. 2022). Another program launched by the GIZ is a recruitment program with Vietnam in 2013 to recruit nurses for elderly care (Kordes et al. 2020). The importance of these recruitment programmes in attracting candidates from non-EU countries is reflected in the number of applications. The few countries involved in these recruitment programmes are responsible for almost the entire increase in applications from non-EU countries (Kordes et al. 2020). Nevertheless, has the strategy of recruiting and integrating IQNs created new challenges for health system stakeholders involved. In the context of the global shortages of qualified nurses, a clear understanding of barriers and enabling factors for successful integration into the German health workforce is necessary if this is to be a successful measure.

1.4 Workplace Integration of IQNs

Hiring IQNs is a strategy to combat the current challenge of nursing shortages. However, this poses new challenges for healthcare organisations and nurse recruiters, who need to monitor the entry of migrant nurses into the workplace and support their successful integration into the healthcare workforce (Viken et al. 2018). IQNs who migrate to another country may be unfamiliar with some or many aspects of the healthcare system and processes in their new workplace (Murray et al. 2012). The increasing diversity of source countries of IQNs exacerbates this challenge. Nurses are educated differently in different international settings which has an impact on the integration of IQNs into healthcare systems in destination countries (Hawthorne 2005). The German Health Care System (GHCS) includes many hospital and ambulatory providers and the availability of highly sophisticated technological equipment, with good overall access and free choice for its population (Dietrich and Riemer-Hommel 2012). The GHCS follows the principles of equity, general and transparent access to insured health services with high quality of care and affordable costs on a (mainly) prepaid basis. One strength is that the GHCS includes almost universal healthcare coverage (OECD 2021). IQNs who migrated to Germany need to understand the GHCS to integrate into the local healthcare system and effectively apply their knowledge and skills to contribute to safe healthcare delivery. Successful integration into the workforce is complex, with significant resource investment (Bond et al. 2020) and it is time-consuming, not only for hospital management but also for the nurses trained and qualified abroad and domestically qualified nurses on the ward who work with internationally qualified colleagues (Blythe et al. 2009; Moyce et al. 2016).

Nursing is a patient-centred, holistic and applied health discipline that involves evidence-based care. Teaching fundamental concepts and basic knowledge of nursing and nursing skills are the first steps in nursing education programmes. Nevertheless, nursing education programmes differ internationally. In the United States of America (USA), nursing education is classified into six levels: Certified Nursing Assistant (CNA), Licensed Practical Nurse or Licensed Vocational Nurse (LPN/LVN), Associated Degree in Nursing (ADN), Bachelor of Science of Nursing (BSN), Master of Science of Nursing (MSN), and Doctor of Nursing Practice (DNP). Similar to the USA, in the Philippines nurses are trained and educated through a combination of competency-based and community-oriented Bachelor of Science in Nursing (BSN). In addition to the Bachelor's degree, there are various opportunities to gain further qualifications (Rogado 2006). In the EU, two European directives regulate the design of nursing education programmes (Spitzer and Perrenoud 2006). These directives indicate that a nursing registration program should be at least three years long or 4,600 hours.

However, these directives do not indicate academic status requirements for registration level. In some countries, such as Germany, this registration is not based on higher education qualifications (Zabalegui et al. 2006). In addition, many countries in the EU do not require an entrance examination, such as the NCLEX-RN, that needs to be completed in the USA to obtain a work permit. The diploma title or student's academic records are enough for registration as a nurse and to be able to work in any of the EU countries (Zabalegui et al. 2006). In Germany, there are different options to qualify as a nurse. One can complete a one-year training program to become a nursing assistant or a 3-year vocational training to become a qualified nurse at a nursing school (Spitzer and Perrenoud 2006). Qualified nurses can specialise in a certain area, such as intensive care or gerontological psychiatric nursing. According to the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth of Germany [Bundesministerium für Familie, Senioren, Frauen und Jugend], there are numerous further and advanced training courses are offered to maintain or develop professional knowledge and skills (BMFSFJ 2024). In Greece, on the other hand, nurses are trained at a technical educational institute. The nursing education program takes four years and ends with a degree from a higher professional school/polytechnic degree (HPS degree) in nursing. Students also have the opportunity to study nursing at a university or a university college in order to receive a Bachelor's Degree in Nursing, in addition to advanced-degree programs such as Master's Programs or PhD of Science in Clinical Nursing offered (Spitzer and Perrenoud 2006). To qualify as a nurse in Bosnia and Herzegovina, one must study at a university. The curricula and nursing programmes are based on traditional education

methods but are transitioning towards the EU directive's recommendations (Oruč et al. 2015). The difference in nursing education program may have an impact on the way nurses' practice and their philosophy of nursing and thus on the success of the integration of IQNs into the nursing workforce in the host country.

Nursing in Germany is advancing as a profession, and part of this development is the move to self-regulation professionally and the establishment of advance nurse practice roles. Nurses are the core providers of strong multi-disciplinary and interprofessional healthcare teams and ensure patient-centred care across all levels of care. They do not only play a critical role in patient care across all sectors but also in health promotion and disease prevention. In addition, they are involved in emergency care and catastrophe response. The ICN defines a (qualified) nurse as a person who completed a training program of basic, generalised nursing education and is authorised to practice as a qualified nurse in her/his home country by the appropriate regulatory authority. A qualified nurse has to be prepared and licensed to practice in the general scope of nursing, which includes the promotion of health, prevention of illness, and care of physically or mentally ill and disabled of all ages in all settings; to carry out health care teaching; to actively participate in the healthcare team; and to be involved in research (ICN 1987). Nursing philosophies as well the professional role and differences in autonomy and power dynamics differ internationally, this may have an impact on the integration process.

Research on migrant nurses' integration into the workplace focuses mainly on the challenges migrant nurses experience during the transition and orientation period (Ramji and Etowa 2018). Challenges include, for example, the complexity of the registration process and registration requirements, adjusting to a new workplace (e.g., learning a new language or terminology), and adapting to a new work environment (e.g., a different understanding of roles and responsibilities or new practice situations) (Blythe et al. 2009). Factors that can negatively affect workplace integration include differences in nursing practice and cultural values, discrimination and racism (Hogh et al. 2011), and delayed recognition of competence, which lead to frustration (Kingma 2007; Neiterman and Bourgeault 2015). Meanings, values, beliefs, and expectations regarding their personal and professional roles may differ from home to host country (Brunton and Cook 2018). These differences may result in tensions between IQNs and their host nurses, negatively impacting their orientation phase and adversely impacting their integration.

While a wide range of studies focuses on the experiences of IQNs, more is needed regarding experiences of domestically qualified nurses. Difficulties related to the integration process of IQN may be more easily resolved if the perceptions and experiences of IQN and their associated domestically qualified nurses are better understood. In terms of recruitment and retention of IQNs, it is essential to focus not only on the challenges of integration, but also to understand why nurses are migrating to Germany and whether their expectations are being met in order to ensure successful integration and create an enjoyable and safe work environment for the entire nursing team and enhance patient safety (Blythe et al. 2009). Integration of IQNs in the workplace over the long term has yet to become a clear focus in nursing research (at least in Germany). Moreover, the role of hospital management in facilitating workplace integration for IQNs has yet to be fully explored in research, including at the level of ward managers and the nursing team. Much of the peer-reviewed data on nurse migration to Germany comes from smaller qualitative studies with limited scope or investigate nurse migration in the outpatient setting (Kuhlmann and Larsen 2013; Kumpf et al. 2016; Lauxen and Blattert 2021; Lauxen et al. 2019; Peters and Braeseke 2016; Pütz et al. 2019; Schilgen et al. 2019; Schilgen et al. 2020; Slotala 2019; Slotala and Bollinger 2014; Smith et al. 2022).

Integration is a process of mutual assimilation between people with a migration background and the host country's population. This process must be linked to an open society in the host country and to the willingness of immigrants to integrate (Woellert et al. 2009). In order to facilitate the integration process, the host society needs to ensure legal equality and access to the labour market, recognise professional qualifications, promote education and training, show tolerance towards others, and be open to a diverse society (Woellert et al. 2009). The Federal Office for Migration and Refugees of Germany states that the goal of integration is to include all people who live permanently and legally in Germany. They emphasise that integration concerns everyone, not only the immigrants. Thus, the research project underlying this thesis explored IQNs workplace integration into the German nursing workforce as a two-way process and generates insights into how the nursing management can effectively facilitate workplace integration of IQNs. In particular, investigation was undertaken of experiences of DQNs working with IQNs who recently migrated to Germany to join the German nursing workforce.

1.5 Aims and Objectives

This research study explored experiences on workplace integration of IQNs joining the German nursing workforce in the context of nursing workforce shortage in Germany. It

sought insights into barriers and enabling factors for integration from the perspectives of both IQNs and DQNs. The following research questions guided this research study:

1. What are the experiences of internationally qualified nurses and domestically qualified nurses regarding safety culture, work-life-balance, burnout, and job demand during workplace integration? Are the experiences of the two groups different or similar?
2. How do domestically qualified nurses who work with internationally qualified nurses experience workplace integration?
3. How do internationally qualified nurses experience their integration into the German nursing workforce?

Due to the research question's explorative character, two different studies were conducted: a Survey Study (Part A) and an Interview Study (Part B). Figure 4 illustrates the research approach and its relevance in more detail (Figure 4).

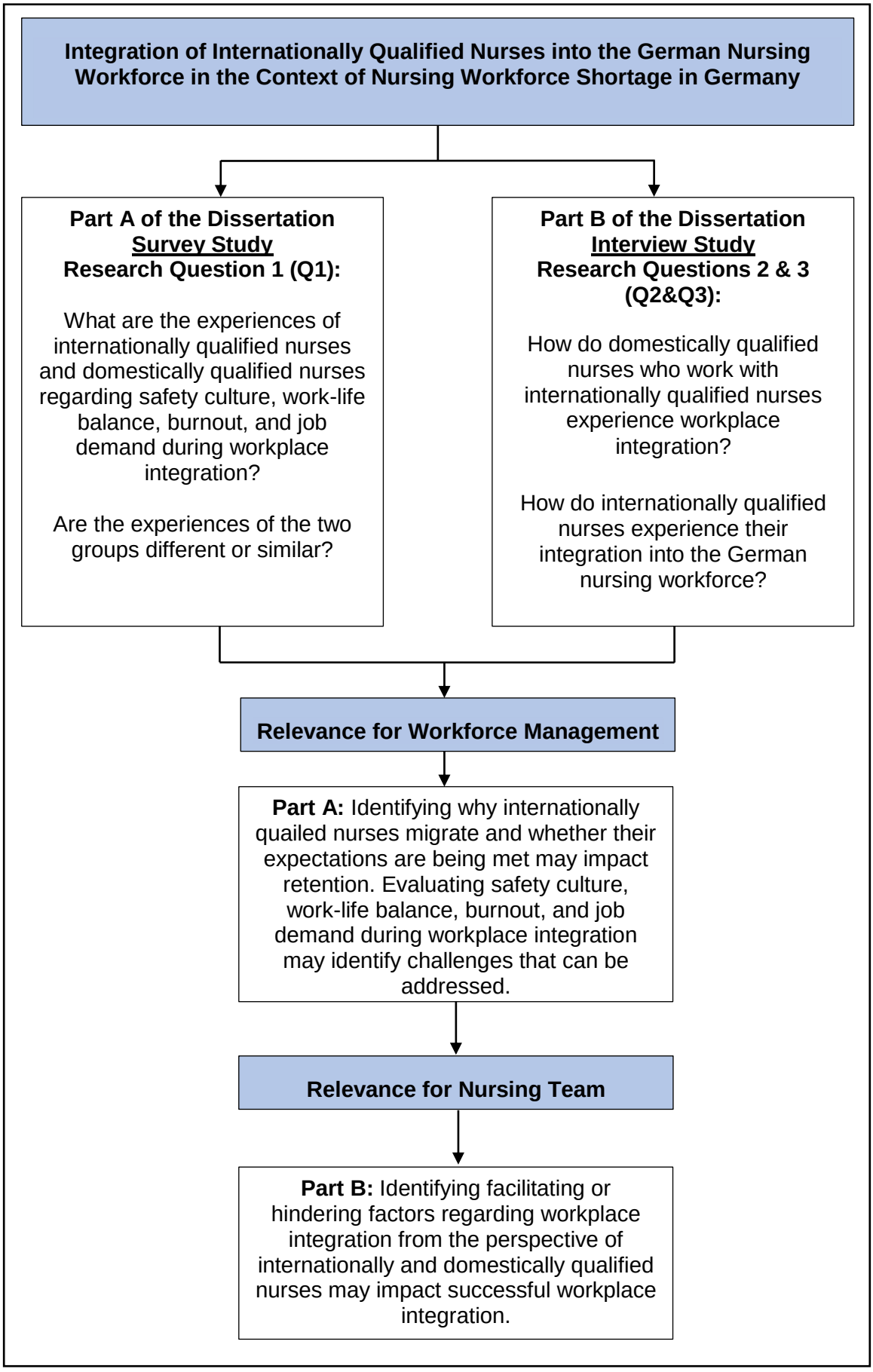


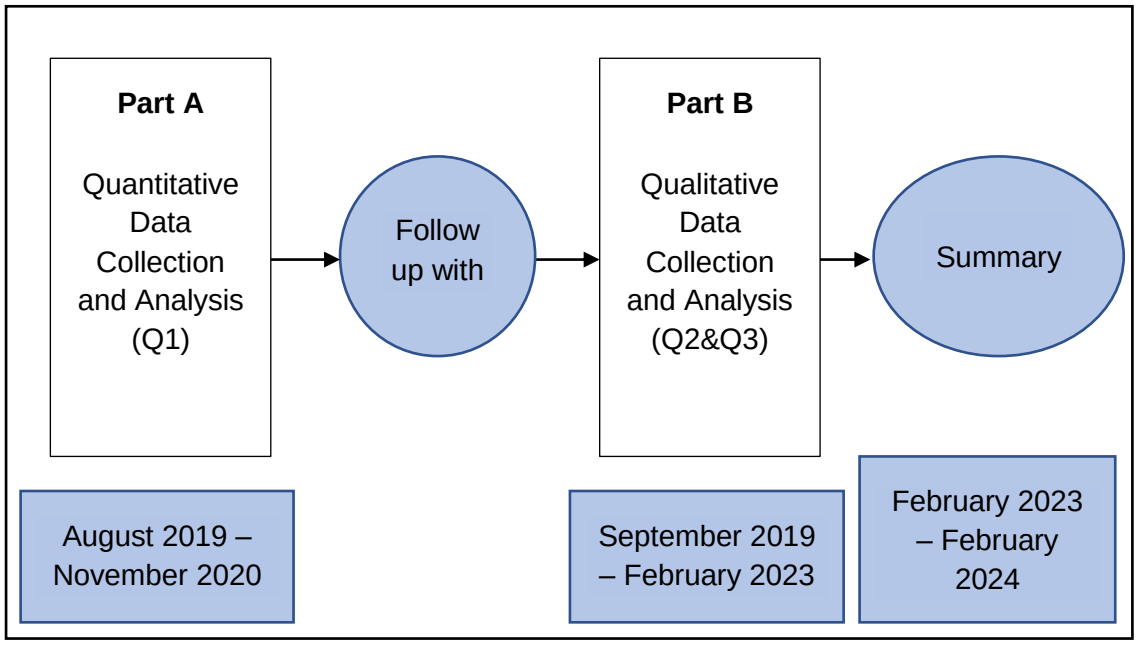
Figure 4: Graphic illustration of the research approach and its relevance for workforce management and the nursing team

2 MATERIAL AND METHODS

This chapter includes a detailed description of the research design, methodology, and data collected for this research study to answer the research questions outlined in the introduction and background section. Due to the specific objectives of the research questions, both quantitative and qualitative data collection methods were utilised and these are described separately in this chapter.

2.1 Methodological Approach

This research encompassed both a quantitative (Part A: Survey Study) and a qualitative study (Part B: Interview Study) arm. Quantitative data was collected and analysed first, followed by qualitative data collection and analysis. Qualitative research was used to explore further findings emerging from the quantitative study. Figure 5 illustrates the methodological approach applied in this research study (Figure 5).



Quantitative data was collected between August 2019 and April 2020; Qualitative data was collected between September 2019 and August 2020; Quantitative data analysis was finalized in November 2020; Qualitative data analysis was finalized in February 2023.

Figure 5: Graphic illustration of the methodological approach applied in this research study

The methodological approach in this research was applied to strengthen and broaden the study's vigor and to add to existing evidence on IQNs integration into the German nursing workforce in South Germany, Baden-Wuerttemberg. The integration process of IQNs into the German nursing workforce was investigated from two perspectives. The first perspective was DQNs who had completed their nursing training in Germany. The second perspective was that of IQNs from Europe or abroad that were working in

Germany. This approach was undertaken to enrich the dataset and enhance credibility and validity of findings.

In order to answer research **Q1**, exploring the experiences of DQNs and IQNs regarding safety culture, work-life-balance, burnout, and job demand during workplace integration and to detect potential differences between IQNs and DQNs; both participant groups were invited to complete a written survey (Part A: Survey Study). To answer research **Q2&Q3**, participants were interviewed by the author using a semi-structured interview guide systematically exploring experiences of DQNs and IQNs of workplace integration (Part B: Interview Study). The interview data of both groups of nurses was transcribed and initially analysed separately, by two researchers (author of this dissertation and a colleague). Two different codebooks were generated and these were compared to identify conflicting or supporting statements and to identify facilitators and barriers related to workplace integration. A joint codebook including both researchers' data sets was created following the consensus finding process.

2.2 Study Procedure

This section describes the study setting and the study population, Part A: Survey Study and Part B: Interview Study.

2.2.1 Funding

The research project was funded by a research grand from the B. Braun-Stiftung (BBST–D–19–00105).

2.2.2 Study Setting

The setting for this study was the Heidelberg University Hospital, the Thorax Clinic Heidelberg, the St. Josefs Hospital Heidelberg, and the Hospital Salem Heidelberg. These hospitals were selected for this research study because they had implemented a recruitment strategy to employ IQNs. Within these hospitals, only wards that employed IQNs were selected. All wards that employed IQNs were eligible, apart from psychiatric wards, because of substantial differences in staffing and shift patterns.

2.2.2.1 Centre 1: Heidelberg University Hospital

The Heidelberg University Hospital has fifty-seven specialized clinical departments and is (with 2,585 beds in total) one of the leading medical centres in Europe. It has training facilities for twelve healthcare professions, including three hospital-based training

programs for nursing students (e.g. geriatric nursing, paediatric nursing, general nursing, and nurse aides). The Heidelberg University Hospital provides high-quality inpatient treatment to best practice medical and nursing standards. It has around 14,621 employees, including 3,142 nurses and approximately 1,600 physicians (including professors). The Heidelberg University Hospital is a hospital that provides maximum medical care.

2.2.2.2 Centre 2: Thorax Clinic Heidelberg

The Thorax Clinic Heidelberg is (with 310 beds in total) one of Europe's largest lung care clinics. Since 2009, it has been certified as a Lung Cancer Centre by the German Cancer Charity (Deutsche Krebsgesellschaft (DKG)) and is a maximum care hospital. The Thorax Clinic Heidelberg is also a member of the National Centre for Tumour Disease (NCT) and collaborates with the “Deutsches Krebsforschungszentrum (DKFZ) [German Cancer Research Centre]”. Around 2,300 thoracic surgeries are conducted annually. Modern diagnosis and treatment procedures are offered and are developed continuously. It is a hospital which provides maximum medical care and has around 800 employees. It has three specialized clinical departments (thoracic surgery, oncology, and pneumology) where 10,000 patients are treated annually.

2.2.2.3 Centre 3: St. Josefs Hospital Heidelberg

The St. Josefs Hospital is a public acute hospital that provides basic and standard medical care. The stakeholder is the Sisters of Charity of Saint Vincent de Paul. Christian values are integrated into the guiding principles of the hospital. The hospital is a teaching hospital and is part of the Medical Faculty of the University of Heidelberg and Mannheim. It also has a Nursing School, the Louise von Marillac-School for Healthcare Professionals, with 66 training places. The hospital has the following six clinical departments: Anaesthesiology and Intensive Care Medicine, Surgery with speciality in abdominal surgery, trauma surgery and vascular surgery, Gynaecology with midwifery, the Department of Internal Medicine with the sections Gastroenterology, diabetology and nutrition medicine, Cardiology and angiology, and Radiology and 24-hours seven days a week emergency room. Annually, the hospital provides treatment for around 21,000 patients. Nationwide is the St. Josefs Hospital the leading clinic in diabetes care.

2.2.2.4 Centre 4: Hospital Salem Heidelberg

The Hospital Salem is a public hospital with around 238 beds and six specialized clinical departments (Department of Internal Medicine, Surgery, Gynaecology with midwifery,

Urology, Anaesthesiology and Intensive Care Medicine, and Radiology). It is also an academic teaching hospital of the Medical Faculty of the University of Heidelberg and has its own nursing school with 45 training places. The hospital employs around 500 healthcare professionals and provides basic and standard patient care. The hospital was founded in 1889 by the pastor, Prof. Wilhelm Frommel. The name "Salem" stands for a biblical location. The hospital's mission is to provide inclusive care for all patients following Christian values.

2.2.3 Study Participants

The study population consisted of two different samples of qualified nurses:

Study Sample I: Domestically qualified nurses (born in Germany or abroad) who obtained a recognised qualification in nursing in Germany and working as qualified nurse on a ward that employs internationally qualified nurses.

Study Sample II: Internationally qualified nurses who obtained a recognised qualification in nursing in another country (outside of Germany either within the EU or elsewhere internationally) and were working as a nurse in the receiving country Germany; or as nurse who had obtained a recognised qualification in nursing in another country but have not yet obtained a (full) registration to practice in the receiving country Germany; were eligible and take part in this study (OECD).

2.2.3.1 Inclusion Criteria

Both domestically qualified and internationally qualified nurses were required to be at least 18 years old, to have a contract with either the University Hospital Heidelberg, the Thorax Clinic Heidelberg, the St. Josefs Hospital, or the Hospital Salem Heidelberg and have a reasonable command of the German and/or English languages (written and spoken). Nurses from different disciplines were invited (e.g. general wards, intermediate care units, and intensive care units) in order to maximise a diverse range of participants.

2.2.3.2 Exclusion Criteria

Student nurses, other healthcare professionals (e.g. physicians, physiotherapists, nurse aids), or domestically and internationally qualified nurses who did not consent to participate were excluded from the study. No minimum employment working hours was set.

2.3 Part A: Survey Study[1]

This section describes in more detail the quantitative methods used in this study to answer research question (**Q1**): “What are the experiences of internationally qualified nurses and domestically qualified nurses regarding safety culture, work-life-balance, burnout, and job demand during workplace integration? Are the experiences of the two groups different or similar?”.

2.3.1 Sampling and Recruitment Procedure

The sampling for the quantitative part of this study was done at the clinical level. The nursing managers of the University Hospital Heidelberg (Centre 1) and the Thorax Clinic Heidelberg (Centre 2) were approached to establish if they were interested in participating in this research study (before the start of the Part A: Survey Study). Both hospitals' staff council/ works committees were asked for study approval after the nursing managers indicated willingness to participate. After ethical approval was obtained from the Ethics Committee of the Medical Faculty of the University of Heidelberg (S-367/2019) (Annexe 1) and each hospital's staff council/ works committee agreed to the proposed research project, study material was distributed as follows:

At Centre 1, the nursing manager identified a key contact person responsible for distributing the study invitation material to potential study participants and for explaining the project's purpose and nature. Before distributing the study invitation material, the key contact person was informed about the recruitment process and the study's purpose by a research team member (author) during a meeting. The key contact person organised the distribution of the study invitation material using the internal mail system.

At Centre 2, a member of the research team (author) presented the purpose and the nature of the project during a regular nursing management meeting. After the meeting study material was distributed using the internal mail system by the research team member.

The aim was to recruit a full census sample of IQNs and a large sample of DQNs within each participating hospital. All wards within the Centre 1 and the Centre 2 that employed IQNs were included. All DQNs and each IQN employed at one of these wards were invited to participate. Figure 6 illustrates the sampling process separately for Centre 1

[1] Parts of this chapter have been published in the following publication: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses’ perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nurs 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

and Centre 2 (Figure 6). The St. Josefs Hospital Heidelberg (Centre 3) and the Salem Hospital Heidelberg (Centre 4) did not participate in the written survey due to limited human resources.

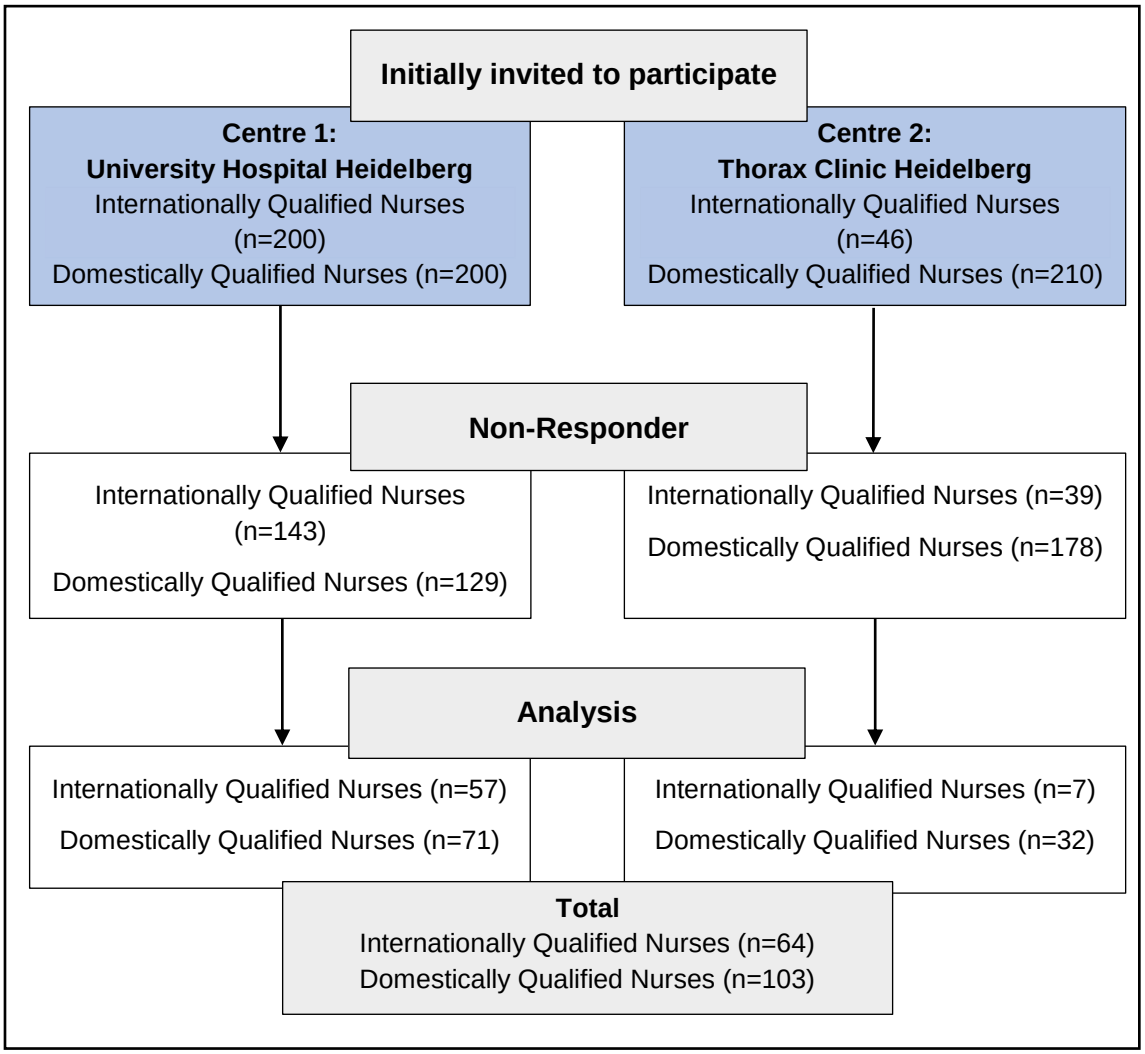


Figure 6: Illustration of the Sampling Process of Part A: Survey Study for Centre 1 and Centre 2

2.3.2 Quantitative Data Collection

Quantitative data was collected using an anonymous paper-based survey between August 2019 and April 2020. All nurses, domestically or internationally qualified, eligible to participate in this study received an envelope with an invitation to participate, an information leaflet explaining the purpose and nature of the study, a printout of the paper-based survey, and a reply envelope. The information sheet included contact details of research team members in case participants wanted to discuss the study procedure or had additional concerns or questions. Eligible nurses (domestically or internationally qualified) were identified based on the inclusion criteria. Extra informed consent for the quantitative part of this research study was not needed. Responding to the survey was taken as consent to participate. Filling in the written survey took about 25 minutes

maximum. Nurses were able to return their completed survey sealed in the provided envelopes in one of three ways: a secure box on the hospital ward, post them via the internal mail system of Centre 1 and Centre 2, or mail them by post. Four and six weeks after the first distribution of the study material, reminder letters via email were sent to the nursing management of each hospital to increase the response rate of participants. In addition, the ward managers of all included wards were asked to promote the survey at regular team meetings. The invitation to participate, the information leaflet, and the printout of the written survey, can be found as Annexe 2.

2.3.2.1 Measure

The first part of the paper-based survey was used to measure experience regarding Safety Culture and Well-Being (including Learning Environment, Local Leadership Teamwork Climate, Safety Climate, Burnout Climate and Personal Burnout) Work-Life-Balance, and Engagement (including Growth Opportunities, Workload, Participation in Decision Making, Advancement) using the SCORE: Assessment of your work setting Safety, Communication, Operational Reliability, and Engagement. Standardised questions on participants' characteristics, such as country of origin, gender, age, marital status, children, work experience, and working hours per contract, were included in the first part of the questionnaire. Additionally, questions regarding migration-related factors, such as length of residency, reasons for migration, and German language proficiency level based on the Common European Framework of Reference for Languages (CEFR) (Jones and Saville 2009) were added. This part included no open-end questions, possible answer options were provided. These variables were used for analysis of demographic background, factors related to migration and as explanatory co-variates in the regression analysis. A detailed description of the additional variables can be found in Table 2.

Table 2: Description of the additionally added variables

Variable Name	Type	Variable Description
Study Centre*	Binary	Centre 1, Centre 2
Country of Origin	Categorial	the Philippines, Vietnam, Korea, India, Serbia, Bosnia and Herzegovina, Poland, Tunisia, Italy, Greece
Gender	Categorial	Female, male, non-binary
Age	Categorial	Between 18 and 29 years, between 30 and 40 years, between 41 and 50 years, above 50 years
Marital Status	Categorial	Married/with partner, single, divorced, separated, widowed
Children under 18	Binary	Yes, no
Work Experience	Categorial	Less than 1 year, between 1 and 3 years, between 3 and 5 years, more than 5 years
Working Hours per Contract	Categorial	100 per cent, between 75 and 99 per cent, between 50 and 74 per cent, less than 50 per cent
Length of Residency	Categorial	Between 0 and 12 months, between 12 and 24 months, more than 24 months
Reasons for Migration	Categorial	Better working conditions, higher standard of living, professional development, career opportunities, higher income, personal safety, opportunities for family members, learning opportunities, better future
Migration	Binary	Mediated by an agency, personal initiative
German language proficiency level	Categorial	B1, B2, C1, C2, I do not know

*Centre 3 and Centre 4 did not participate in Part A of this research study

The central part of the questionnaire comprised the German version of the SCORE questionnaire: Assessment of your work setting Safety, Communication, Operational Reliability, and Engagement (Sexton et al., 2019; Sexton et al., 2018). The SCORE includes three separate sections: the Safety Culture and Well-Being Assessment tool *(*six subscales*),* the Work-Life-Balance (one scale), and the Engagement Assessment Tool *(*four subscales*).* A detailed description of the SCORE questionnaire can be found in Table 3.

Table 3: SCORE: Assessment of your work setting Safety, Communication, Operational Reliability, and Engagement (Sexton et al., 2019; Sexton et al., 2018)

Domain (Subscales)	Items	Concept	Response Scale
Domain 1: Safety Culture and Well-Being Assessment Tool (6) *higher scores reflect higher safety culture and higher burnout level*			*0 strongly disagree to 100 strongly agree*
Learning environment	5	measures whether quality improvement was supported within a work setting through analysing strengths and weaknesses	
Local Leadership	5	indicates to what extent leaders communicate with their employees and how available they are for their employees	
Teamwork Climate	7	shows whether interactions, such as collaboration, communication, or the way conflicts are managed are effective	
Safety Climate	7	measures to what extent patient safety regulations are actively applied	
Burnout Climate	5	indicates the exhaustion climate or workforce burnout	
Personal Burnout	5	measures emotional exhaustion	
Domain 2: Work-Life-Balance (1) *lower scores reflect a better work-life balance.*			*1 rarely or none of the time to 4 all of the time*
Work-Life-Balance	8	measures the balance between a person's professional demands and private needs	
Domain 3: The Engagement Assessment Tool (4) *higher scores indicate more positives norms for advancement, growth opportunities and inclusive decision-making but worse norms regarding workload*			*1 strongly disagree to 5 strongly* agree
Growth Opportunities	6	measures who an employee perceives the growth opportunities within his/her organisation	
Workload	5	measures the perceived workload of an employee	
Participation in Decision Making	6	measures the why an employee experiences the participation in decision making	
Advancement	7	measures the way an employee perceives advancement opportunities within his/her organisation	

The original version of the quantitative measurement SCORE (Sexton et al. 2019) was only available in English. The translation guidelines by the International Society for Pharmacoeconomics and Outcome Research (ISPOR) (Mahler and Reuschenbach 2011; Wild et al. 2005) was applied to translate the English version to German. The

translation process of the English version of the SCORE questionnaire is described below:

2.3.2.2 Translation of the SCORE

Contact was made with the developer of the instrument Bryan Sexton, Director of the Duke Centre for Healthcare Safety and Quality, Duke University Health System, Department of Psychiatry, Duke University, USA (Sexton et al. 2019; Sexton et al. 2018) in May 2019. Copyright issues were clarified, and permission to translate the SCORE questionnaire was obtained. Two forward translations in the target language (German) were done by CR and JB, both qualified nurses, German native speakers and fluent in English. Through discussion between the two translators (CR and JB), the different forward translations were compared and agreed upon, and a consensus version in the target language (German) was developed. The consensus version was translated verbatim by SB a registered nurse, English native speaker, and fluent in German, and RPD, a health services researcher, German native speaker and fluent in English, back into the original language (English). The different back translations were compared and agreed upon, and a consensus version in the original language (English) was developed. The consensus version of the backward translation and the original version were reviewed by author of this dissertation (CR). Problematic items were identified and discussed with JB, SB, and RPD. All translation versions were aligned with each other and with the original version to reveal differences between the language versions. The final consensus version of the backwards translation was sent to Bryan Sexton to confirm that meaning of the original measurement in September 2019. The target instrument was distributed to five people in the target group (qualified nurses) to check comprehensibility and conceptual consistency. In addition, practicability was checked. The results from the translated version were evaluated and the translation process was completed. The target version was proofread, and existing minor errors (e.g. spelling mistakes) were corrected**.** The translated version was finalised by CR and used in this research project (Figure 7).

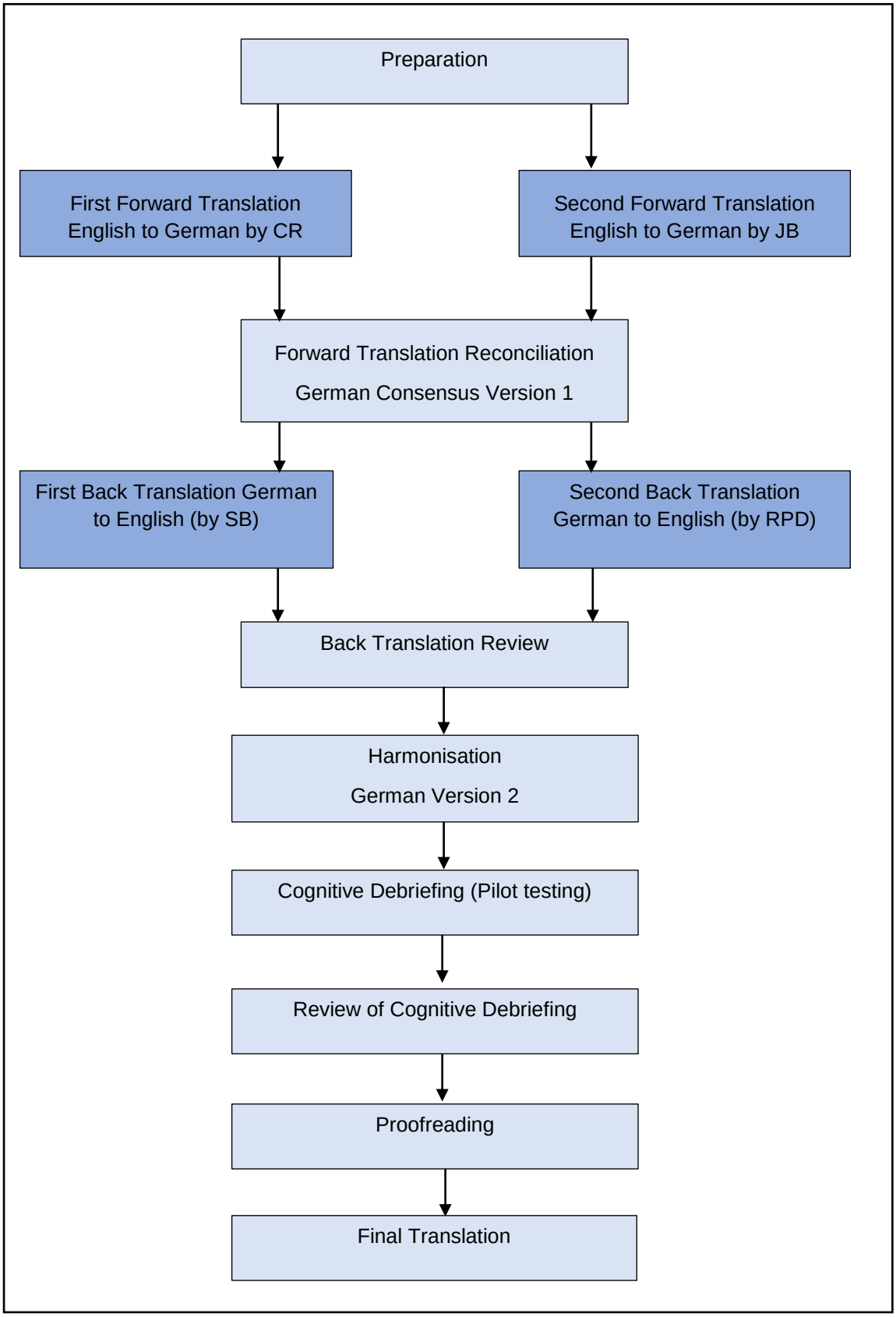


Figure 7: Graphic illustration of a translation process (Mahler & Reuschenbach, 2011; Wild et al., 2005)

2.3.3 Psychometric Properties of Quantitative Research

Psychometric properties have an essential meaning for selecting measurement tools or assessments in quantitative research. They are used, among other things, in selecting, evaluating, and testing the quality of measurement tools or assessments such as standardised questionnaires e.g., the SCORE questionnaire that was used in this research. Psychometric properties include validity, reliability, and objectivity. **Validity** is defined as the extent to which a concept is accurately measured in a quantitative study. For example, a maths test with high validity would actually measure mathematical understanding and skills and not something else, such as reading skills. **Reliability** is defined as the extent to which a measurement is repeatable under the same internal and external conditions. An example for a highly reliable measurement is a folding ruler. It is a very reliable method of measuring height. No matter how often height is measured with a folding ruler it will always measure the same height. Reliability can be high although a measurement does not measure what it's supposed to measure. Thus, the measurement may be reliable but not valid. **Objectivity** is given when no internal or external basic or marginal conditions affect the process and its evaluation. External and internal factors during the conduction of a test can have an impact on the objectivity. For example, if pain is measured it should always be under the same conditions. If pain is measured after waking up and after moving around the house the next day, objectivity may be threatened (Reuschenbach 2011).

2.3.3.1 Psychometric Properties of the SCORE questionnaire

Validity: The original version of the SCORE questionnaire was based on the Safety Attitudes Questionnaire (SAQ). The SAQ was tested and developed over decades. Findings have been published in peer-reviewed literature and replicated in different studies and languages (Sexton et al. 2006). The SAQ and other safety culture measurements have been used extensively over time. However, the healthcare delivery changed in the past 20 years, in particular with the increasing patient acuity and impact of workforce shortages, but items of measurement of this questionnaire have remained the same. According to Sexton et al. (Sexton et al. 2019), burnout and work-life balance are critical to quality improvement but were missing from most safety culture assessments. Related literature has shown burnout and work-life-balance are associated with a growing list of clinical outcomes (Bakker and Demerouti 2007; Bakker et al. 2004; Demerouti et al. 2001). In addition, the original conceptions of teamwork climate and safety climate were valid at the time, and though still acceptable, they are not as reflective of practice conditions in contemporary healthcare settings.

Psychological safety was addressed indirectly through individual items by some safety culture measurements, but not directly measured by a scale/domain. Moreover, improved clarity for leadership was required on strategies to create a safer work environment, where staff would feel comfortable using their voice, admitting mistakes, and closing gaps through continuous learning. These issues were addressed with the updated safety culture tool SCORE, including evidence-based domains on burnout and work-life balance (Sexton et al. 2019). Due to the detailed description of the development of the SCORE questionnaire over time, a certain validity can be assumed.

Reliability: The assessment SCORE was developed and available in English by Sexton et al. (Sexton et al. 2019). The original version demonstrated good psychometric properties for each subscale of the three domains: Domain 1: Safety Culture and Well-being Assessment Tool: Cronbach's alpha of the six subscales between 0.82 and 0.96; Domain 2: Work-Life-Balance: Cronbach's alpha 0.83, Domain 3: Engagement Assessment Tool: Cronbach's alpha of the four subscales between 0.84 and 0.92 (Sexton et al. 2018).

Objectivity: The objectivity of a measurement cannot be determined numerically. However, the SCORE questionnaire has precise specifications on how the different scales are to be analysed (Annexe 3). Accordingly, the results of the SCORE questionnaire are independent of the researcher and a certain degree of objectivity can be assumed.

2.3.4 Quantitative Data Analysis

2.3.4.1 Safety Culture and Well-Being Assessment Tool

In order to be able to classify findings of the Safety Culture and Well-Being Assessment Tool, specific threshold values were determined based on the equivalent of *strongly disagree (0), slightly disagree (25), neutral (50), slightly agree (75)* or *strongly agree (100)* on the Likert-Scale used for response options for the five subscales of the Safety Culture and Well-Being Assessment Tool. Thus, mean scores between above 50 (neutral) and 100 (strongly agree) indicated more positive perceptions towards Learning Environment, Local Leadership, Teamwork Climate, and Safety Climate. Mean scores less than 50 or equal show room for improvement in these areas. Personal Burnout or Burnout Climate levels were defined as having mean scores above 50. Mean scores between above 50 and 75 or equal were considered a moderately high degree of burnout, and mean scores between above 75 and 100 were considered high burnout levels.

2.3.4.2 Engagement Assessment Tool

For the subscales of the Engagement Assessment Tool Scale specific threshold values were determined based on the equivalent *strongly disagree (1.0), slightly disagree (2.0), neutral (3.0), slightly agree (4.0)* or *strongly agree (5.0)* on the Likert-Scale used for response options for the four subscales of the Engagement Assessment Tool. Thus, more positive norms for Growth Opportunities, Participation in Decision Making, and Advancement were considered if mean scores were between above 3.0 (neutral) and 5.0 (strongly agree). Mean scores between 1.0 (strongly disagree) and less than 3.0 or equal (neutral) indicated that these areas had room for improvement. The Workload subscale was interpreted in the opposite way. Worse norms regarding Workload were considered if mean scores were between above 3.0 (neutral) and 5.0 (strongly agree) as this indicated higher workloads.

2.3.4.3 Work-Life-Balance Scale

For the Work-Life-Balance Scale specific threshold values were determined based on the equivalent *rarely or none of the time* (1.0), *some or little of the time (2.0), Occasionally or a moderate amount of time (3.0), and all of the time (4.0)* on the Likert-Scale used for response options for the Work-Life-Balance Scale. Thus, mean scores between 1.0 (rarely or none of the time) and below 3.0 *(*some or little of the time) reflected fewer problems with Work-Life-Balance. Mean scores between above 3.0 *(*occasionally or a moderate amount of time*)* and 4.0 *(*all of the time) indicated more problems with work-life-balance.

2.3.5 Statistical Analysis

All variables were checked for data entry errors and missing values. Cases with more than 40 per cent missing values were excluded from the data analysis. Descriptive statistics were used to calculate the mean scores (Mean) and standard deviations (SD) for continuous variables and frequencies and percentages for categorical variables. The Shapiro-Wilk-Test, a test of normality, was used to determine whether the study sample was normally distributed (Das and Imon 2016; Shapiro and Wilk 1965). Levene's test (Joseph et al. 2009) was used to assess the equality of variances for the 11 mean scores of the SCORE subscales.

Dealing with non-normally or normally distributed data

Although most data sets, including continuous variables, usually follow a normal or bell-shaped distribution, many do not. Non-normal distributed data sets may lack symmetry

or have extreme values. It is essential to consider whether variables follow normal or non-normal distribution because this influences how data is described and analysed. Non-normal variables with extreme statistical outliers are better described with medians and percentiles rather than means and standard deviations. Statistical tests for analysing continuous data, e.g. t-test, analysis of variance [ANOVA], or linear regression, are not ideal on non-normal distributed data if the sample size is small. In this case, alternative statistical tests are needed (Sainani 2012). It is, therefore, crucial to plot the distribution of the collected data before performing a statistical test. This can be done by, for example, plotting a simple histogram. If the data is normally distributed, it will flow a bell curve; if it is skewed, it will have a left or right trail or otherwise deviate from a bell shape, e.g., flat. In order to determine if a data set is normally distributed, formal tests of normality, such as the Shapiro-Wilk test or the Kolmogrov-Smirnov test, can be applied. (Das and Imon 2016; Shapiro and Wilk 1965). The Shapiro-Wilk-Test was used in this study to determine whether the study sample was normally distributed. The null hypothesis for this test is that the variables follow a normal distribution. Thus, small p-values give evidence against normal distribution. Nevertheless, it is important to consider the size of the sample. Very small samples may miss important deviations, and very large samples may pick up unimportant deviation from normality (Das and Imon 2016; Sainani 2012). If the variables are not normally distributed, they may be transformed. The transformation depends on the nature of the data. There are five different ways to transform variables that are not normally distributed. (1) A logarithmic transformation is appropriate for data that is fairly skewed and groups of data in which the variances are proportional to the mean. (2) A squared root transformation is appropriate for slightly skewed data, and counts. (3) A reciprocal transformation is appropriate for highly skewed data. (4) A cube transformation can be used for data relating to volumes. (5) A logit transformation is appropriate for proportions.

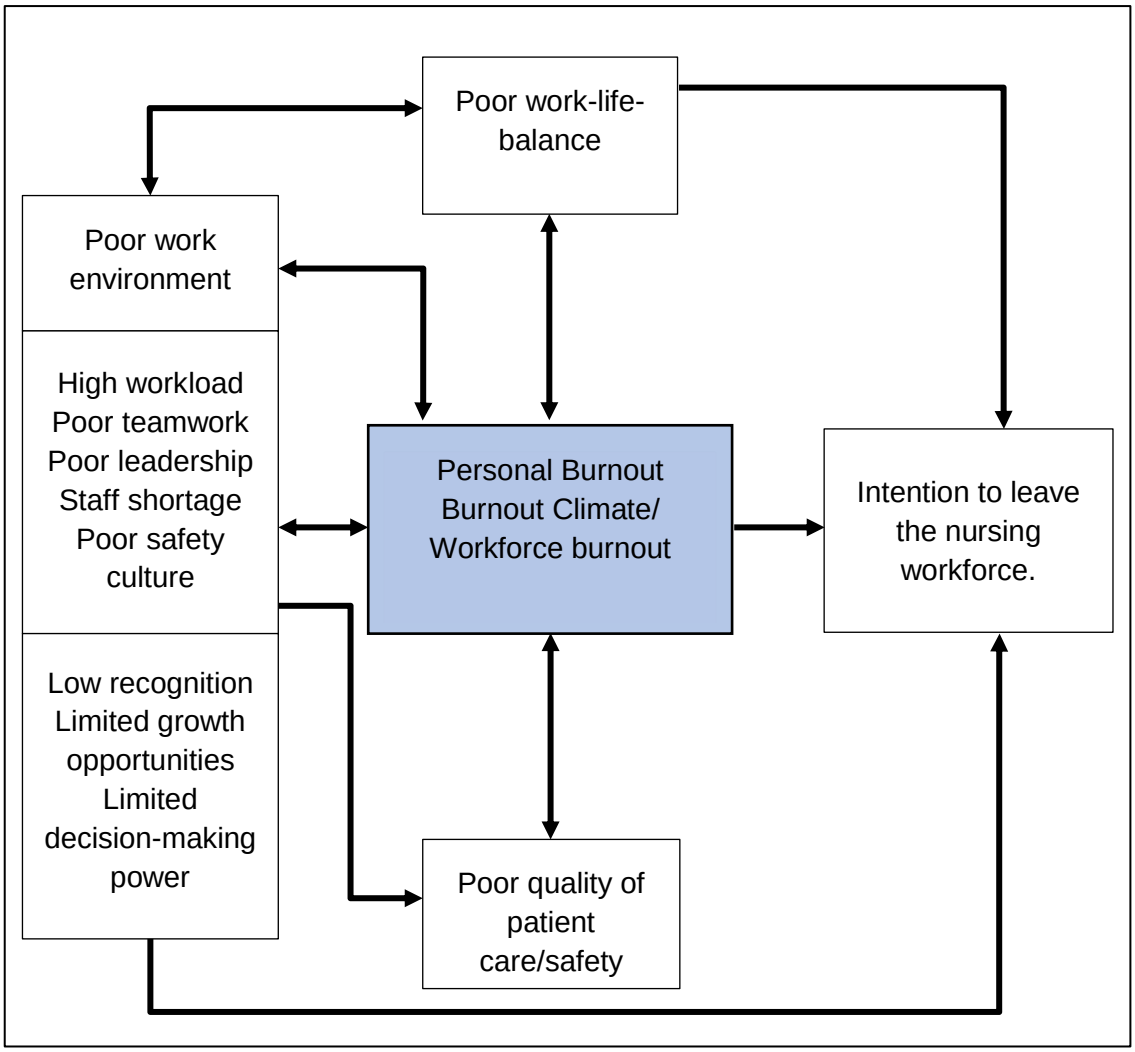
Levene's test

In order to apply a statistical test such as ANOVA, Levene's test should be used to test the assumption of equal variances. Levene's test can verify the assumption that two samples have equal variance. Equal variance across samples is called homogeneity of variances. The null hypothesis for Levene's test is that the two samples have equal variances. If the p-value is greater than .05, then the variances are not significantly different from each other, and homogeneity of variances can be assumed. If the p-value is less than .05, there is a significant difference between the variances of the two samples. The mean values of the groups, however, do not influence the result of the Levene's test they may differ. The Levene's test is very stable against violations of the

normal distribution. The variance equality can also be plotted with a grouped box-plot or scatterplot. If the variances of the groups differ, it may be possible that the groups are not selected from identical populations. Suppose the assumption of homogeneity of variances cannot be fulfilled. In that case, nonparametric statistical tests such as Kruskal-Wallis ANOVA or the Mann-Whitney test can be used to compare two groups. It is important to note that nonparametric tests do not assume that the data is normally distributed; the Kruskal-Wallis and Mann-Whiney tests assume the data distribution's shape is the same in each group (Keselman et al. 1979; Wang et al. 2016).

Analysis of the SCORE

The standard technique to calculate mean scores and standard deviations for all 11 subscales of the SCORE was used (Sexton et al., 2019). In order to identify significant differences in the mean scores of the 11 SCORE subscales between the two groups of nurses, analysis of covariance (ANCOVA) was applied and adjusted for gender and age (Mishra et al. 2019). Cohen's D was calculated to determine the magnitude of the differences in the mean scores of the 11 subscales of the SCORE between the two groups to identify if relevant effects were found. Values between 0.2 or less are considered as a small effect, values between 0.2 and 0.5 a medium effect size, and values of 0.8 or larger a large effect (Aarts et al. 2014). Bivariate linear regression analyses were applied to explore the impact of sociodemographic characteristics and factors related to migration on the 11 subscales of the SCORE. Sociodemographic characteristics or factors related to migration with significant effects in the bivariate regression were included in stepwise linear regression models adjusted for age and gender for both groups separately. Dummy-coded variables were created for categorical variables (e.g. for age) to include them in the regression analysis. A tentative conceptual model was developed based on a literature review of factors related to the intention to leave the nursing profession (Figure 8). The conceptual framework was used as a heuristic tool rather than a theory that provided a strong hypothesis. The framework suggests that factors associated with an increased risk for burnout or may cause burnout interact with each other, contributing to the intention to leave the nursing workforce. All analyses were performed in IMB SPSS Statistics 25. Statistical Significance was defined as $p < 0.05$ for all analyses.



Based on a literature review of factors related to intention to leave the nursing profession, a tentative conceptual model was developed. The model was used as a heuristic tool rather than a theory that provides a strong hypothesis. The model suggests that factors that are associated with increased risk of burnout or may cause burnout interact with each other and contribute to the intention to leave the nursing profession

Figure 8: Tentative conceptual model to guide data-analysis[2]

[2] Figure 8 has been published in the following publication: **Roth, C.**, Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nursing 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

2.4 Part B: Interview Study[3]

This section outlines the qualitative methods used to explore research Question (**Q2**): "How do domestically qualified nurses who work with internationally qualified nurses experience workplace integration?" and research question (**Q3**): "How do internationally qualified nurses experience their integration into the German nursing workforce?". The qualitative study was conducted and reported in accordance with the "Consolidated criteria for reporting qualitative research" (COREQ) checklist (Tong et al. 2007). A completed COREQ checklist can be found as Annexe 4.

2.4.1 Sampling and Recruitment Procedure

Qualitative sampling techniques differ from quantitative sampling methods. It is crucial to understand those differences to choose the appropriate sampling strategy to improve the rigour of qualitative research studies (Gill 2020). Qualitative sampling strategies are convenience sampling, purposive sampling (purposeful, judgmental, or selective sampling), snowball sampling, and theoretical sampling. Commonly, more than one sampling technique is used in one qualitative study to reach an appropriate sample size. While in convenience sampling, potential participants take part voluntarily, in purposive sampling, researchers select knowledgeable participants about the phenomenon being studied. If the snowball sampling technique is applied, participants recommend other persons from their community who may be willing to participate in the research (Gill 2020). The theoretical sampling technique was initially developed by Glaser and Strauss as the core process of the grounded theory to create a theory. The theoretical sampling of the data collection is guided by the emerging theory. The initial decisions for theoretical data collection are based only on a general sociological perspective and a general topic or problem area (Glaser et al. 1968).

The goal of qualitative research is not necessarily generalisability but it aims to examine a phenomenon in depth; thus, the sample size is usually much smaller than quantitative research samples (Gill 2020; Hennink et al. 2019). Qualitative sampling aims to select a sufficient number of participants to provide rich data to understand the phenomenon studied (Hennink et al. 2019). A clear concept of the research subject and the method of the sampling process needs to be documented correctly and traceably to maximise

[3] Parts of this chapter have been published in the following publications: **Roth, C**., Breckner, A., Wensing, M., Mahler, C., Krug, K., & Berger, S. (2023). Barriers and enabling factors for workplace integration of internationally qualified nurses: A qualitative study of perceptions of German nurses. Nursing Open, 00, 1– 11. https://doi.org/10.1002/nop2.1760; **Roth, C**., Wensing, M., Breckner, A. et al. Keeping nurses in nursing: a qualitative study of German nurses' perceptions of push and pull factors to leave or stay in the profession. BMC Nursing 21, 48 (2022). https://doi.org/10.1186/s12912-022-00822-4

trustworthiness of qualitative data (Kitto et al. 2008; Lincoln et al. 1985; Merkens 2017). The aim is not statistical representativeness; it is instead to be able to generalise findings on other similar research subjects (Hartley 1994). The objective of the qualitative sampling process should, therefore, be a highly representative group. In accordance with the research questions from the qualitative arm of the stud, it was identified that interview participants should be from different hierarchical levels, departments, and specialities to maximise insights gained (Patton 1990).

A convenience sampling technique was used for the qualitative part of this research project. This means the sample was selected based on availability and willingness. A drawback of this method is the limited range of participants and the risk of non-response bias, meaning that those who do respond are different from those who do not respond/participate on average. Therefore, findings are not generalisable. Nevertheless, it is a method that provides a wealth of qualitative information form an individual perspective specific groups (Bowling 2014). In addition, snowball sampling as a method within convenience sampling was applied due to difficulties in accessing a sufficiently large sample, e.g., participating nurses were encouraged to share the study invitation to colleagues. This method can be applied if study participants are difficult to recruit or hard to reach. It usually begins with some participants who are identified and are willing to recruit additional participants (Johnson 2014).

A research team member contacted the nursing managers of the four hospitals via email and phone to inform them about the purpose of the study and recruitment process. All four hospitals agreed to participate in this part of the research project. A mixture of convenience and snowball sampling and recruitment methods were applied at the four hospitals based on the recommendations of the nursing managers.

At Centre 1, a contact person was responsible for explaining the nature and purpose of the study to the ward managers. At Centre 2, ward managers were informed during a meeting with research team members. In Centre 1 and Centre 2, ward managers distributed the research materials. Each eligible nurse received an envelope with the study materials, including an invitation to participate, an informational flyer, an informed consent form, and a return envelope (Annexe 5). The material also contained contact information of the research team. Nurses who decided to take part in the study were asked to contact the research team directly. At Centre 3 and Centre 4, the nursing management informed the ward nurse managers about the study. The ward managers then informed their nursing teams and decided together with the team who could and

wanted to participate. They then informed the research team about the interested nurses. These nurses also received the study materials described above. The head nurse and a research team member made appointments for interviews with the interested nurses. Reminders were sent to each hospital's nursing management and ward managers to increase the respondent’s rate four and six weeks after the first distribution of the study materials. In addition, ward managers were asked to promote the research project at regular team meetings. The sampling procedure of Study Sample I (DQNs) and Study Sample II (IQNs) is illustrated below (Figures 9 and 10).

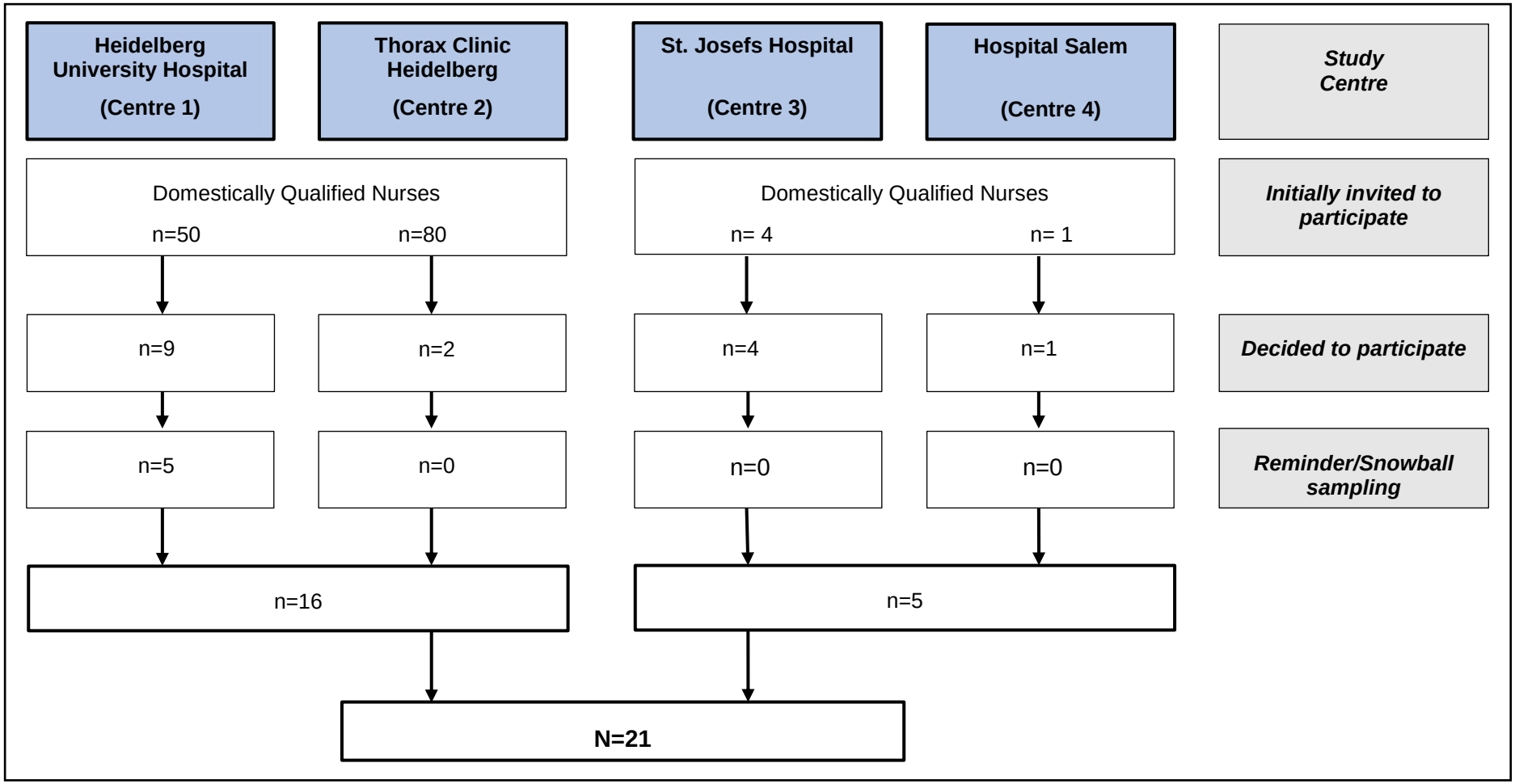


Figure 9: Sampling Procedure based on a nonprobability sampling technique for Sample I: Domestically Qualified Nurses

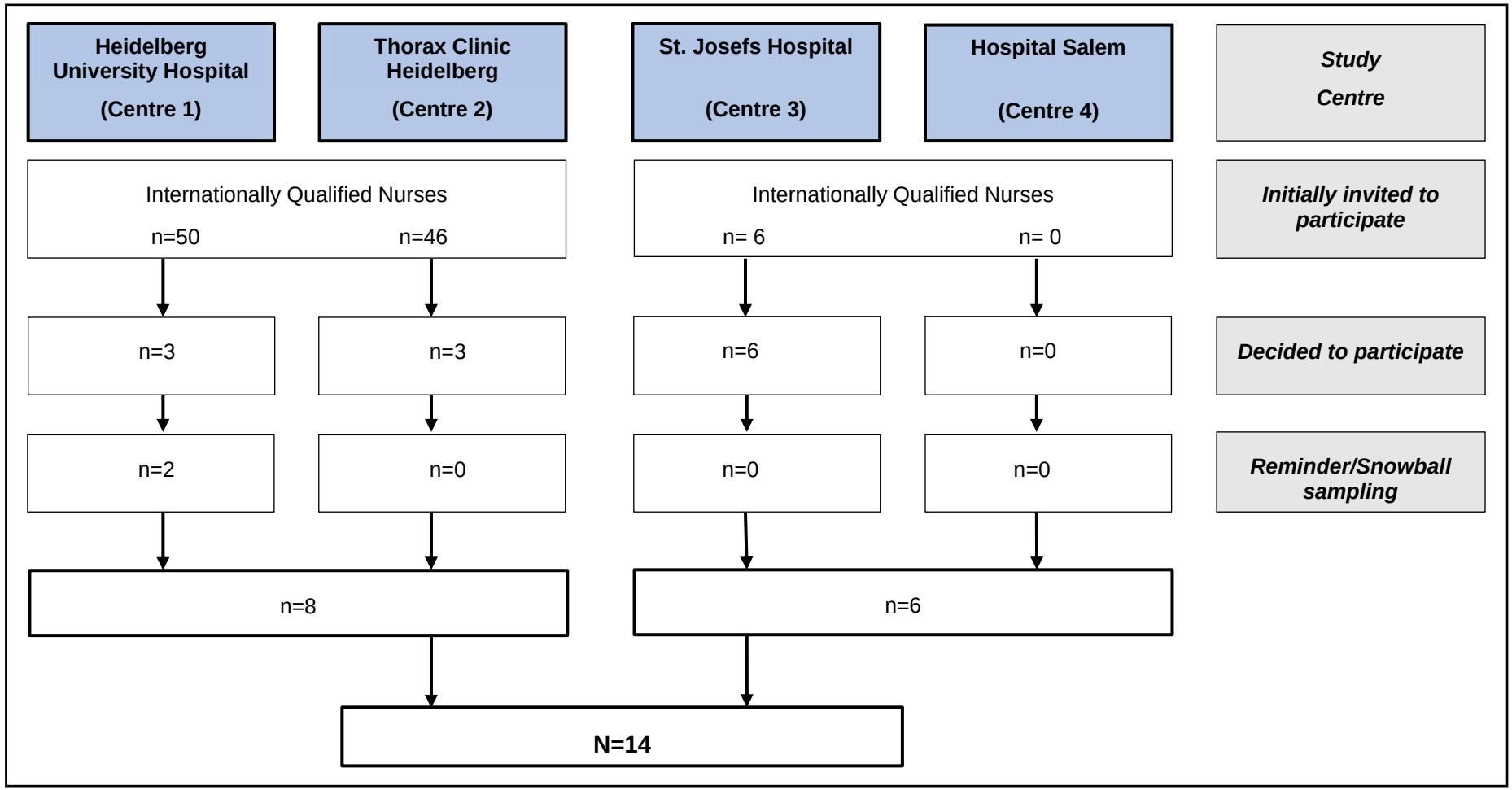


Figure 10: Sampling Procedure based on a nonprobability sampling technique for Sample II: Internationally Qualified Nurses

2.4.2 Qualitative Data Collection

2.4.2.1 Development of the Interview Guides

All interviews were based on semi-structured interview guides (one for DQNs and one for IQNs) that were developed initially by CR based on a literature review (Annexes 6 and 7). The two different interview guides consist of five overarching topics that included a set of questions: (I) Induction, (II) Challenges related to Workplace Integration, (III) Cooperation and Teamwork, (IV) Qualification and Nursing Training, and (V) Nursing Workforce Shortage. Each interview was also accompanied by an opening phase ("opening question") and a closing phase ("closing question"). Questions were open-ended and addressed experiences and perceptions regarding workplace integration of IQNs into the German nursing workforce in general. The initial versions of the interview guides were discussed in a qualitative research colloquium with other health service researchers and sociologists (colleagues of CR) at the Department of General Practice and Health Services Research, Heidelberg University Hospital. The interview guides were adjusted according to recommendations by the colloquium participants but not pilot-tested due to limited human resources. Questions were pre-selected and structured in sets. These sets of questions were asked of all participants in the same order during an interview conducted by the author of this dissertation. The interview guides differ slightly between the two study groups:

Interview Guide Domestically Qualified Nurses: The opening phase included questions regarding recruiting internationally trained nurses and their impact on patient care in general. Topic one included queries regarding the induction and integration of internationally qualified nurses into the German nursing workforce, what works well, and what could be improved. In addition, DQNs were asked to talk about their experiences with nursing management and its role in workplace integration of IQNs. The second part focussed on the challenges of workplace integration of IQNs into the German nursing workforce. The third part focussed on cooperation and teamwork in a multicultural nursing team. Topic four dealt with the different qualifications of nurses from various countries and its impact on workplace integration and delivery of healthcare. The last topic addressed the global nursing workforce shortage, its causes, how to improve it, and the role the recruitment of IQNs plays. The closing question aimed at collecting ideas in order to develop a structured program to enhance the integration of IQNs from the perspective of DQNs working with IQNs on the ward.

Interview Guide Internationally Qualified Nurses: The opening phase included open questions regarding the migration of nurses overall and perceived differences in the

working environment between Germany and the home country. The first topic covered experiences relating to induction, support from nursing management or the nursing team itself. The second topic focussed on possible challenges and ideas for overcoming them. Topic three deals with collaboration and teamwork in a multicultural nursing team. Topic four focussed on the different qualifications and nursing training standards and its impact on workplace integration. The final topic addressed the global nursing workforce shortage. The final question was very general and related to experiences that had not yet been addressed.

2.4.2.2 Qualitative Data Collection

Semi-structured individual face-to-face or telephone interviews were conducted between September 2019 and August 2020 by the author of this dissertation (CR), a female health services researcher with a background in general nursing and public health with about one and a half years of experience in qualitative research methods. Due to the measures (such as social distancing and nationwide lockdowns) that were applied to contain the SARS-CoV-2 pandemic, the data collection process was interrupted and, therefore, prolonged.

Nurses could elect to take part in either a face-to-face or telephone interview. The participating nurses also determined the time and place of the interview. Face-to-face interviews were conducted in a separate room on the ward or at the Department of General Practice and Health Services Research, Heidelberg University Hospital. Only the participant and the researcher were present during the interview. There was no relationship between the participating nurses and the interviewer (CR). The interviewer called the participants who elected to participate in a telephone interview. Most interviews took place before or after the participants' regular shifts. Participants were free to answer each question as they wished. During the interviews, follow-up questions were asked to obtain additional information.

Participating nurses were informed about the principles of the research project before the interview. The management of the data collected was also discussed and open questions were answered. Each participating nurse gave written consent to the recording of the interview before the start of the interview. Interviews were digitally recorded, pseudonymized, and transcribed verbatim. In addition to the collected interview data, information such as sociodemographic data (age, gender, country of origin), position (nurse manager or qualified nurse), work experience (in Germany or country of origin), ward (intensive care unit, intermate care unit, normal ward), nursing training (Germany

or abroad), study centre (University Hospital Heidelberg, Thorax Clinic Heidelberg, Hospital Salem, or St. Josefs Hospital), and clinic (specific medial department) were documented. No additional field notes were taken during or after the interviews. Interviews were not repeated, and transcripts were not returned to participants for verification or feedback. Each interview was audio recorded. Interview data was collected until theoretical saturation could be assumed (Flick 2020).

2.4.2.3 Qualitative Data Preparation and Transcription

The first step in qualitative data analysis usually involves transcribing the interview recordings. Although transcription of interview recordings can be done differently, there are different rules to which researchers should adhere when transcribing interview recordings. The rules indicate how the data material must be transcribed, e.g., whether social interaction such as laughing or sighing should be documented. The software *f4transkript* was used to transcribe the interviews. Each interview was transcribed verbatim using the same method.

2.4.2.4 Preparation of the Transcripts

The tape recordings of the interviews of this study were transcribed verbatim (exactly word-for-word) to be studied in detail. The transcription software f4 was used to transcribe the tape recordings. Each tape recording was transcribed according to the Transcription Rules by Kuckartz (Kuckartz 2019a) and the Transcription Rules for Qualitative Content Analysis (Version 1.3*)* of the Department of General Practice and Health services Research, Heidelberg University Hospital:

1. The whole interview must be transcribed verbatim not only selected parts
2. Language and interpunction were adapted to written German
3. New questions and related answers by the participants were transcribed as separate paragraph
4. The identity of each participant was pseudonymized using a pseudonym
5. Overlaps between statements were marked according to the situation such as >*interrupts*< or >*laughs*<.
6. Pauses in the conversation or statements that could not be understood properly were marked in brackets with dots (…).

The transcription material consisted of 270 pages (Annexe 8). Each transcript was reviewed whilst listening to the digital recording to ensure accuracy by the author of this dissertation. The transcripts are not attached to this dissertation due to the amount of

the data material and data protection guidelines. Transcripts are made available by the author on reasonable request.

2.4.3 Qualitative Data Analysis

In this dissertation, Content-structured Qualitative Content Analysis (see detailed description 2.4.3.1), according to Udo Kuckartz, was applied (Kuckartz, 2019b). Content-structured Qualitative Content Analysis or QCA is a reliable and transparent technique, can quickly be learned, and is well understood by other researchers. Qualitative Content Analysis can be used to analyse text material systematically, in a rule-guided manner, and oriented towards quality criteria (Kuckartz 2019b). Within the Qualitative Content Analysis approach, two researchers (CR (health services research with a background in nursing) and AB (health services researcher)) analysed the collected interview data. The two researchers coded the interview material inductively line by line and structured it into codes, subthemes, and themes. All interviews were analysed according to this approach by the two researchers to improve the reliability of the coding. The coded interviews were compared and modified where necessary. In addition, all interviews were discussed in detail between the two researchers to ensure validity. The inductive approach, or data-driven approach, is characterised by a step-by-step procedure using the method of open coding, organising, and systematising formed codes into subthemes and themes (Kuckartz 2019b). This analysis was considered an appropriate analysis technique due to the explorative nature of the research questions and the data material. Interview data were analysed and managed using MAXQDA, version 2020.1.0, a computer-assisted qualitative data management software. Quotations presented in this dissertation were translated into English, slightly adapted to maintain cultural sense meaning by CR (fluent in German and English) and checked for accuracy by SB (a native English speaker fluent in German).

2.4.3.1 Qualitative Content Analysis according to Kuckartz (Kuckartz 2019b)

As the Qualitative Content Analysis process started during the early stages of data collection, the two data sets (DQNs and IQNs) were initially analysed separately (Steps 1 – 5) to avoid influencing the ongoing data collection and to obtain an uninfluenced picture of the nurses' experiences independently of each other. After all interviews had been completed and analysed, the two groups were compared (Steps 6 - 9). The process

of analysing the interview data is described as follows (Figure 11 illustrates the individual analysis steps graphically):

First Step (Reading and interpreting the text): In the first step, interview transcripts of both groups of nurses (domestically and internationally qualified) were prepared for the analysis process by CR. CR formatted all interview transcripts uniformly to improve readability. This step was optional, but inconsistent interview transcripts might have complicated the later content analysis. Furthermore, the first transcripts were read, and essential text passages were marked by CR and AB (two data coders). First ideas for the content analysis were documented as notes within the interview transcript in order to discussed between the two researchers.

Second Step: In the second step, the two researchers familiarised themselves with the whole data set by reading more transcripts. Both researchers coded the first three transcripts independently. The codes were based on the notes from the first analysis step and the research question (deductive-inductive). This step aimed to develop initial codes, subthemes, and themes and to analyse around 10 to 25 % of the existing data material in a structured manner. In a subsequent step, codes were discussed, and an initial code system including subthemes was developed by consensus.

Third Step: As the third step, the two researchers coded the following transcripts line-by-line according to the initially developed code system. They analysed all interview transcripts of both groups of nurses, and each text section was coded and assigned to a subtheme.

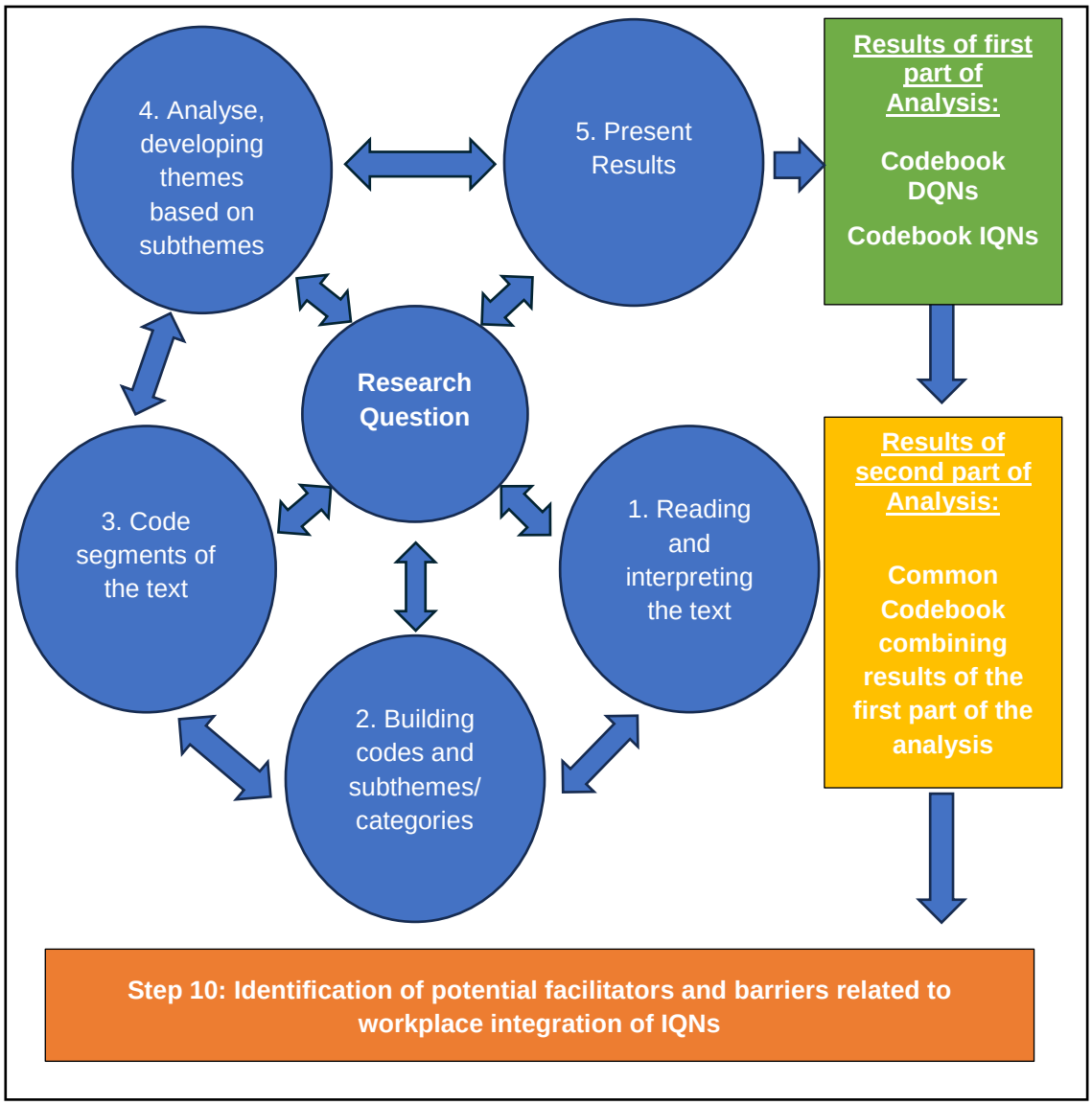
Fourth Step: In further discussion, coded transcripts were compared against the developed coding system. Disagreements regarding codes were resolved in a meeting with the two researchers and SB (a senior researcher with a background in nursing and health services research). Main themes were developed based on the codes and subthemes that emerged from the content analyses. All interview transcripts were analysed using the same method by the two researchers.

Fifth Step: The final coding system (codebooks) included codes, subthemes, themes, and illustrative quotes (Annexes 10 and 11). This analysis procedure was applied to both data sets (DQNs and IQNs), resulting in two separate codebooks, including several similar subthemes and themes. The final codebooks and illustrative quotes were

discussed between CR, AB, and SB to ensure consensus as part of the quality management process for qualitative data analysis.

2.4.3.2 Comparison of the Codebooks

As a first step, the two data sets generated from the interviews with DQNs and IQNs were initially analysed as described earlier (see detailed description 2.4.3.1). During the qualitative content analysis of interview transcripts of the two groups of nurses (Steps 1 - 5), ideas emerged regarding potential agreeing and disagreeing statements between DQNs and IQNs. Therefore, both codebooks were scanned in detail to detect agreeing or disagreeing statements in a structured manner **(Step 6)**. During this data analysis step, a table was created that included statements made by either or only one group. This table consisted of the original codes, subthemes and themes developed during the first step of data analysis **(Step 7)**. Based on the developed initial codebooks, the statements were structured into common subthemes and themes **(Step 8)**. The Common Codebook can be found as Annexe 12. Subsequently, the separately presented findings of both study groups (Codebooks) of the first analysis steps, including the raw data, were scanned again and compared to the table that included deductively developed common subthemes and themes to ensure that no data was lost during the second part of the qualitative content analysis **(Step 9)**. In a final analysis step, the results of the codebook containing data from both study groups were scanned for possible facilitators or barriers related to successful workplace integration **(Step 10)**.



This figure represents the analysis process of the interview data. The first part (Steps 1 - 5) of the analysis of the interview transcripts of the two study groups is presented in blue circles. Based on these steps, two independent codebooks were developed (Green Box: Codebook DQNs and Codebook IQNs). Based on the results of the first part of the analysis (Green Box), the second part of the analysis (Steps 6 – 10) was conducted, and the Common Codebook was developed (Yellow Box: Development of the Common Codebook) and facilitator and barriers related to workplace integration of IQNs were identified. The figure is based on the description of the General Process of Qualitative Content Analysis according to Kuckartz (Kuckartz 2019b)

Figure 11: General Process of Qualitative Content Analysis as presented in Kuckartz (Kuckartz 2019b)

2.4.4 Management of Qualitative Data Quality

Qualitative Content Analysis is considered one of the most used techniques to analyse qualitative data, such as interview transcripts (Kuckartz 2014; Kuckartz 2019b; Mayring 1994). The basic idea of qualitative content analysis is to preserve the strengths of quantitative content analysis but to focus on the qualitative analysis steps during text interpretation. In this way, quantification may be avoided. Nevertheless, analysis is systematic, rule-guided, and oriented towards quality criteria (Mayring 1994). Qualitative research claims the establishment of inter-subjective comprehensibility of the research

process based on which an evaluation of the findings can follow (Steinke 2017). The inter-subjective comprehensibility of the research process is, according to Steinke (2017), the core quality criteria in qualitative research. The evaluation of the qualitative research findings of this dissertation by other researchers was ensured by a detailed documentation of the research process (Steinke 2017), review of the indication of the research methodology before conducting the study, empirical anchoring of qualitative findings, and the consideration of potential limitations. The documentation of the study process included the application to the ethics committee inclusive study protocol, the application for admission to the doctoral procedure, meeting notes and meeting minutes, the participation and consent forms of participating nurses, the transcription rules, the transcription material, and the data analysis methods and the findings. The appropriateness of the qualitative research methodology of the present study was ensured by the selection of the method by considering to whom or what it was applied, the sampling process, and the transcription procedure (Flick 2018; Steinke 2017). The explorative nature of research questions ("how, what, and which") required a qualitative study design. With the empirical anchoring, the results and the hypotheses arising from the data sets' interpretation were tested using the available data material (Steinke 2017). A recognised analytical procedure was used for the content analyses. The quality of the results was ensured in the best possible way by an in-process review of the raw data during the qualitative content analysis. This was done by regularly comparing the results and the interpretation with the raw data. Limitation refers to the issue that qualitative findings cannot be generalised (Steinke 2017). In the present study, it was possible to oppose two different groups of nurses and, by opposing them, to substantiate the validity of the results, considering specific study conditions. Nevertheless, other contexts may lead to different results.

2.4.5 Management of Data Quality

Quality criteria of qualitative research aim to provide quality assurance, ensure meaningful results, and enhance the transferability into policy and practice in the future (Kitto et al. 2008; Steinke 2017). The following quality criteria were taken into account in consideration of the research object, the research methods, and the research question: (1) Credibility, (2) Transferability, (3) Confirmability, (4) Dependability, and (5) Reflexivity (Kitto et al. 2008).

2.4.5.1 Credibility (i.e., internal validity)

Credibility of qualitative findings and the interpretation of them were ensured by using more than one data coder during qualitative data analysis (CR and AB) and consensus

discussions between the two coders (CR and AB) and a senior researcher (SB). Moreover, phenomenology was considered as appropriate as an underpinning theoretical framework for the research mythology for the explorative nature of the research questions two and three which were focussed on understanding individual experiences and perceptions of a social phenomenon (Creswell 2007).

2.4.5.2 Transferability (i.e., external validity)

Transferability was ensured by describing the setting of data collection as precisely as possible (see detailed description 2.2.2; 2.2.3 and 2.4.1)

2.4.5.3 Confirmability (i.e., Objectivity)

In order to establish confirmability and show that there is a clear link between the interview data and the findings an audit trail of the research process was developed to document the research process.

- meeting notes and meeting minutes,
- the application to the ethics committee inclusive a study protocol,
- the application for admission to the doctoral procedure,
- the participation and consent forms of participating nurses,
- the transcription rules, the transcription material,
- the data analysis methods and the findings.

2.4.5.4 Dependability (i.e., reliability)

The following steps were applied to establish dependability, during the qualitative content analysis process, the initial results were regularly discussed in a colloquium with doctoral students (peer debriefing) and in a qualitative research colloquium with other researcher (health service research and sociologists) who were not involved in the research project (external audit). Participants of both colloquiums were given no insight into raw data adhering to data protection regulations.

2.4.5.5 Reflexivity

The person collecting the qualitative data plays a central role. Characteristics of the interviewer, such as gender and profession, are likely to influence the answers of the respondents. For example, if the interviewer is an expert on the research topic, she/he may get different answers than a junior researcher. Interviews were conducted by the author of this dissertation, who has a background in nursing. Critical reflection was used to evaluate subjectivity to disclose prior assumptions by the researcher and to examine

the influence of the role and behaviour of the research during the research process and their possible influences on the study.

2.5 Data Protection and Ethical Aspects of the Research Study

For the implementation of this research project, approval of the relevant institutional bodies – the ethics committee of the Heidelberg University, the works committee and the staff council of the University Hospital Heidelberg, the Thorax Clinic Heidelberg, St. Josefs Hospital Heidelberg, and the Hospital Salem Heidelberg, and the director of nursing of the hospitals mentioned above – was required. Hence, a study protocol and additional study material was submitted to the ethics committee of the Heidelberg University and the relevant institutional bodies named above.

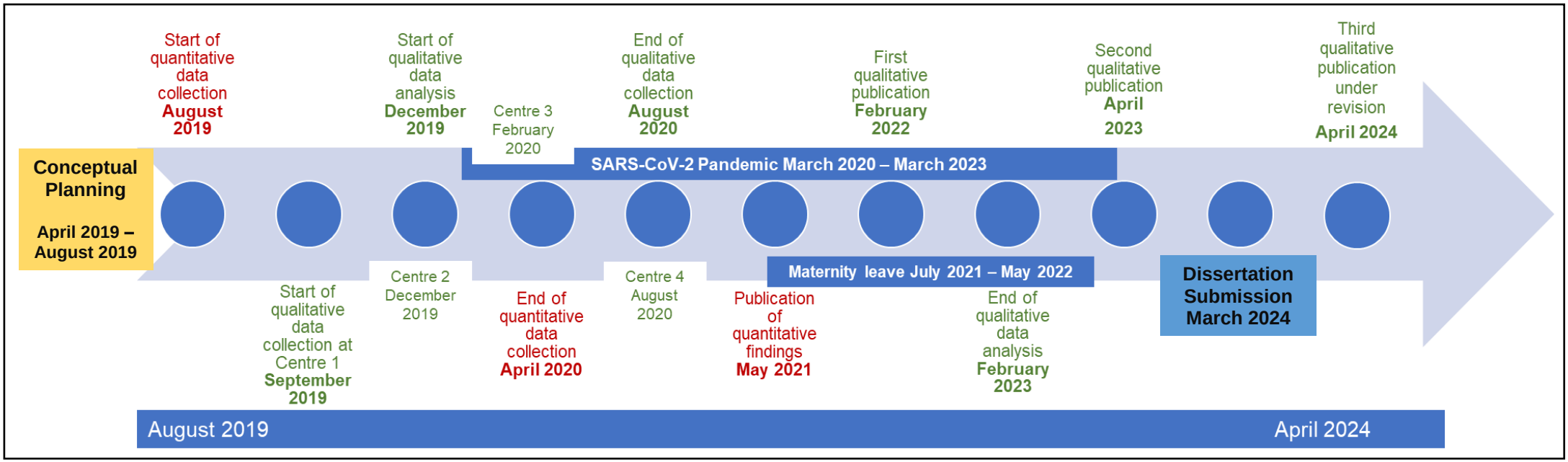
Ethical approval was obtained from the Medical Ethics Committee of the Medical Faculty of Heidelberg University (S-367/2019). Recruitment of participants started when ethical approval was obtained, and the staff council approved the study. Research conducted in this study was performed in accordance with the Declaration of Helsinki.

Part A Survey Study: consent to participate was assumed when participants completed the questionnaire. This was stated explicitly in the information leaflet.

Part B Interview Study: At the beginning of each interview, written consent was obtained, and each participant was reminded that a withdrawal at any time of the interview was possible without any negative consequences for her or him.

Part A and Part B: In line with ethical requirements, participation was entirely voluntary. Each participant could withdraw from the study at any time without giving any reasons. Non-participation or withdrawal did not affect the participant in any way. The participants had the option to either erase their data in case of withdrawal or to allow the research team to use it to answer the research question. However, participants were informed that data collected anonymised, already anonymised data, or data included in the analysis could not be deleted. Information about the participants or personal identifying details were not shared or disseminated. Only the research team had access to the information and handled it confidentially, following data protection and privacy protocols.

All collected data (Part A (quantitative) and Part B (qualitative)) are stored at the Department of General Practice and Health Services Research, Heidelberg University Hospital. Data is stored there in accordance with the data protection rules and will be destroyed after ten years.



Months displayed in red refer to Part A (Survey Study) of the project; months displayed in green refer to Part B (Interview Study) of the research. Processes that occurred before August 2019 (start of data collection) are not presented in this figure (yellow box). The conceptual planning included, for example, development of the study protocol, the grant application, and the ethic application.

Figure 12: Partial Chronological Representation of the Research Project from point of data collection

3 RESULTS

This chapter summarises results of the overarching research project. Due to the three research questions and both quantitative and qualitative methodology approaches used, it is divided into two parts: (3.1) presents results of the quantitative research project (Part A: Survey Study) and (3.2) presents results of the qualitative research (Part B: Interview Study). Findings are presented in tables, frequencies, and rich textual descriptions and quotations.

3.1 Part A: Findings of the Survey Study[4]

Of a random sample of 400 DQNs invited to participate, 103 completed the questionnaire (response rate 25.75 %). Out of the 264 IQNs who were identified as potential participants and invited by nursing management or the ward managers of the participating hospitals, 64 responded (response rate 24.24 %). In total, 167 (total, response rate 24.6 %) nurses participated in the quantitative part of this study. Most nurses were from the University Hospital Heidelberg (89.1 % IQNs; 68.9 % DQNs) (Table 4).

3.1.1 Description of the Study Sample

The predominance of the IQNs were from Serbia (43.8 %) or Bosnia-Herzegovina (42.2 %). Most participating nurses identified as female (70.3 % IQNs; 80.6 % DQNs). Around half of the IQNs were between 18 and 29 years old (54.7 %); DQNs, on the other hand, were more evenly distributed over all age categories. A majority of domestically qualified nurses stated to be married or had a partner (60.2 %). IQNs were equally single (45.3 %) or married/with a partner (43.8 %). A vast majority of all participating nurses indicated that they did not have children under 18 (70.9 % DQNs and 70.3 % IQNs). More than half of the DQNs had greater than five years work experience (54.4 %), with only a few indicating they had less than one year of work experience (12.6 %). Almost a third of the participating IQNs indicated they had less than one year of experience (26.6 %), and almost half had more than five years of professional experience (40.6 %). Most IQNs and more than half DQNs worked full-time (89,1 % and 67.0 %, respectively) (Table 4).

[4] Parts of this chapter have already been published in the following publication: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nursing 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

Table 4: Characteristics of the Study Participants of Part A: Survey Study[5]

	DQNs* n=103 (61.7)	IQN** n=64 (38.3)	Total N=167 (100.0)
Study Centre		**n (%)**	
University Hospital Heidelberg	71 (68.9)	57 (89.1)	128 (76.6)
Thorax Clinic Heidelberg	32 (31.1)	7 (10.9)	39 (23.4)
Country of Origin		**n (%)**	
Republic of Serbia		28 (43.8)	
Bosnia-Herzegovina	n/a	27 (42.2)	n/a
Other		6 (9.4)	
No answer		3 (4.7)	
Gender		**n (%)**	
Female	83 (80.6)	45 (70.3)	128 (76.6)
Male	18 (17.5)	16 (25.0)	34 (20.4)
Third	1 (1.0)	0	1 (0.6)
No answer	1 (1.0)	3 (4.7)	4 (2.4)
Age group		**n (%)**	
18 to 29 years	28 (27.2)	35 (54.7)	63 (37.7)
30 to 40 years	30 (29.1)	18 (28.1)	48 (28.7)
40 to 50 years	19 (18.4)	7 (10.9)	26 (15.6)
over 50 years	24 (23.3)	1 (1.6)	25 (14.9)
No answer	2 (1.9)	3 (4.7)	5 (3.0)
Marital Status		**n (%)**	
Married/with a partner	62 (60.2)	28 (43.8)	90 (53,9)
Single	26 (25.2)	29 (45.3)	55 (32,9)
Divorced	8 (7.8)	0	8 (4.8)
Separated	4 (3.9)	2 (3.1)	6 (3.6)
Widowed	1 (1.0)	0	1 (0.6)
No answer	1 (1.0)	5 (7.8)	6 (3.6)
Other	1 (1.0)	0	1 (0.6)
Children under the age of 18		**n (%)**	
no	73 (70.9)	45 (70.3)	118 (70.7)
yes	29 (28.2)	18 (28.1)	47 (28.1)
No answer	1 (1.0)	1 (1.6)	2 (1.2)
Work experience in years		**n (%)**	
less than 1 year	13 (12.6)	17 (26.6)	30 (17.9)
between 1 and 3 years	16 (15.5)	15 (23.4)	31 (18.6)
between 3 and 5 years	14 (13.6)	5 (7.8)	19 (11.4)
more than 5 years	56 (54.4)	26 (40.6)	82 (49.1)
No answer	4 (3.9)	1 (1.6)	5 (3.0)
Working hours by contract		**n (%)**	
100 per cent	71 (68.9)	57 (89.1)	128 (76.6)
between 75 and 99 per cent	21 (20.4)	0	21 (12.6)
between 50 and 74 per cent	8 (7.8)	4 (6.3)	12 (7.2)
less than 50 per cent	3 (2.9)	1 (1.6)	4 (2.4)
No answer	0	2 (3.1)	2 (1.2)

*DQNs – Domestically qualified nurses; **IQNs – Internationally Qualified Nurses

[5] Table 4 has been published in the following publication: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nurs 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

Different reasons for migration to Germany were mentioned. Around a fifth of the participating IQNs stated that they migrated to Germany for a higher standard of living (18.0 %) and better working conditions (18.0 %). Other reasons were professional development (14.0 %) and career opportunities (13.3 %). A few were looking for higher income (11.3 %) and personal safety (11.3 %). Others stated that they migrated to Germany due to opportunities for family members (6.7 %). Only a few indicated other reasons, such as learning opportunities (5.3 %) or a better future (1.3 %). Most IQNs organised their own migration but via a mediating organisation (82.8 %). Over half of the IQNs had recently moved and indicated that they had only lived in Germany between 0 and 12 months (54.7 %). A third stated they have lived in Germany between 12 and 24 months (34.4 %) or more than 24 months (7.8 %). More than half of all IQNs participating in this study had achieved a B2 German level (57.8%) on the CEFR (Table 5).

Table 5: Migration-related aspects reported by IQNs[6]

Reasons to migrate to Germany [(a)]	**N=64 (100)**
Better Working Conditions	27 (18.0)
Higher Standard of Living	27 (18.0)
Professional Development	21 (14.0)
Career Opportunities	20 (13.3)
Higher Income	17 (11.3)
Personal Safety	17 (11.3)
Opportunities for family members	10 (6.7)
Learning Opportunities	8 (5.3)
Better Future	2 (1.3)
No answer	1 (0.7)
With whom did you migrate to Germany?	
Alone	53 (82.8)
Family/Friends/Classmates	5 (7.8)
Other	2 (3.1)
No answer	4 (6.3)
How did you migrate?	
Mediated by an agency	53 (82.8)
Personal initiative	8 (12.5)
No answer	3 (4.7)
Length of time living in Germany?	
between 0 and 12 months	35 (54.7)
between 12 and 24 months	22 (34.4)
more than 24 months	5 (7.8)
No answer	2 (3.1)
CEFR – German language proficiency	
B1	17 (26.6)
B2	37 (57.8)
C1	5 (7.8)
C2	2 (3.1)
I do not know	1 (1.6)
No answer	2 (3.1)

*Reported are frequencies and percentages; (a) Multiple responses possible.

[6] Table 5 has been published in the following publication: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nurs 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

3.1.2 Results of the Reliability Analysis of the German Version of the Score

The German language translation of the SCORE showed an acceptable internal consistency: Domain 1: Cronbach's alpha of the six subscales between 0.70 – 0.91; Domain 2: Cronbach's alpha 0.88; Domain 3 Engagement Assessment Tool Cronbach's alpha of the four subscales between 0.80 and 0.90 (Table 6).

Table 6: Results of the Reliability Analysis of the German version of the SCORE[7]

	N*	Number of items	Answering categories	Scale construction	Cronbach's alpha
Domain 1: Safety Culture and Well-Being Assessment Tool					
Learning Environment	154	5	5	Average	0.85
Teamwork Climate	100	7	5	Average	0.70
Local Leadership	159	5	5	Average	0.86
Safety Climate	136	7	5	Average	0.80
Burnout Climate	158	5	5	Average	0.91
Personal Burnout	158	5	5	Average	0.89
Domain 2: Work-Life-Balance					
Work-Life-Balance	109	8	4	Average	0.88
Domain 3: Engagement Assessment Tool					
Growth Opportunities	153	6	5	Average	0.85
Workload	163	5	5	Average	0.90
Participation in Decision making	153	6	5	Average	0.80
Advancement	150	7	5	Average	0.83

*Number of returned completed questionnaires

3.1.3 Means of the SCORE Subscales of DQNs and IQNs

Eight out of 11 subscales of the SCORE showed no difference between the two samples of nurses (Table 7): Learning Environment, Teamwork Climate, Local Leadership, Safety Climate, Personal Burnout (Safety Culture and Well-being Assessment Tool) and Growth Opportunities, Participation in Decision Making, and Advancement (Engagement Assessment Tool). Results are described in more detail in the following section (3.1.2.1)

[7] Table 6 has been published in the following publication: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nurs 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

3.1.3.1 Safety Culture and Well-being Assessment Tool

Subscale: Learning Environment

The results of the Learning Environment Subscale showed that both groups indicated a learning infrastructure that supported their quality improvement efforts (Mean 63.7 (SD 12.9) and Mean 62.5 (SD 18.5)) to a moderately high degree (Table 7).

Subscale: Teamwork Climate

The results of the Teamwork Climate Subscale (Mean 55.2 (SD 13.0) and Mean 54.5 (SD 16.5)) showed that the nursing teams including both domestically and internationally qualified nurses tended to collaborate and communicate effectively and that conflicts were successfully resolved to some extent (Table 7).

Subscale: Local Leadership

The Local Leadership Subscale showed that both groups indicated their management created an environment where they felt psychologically safe to a moderately high degree (Mean 63.7 (SD 12.99) and Mean 62.5 (SD 18.5)) (Table 7).

Subscale: Safety Climate

The mean scores of Safety Climate Subscale (Mean 57.2 (SD 12.1) and Mean 57.1 (SD 17.6)) indicated that patient safety measures were adopted to a moderate degree by the nursing teams (Table 7).

Subscale: Personal Burnout

The mean scores of the Personal Burnout Subscale showed that both groups of nurses tend to feel less personally burnt out (Mean 46.9 (SD 23.1) and Mean 49.0 (SD 25.9)) (Table 7).

3.1.3.2 Engagement Assessment Tool

Subscales: Growth Opportunities, Participation in Decision Making, and Advancement

The mean scores of subscales Growth Opportunities, Participation in Decision Making, and Advancement were on average above 3.0 suggesting that the nurses felt like they were given the opportunity for professional and personal growth (Mean 3.45 (SD 0.66) and Mean 3.54 (SD 0.76)) and were able to participate in decision making to a moderate extent (Mean 3.38 (SD 0.50) and Mean 3.46 (SD 0.67)). It indicated that they perceived there was reasonable remuneration for their performance to some extent (Mean 3.21 (SD 0.74)) and Mean 3.04 (SD 0.74)) (Table 7).

3.1.4 Differences of the means SCORE Subscales between DQNs and IQNs

Three out of 11 subscales of the SCORE showed a difference between the two groups of nurses (Table 7): Burnout Climate (Safety Culture and Well-being Assessment Tool), Work-Work-Life-Balance, and Workload (Engagement Assessment Tool). Results are described in more detail in the following section (3.1.3.1).

3.1.4.1 Subscale: Burnout Climate

There was a difference in the mean scores on the subscale for perceived Burnout Climate between IQNs (Mean 55.4 (SD 22.5)) and DQNs (Mean 66.4 (SD 23.5)); F(2, 157) = 3.65, p=0.028) while adjusting for gender and age differences. These results suggest that IQNs perceived lower levels of Burnout Climate than DQNs, but both groups evaluated the degree of emotional exhaustion climate as moderately high (Table 7).

3.1.4.2 Subscale: Work-Life-Balance

ANCOVA for the Work-Life Balance Subscale adjusted for gender and age differences showed that there was a difference between IQNs (Mean 2.02 (SD 0.86)) and DQNs (Mean 2.31 (SD 0.66)); F (2, 153) = 7.56, p=0.001) which indicated that IQNs evaluated their Work-Life-Balance slightly better than DQNs but still perceived problems with the balance to some extent (Table 7).

3.1.4.3 Subscale: Workload

There was a difference between IQNs (Mean 3.67 (SD 0.81)) and DQNs (Mean 4.06 (SD 0.65)); F (2, 157) = 3.71, p=0.027) for the subscale Workload adjusted for gender and age. These results suggest that IQNs perceived moderately lower workload burden levels than DQNs but still high levels (Table 7).

Table 7: Results of the analysis of covariance (ANCOVA) on the 11 subscales of the SCORE questionnaire[8]

	DQNs mean (SD)	IQNs mean (SD)	F	p-value	Cohen's D
Safety Culture and Well-Being Assessment Tool					
Learning Environment [(a)]	62.5 (18.5)	63.7 (12.9)	1.65	0.195	n/a
Teamwork Climate [(a)]	54.5 (16.5)	55.2 (13.0)	1.82	0.166	n/a
Local Leadership [(a)]	62.3 (22.2)	61.5 (15.5)	1.25	0.561	n/a
Safety Climate [(a)]	57.1 (17.6)	57.2 (12.1)	2.29	0.425	n/a
Burnout Climate [(b)]	66.4 (23.5)	55.4 (22.5)	3.65	**0.028***	0.47
Personal Burnout [(b)]	49.0 (25.9)	46.9 (23.1)	0.26	0.767	n/a
Work-Life-Balance					
Work-Life-Balance [(c)]	2.31 (0.66)	2.02 (0.86)	7.46	**0.001***	0.38
Engagement Assessment Tool					
Growth Opportunities [(d)]	3.54 (0.76)	3.45 (0.66)	0.78	0.460	n/a
Workload [(d)]	4.06 (0.65)	3.67 (0.81)	3.71	**0.027***	0.53
Participation in Decision making [(d)]	3.46 (0.67)	3.38 (0.50)	1.01	0.366	n/a
Advancement [(d)]	3.04 (0.74)	3.21 (0.74)	1.68	0.189	n/a

(a) Moderately positive perceptions were defined as having mean scores > 50 and ≤ 75, and positive perceptions were defined as having mean scores between > 75 and 100; (b) Moderately high levels of burnout climate and personal burnout were defined as having a mean score > 50 and ≤ 75, high burnout climate and personal burnout level were defined as mean scores between > 75 and 100; (c) Mean scores between 1.0 and ≤ 3.0 reflect fewer problems with work-life balance, mean scores between > 3.0 and 4.0 indicate more problems with work-life balance; (d) Mean scores ≥ 3.0 and 5.0 indicated more positives norms for advancement, growth opportunities and inclusive decision-making but worse norms regarding workload (mean scores between > 3.0 and 5.0 indicate higher workloads); Statistical comparisons were based on the mean scores and the variation.; Models are adjusted for gender and age; Statistical significance was defined as $p<0.05$

3.1.5 Determinants of the SCORE subscales of DQNs and IQNs

Sociodemographic characteristics (Table 5) and factors related to migration (Table 6) were included in a bivariate linear regression analysis to detect their impact on the SCORE subscales. Variables that showed significant effects were included in a stepwise linear regression model adjusted for age and gender (Table 8). The results of the bivariate regression analysis can be found in the appendix (Annexe 9).

3.1.5.1 Results of the Stepwise Linear Regression Model

Most of the presented associations between sociodemographic characteristics or factors related to migration and the mean scores SCORE subscales were weak. However, 14 of the detected associations were significant in the multiple regression analysis at a

[8] Table 7 has been published in the following publication: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nurs 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

significance level of at least p <0.05, adjusted for gender and age, indicating evidence that a linear relationship exists (Table 8).

3.1.5.2 Subscale: Learning Environment

No sociodemographic characteristics of DQNs were associated with the subscale Learning Environment. However, the multiple stepwise regression analysis showed that IQNs with less than one year of professional experience tended to evaluate their Learning Environment as slightly less supportive (b= -11.193, p=0.002) (Table 8).

3.1.5.3 Subscale: Safety Climate

IQNs who migrated to Germany alone evaluated the subscale Safety Climate more positively compared to those who migrated with their family or with friends (b= -9.953, p=0.019). No sociodemographic characteristics of DQNs showed an association with Safety Climate Subscale (Table 8).

3.1.5.4 Subscale: Burnout Climate and Personal Burnout

DQNs between 18 and 29 years evaluated the degree of Burnout Climate as higher compared to older DQNs (b=10.723, p=0.037). IQNs with a level of language proficiency of B1 perceived higher levels of Burnout Climate (b= -17.720, p=0.006). Personal Burnout was associated with work experience in DQNs (b=16.127, p=0.025), indicating that nurses with more professional experience rather tended to feel burnt out (Table 8).

3.1.5.5 Subscale: Work-Life-Balance

DQNs without children under 18 indicated less Work-Life-Balance problems (b=0.207, p=0.036) compared to those with children. Nurses older than 29 years tended to report more Work-Life-Balance problems (b=0.348, p=0.019, b=0.631, p=0.002, respectively). IQNs with higher level of language proficiency (B2 or above) reported less Work-Life-Balance problems (b= -0.612, p=0.009) (Table 8).

3.1.5.6 Subscale: Growth Opportunities

IQNs who migrated alone tended to evaluate their Growth Opportunities better compared to nurses who migrated with their family (b= -0.539, p=0.023) (Table 8).

3.1.5.7 Subscale: Workload

DQNs who identified as male tended to perceive lower Workload levels compared DQNs who identified as female (b= -0.352, p=0.028). IQNs with a higher level of language proficiency perceived lower Workload levels (b= -0.894, p<0.001) (Table 8).

Table 8: Results of the Multiple Stepwise Regression Analysis on the 11 Subscales of SCORE per Study Group[9]

	IQNs				DQNs			
Dependent / **Predictor**	**B**	**beta**	**p-value**	**R-square**	**B**	**beta**	**p-value**	**R-square**
Learning Environment								
between 18 and 29	0.268		0.066					
between 30 and 40	-0.026		0.844					
between 40 and 50	-0.140		0.260	0.151			n/a	
Female	-0.083		0.508					
Work experience: less than one year	-11.193	-0.388	**0.002***					
Safety Climate								
between 18 and 29	0.029		0.819					
between 30 and 40	-0.136		0.288					
between 40 and 50	0.113		0.376	0.091			n/a	
Female	0.065		0.627					
Migration: alone	-9.953	-0.302	**0.019***					
Burnout Climate								
between 18 and 29	0.026		0.835		10.723	0.206	**0.037***	
between 30 and 40	0.141		0.248		0.075		0.482	
between 40 and 50	-0.208		0.087	0.118	-0.124		0.223	0.042
Female	0.018		0.888		-0.151		0.125	
CEFR Level: B1	-17.720	-0.342	**0.006***				n/a	
Personal Burnout								
between 18 and 29					0.128		0.259	
between 30 and 40					0.047		0.648	
between 40 and 50			n/a		-0.107		0.289	0.050
Female					-0.137		0.171	
Work experience: 1 to 3 years					16.127	0.224	**0.025***	
Work-Life Balance								
between 18 and 29	0.631	0.372	**0.002***		0.348	0.237	**0.019***	
between 30 and 40	0.026		0.872		0.072		0.487	
between 40 and 50	-0.180		0.146	0.237	-0.156		0.123	0.130
Female	-0.095		0.436		-0.062		0.529	
Children under 18: No	0.254		**0.059***		0.307	0.211	**0.036***	
CEFR Level: B1	-0.612	-0.311	**0.009***			n/a		
Growth Opportunities								
between 18 and 29	0.119		0.343					
between 30 and 40	-0.174		0.169					
between 40 and 50	0.060		0.637	0.084			n/a	
Female	0.002		0.987					
Migration alone	-0.539	-0.290	**0.023***					
Workload								
between 18 and 29	-0.006		0.961		0.188		**0.055***	
between 30 and 40	0.115		0.314		-0.096		0.326	
between 40 and 50	-0.158		0.167	0.229	-0.175		0.073	0.047
Female	-0.097		0.405		-0.352	-0.216	**0.028***	
CEFR Level: B1	-0.894	-0.479	**<0.001***				n/a	

*All models were adjusted for gender and age (Dummy coded: Reference category Gender: male, Reference category age: over 50); statistical significance was defined as <0.05; n/a (not applicable) indicates that either no significant effects were found or that the independent variable is for a certain study group not applicable

[9] Table 8 has been published in the following publication: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nurs 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8

3.2 Part B: Findings of the Interview Study[10]

In total, 135 domestically qualified and 102 internationally qualified nurses were invited to participate in an interview; 21 DQNs and 14 IQNs agreed to take part (respondents' rate 28.35 % and 14.28 %, respectively). The mean interview duration was 20.64 minutes (range 08.15 – 41.23 minutes). Overall, eight main themes emerged from qualitative content analyses concerning the integration process of IQNs into the German nursing workforce. Exemplary quotations were used to illustrate meaning and themes emerging from two data sets generated from this research. Exemplar quotes were anonymised to protect the identity of participating nurses, translated into English, and slightly adapted to preserve cultural sense and meaning by CR (fluent in German and English) and checked for accuracy by SB (a native English speaker fluent in German).

3.2.1 Description of the Study Participants

A total of thirty-five qualified nurses were included in the study: 21 domestically qualified and 14 internationally qualified. Most nurses worked at the University Hospital Heidelberg (54.3 %) or the St. Josefs Hospital Heidelberg (18.6 %). DQNs were, on average, 40 years old, IQNs about ten years younger. Most nurses identified as female (74.3 %). DQNs (with 19.5 years) had twice as many years of work experience as IQNs (with 10.5). Nearly a quarter of participating nurses worked at the management level (22.9 %). Nurses were employed in a variety of different specialities, services and departments. Most worked in inpatient wards (74.3 %), with a few nurses from intensive care units (25.7 %) (Table 9). The top country of origin of IQNs was the Philippines (35.7 %), followed by India (14.3 %), Italy (14.3 %), and Romania (14.3 %).

[10] Parts of this chapter have been published in the following publications: **Roth, C**., Breckner, A., Wensing, M., Mahler, C., Krug, K., & Berger, S. (2023). Barriers and enabling factors for workplace integration of internationally qualified nurses: A qualitative study of perceptions of German nurses. Nursing Open, 00, 1– 11. https://doi.org/10.1002/nop2.1760; **Roth, C**., Wensing, M., Breckner, A. et al. Keeping nurses in nursing: a qualitative study of German nurses' perceptions of push and pull factors to leave or stay in the profession. BMC Nursing 21, 48 (2022). https://doi.org/10.1186/s12912-022-00822-4

Table 9: Characteristics of the Study Participants of Part A: Interview Study

n (%)	DQN* n= 21 (60.0)	IQN** n=14 (40.0)	Total N=35 (100.0)
Study Centre		**n (%)**	
University Hospital Heidelberg	14 (66.7)	5 (35.7)	19 (54.3)
St. Josefshospital	4 (19.0)	6 (42.9)	10 (28.6)
Thorax Clinic Heidelberg	2 (9.5)	3 (21.4)	5 (14.2)
Hospital Salem	1 (4.8)	0	1 (2.9)
Age in years		**Mean (SD)**	
	40.4 (11.4) Min 22 Max 60	33.1 (10.4) Min 24 Max 62	37 (11.3) Min 22 Max 62
Gender		**n (%)**	
Female	17 (81.0)	9 (64.3)	26 (74.3)
Male	4 (19.0)	5 (35.7)	9 (25.7)
Work experience in years		**Mean (SD)**	
in Germany	19.5 (12.8) Min 0 Max 44	10.5 (8.3) Min 1 Max 28	16 (11.7) Min 0 Max 44
Position		**n (%)**	
State-Qualified-Nurse	14 (66.7)	13 (92.9)	27 (77.1)
Head Nurse	7 (33.3)	1 (7.1)	8 (22.9)
Clinic		**n (%)**	
Internal Medicine	5 (23.8)	3 (21.4)	8 (22.9)
Surgical Clinic	6 (28.6)	1 (7.1)	7 (20.0)
Pneumology Department	2 (9.5)	3 (21.4)	5 (14.2)
Gastro-Enterology Department	2 (9.5)	3 (21.4)	5 (14.2)
Cardiology/Pneumology	3 (14.3)	0	3 (8.6)
Paediatric Clinic	1 (4.8)	1 (7.1)	2 (5.7)
Dermatological Clinic	1 (4.8)	1 (7.1)	2 (5.7)
Cardiology/Internal Medicine	1 (4.8)	1 (7.1)	2 (5.7)
Trauma & Orthopaedics	0	1 (7.1)	1 (2.9)
Ward		**n (%)**	
ICU/IMC***	6 (28.6)	3 (21.4)	9 (25.7)
Normal Ward	15 (71.4)	11 (78.6)	26 (74.3)

*DQNs – Domestically Qualified Nurses (in Germany); **IQNs – Internationally Qualified Nurses (within Europe or overseas); ***Intensive Care Unit, Intermediate Care Unit

3.2.2 Content Analysis Findings

The first part of the qualitative content analysis (Steps 1 – 5, Figure 11) of interview transcripts of the DQNs resulted in 660 inductively identified codes, which were empirically anchored in the transcription material. From the 660 codes, a total of five main themes emerged with a varying number of subthemes and codes: (I) Standard of Practice, (II) Workplace Integration, (III) International Recruitment, (IV) Organisational Role, and (V) Workforce Shortage (Annexe 10).

The first part of the qualitative content analysis (Steps 1 – 5, Figure 11) of the IQNs' interview transcripts resulted in a total of 332 inductively identified codes, which were empirically anchored in the transcripts. A total of three themes and a varying number of

subthemes emerged from the codes: (I) Standard of Practice, (II) Workplace Context, and (III) Internationally Qualified Nurses (Annexe 11).

The second part of the qualitative content analysis (Steps 6 – 9, Figure 11) comparison of the two codebooks resulted in six deductively identified main themes, including several subthemes (Annexe 12) (Table 10).

The exemplary quotations of the nurses are colour-coded in the course of the presentation of the qualitative results in order to simplify readability. Quotations made by IQNs are shown in blue. Quotations made by DQNs in green.

Table 10: Themes and Subthemes that emerged deductively from the comparison of the two different codebooks

Main theme	Definition	Subthemes
I. Nursing Training and Professional Experiences	This theme describes perceived differences in nursing training, the philosophy of nursing and the impact of (lack) of professional experiences of IQNs on the success of workplace integration.	• Differences in Nursing Training • Philosophy of Nursing and Model of Nursing Care • Recognition of Professional Experiences
II. Nursing Scope and Standard of Practice	This theme describes perceived differences related to services that a qualified nurse is deemed competent to perform in keeping with the terms of their professional license and related context factors such as working as nursing team or available working material and resources.	• Collaborative Teamwork • Experiences with Patients • Delivery of Patient Care • Material and Resources
III. Social and Cultural Aspects	This theme describes social and cultural aspects related to workplace integration.	• Racism, Discrimination and Othering • Cultural Differences
IV. Lack of German Language Proficiency	This theme describes the impact of the lack of German language proficiency of IQNs on workplace integration.	• Impact on Delivery of Patient Care • Impact on Teamwork • Language Lessons
V. Organisational Role	This theme describes the role of the management of hospitals in workplace integration of IQNs.	• Appropriate Placement • Recruitment Process • Orientation Phase • Leadership Support • Support by Preceptors/Mentors • Nursing Workforce Management • Additional Responsibilities/ Increased Workload
VI. The Role of Internationally Qualified Nurses	This theme describes the role of internationally qualified nurses' role have in their workplace integration.	• Personal or Professional Challenges of IQNs • Personal Attributes of IQNs

3.2.3 Theme I: Nursing Training and Professional Experiences

This theme describes perceived differences in nursing training, the philosophy of nursing and the impact of (lack) of professional experiences of IQNs on the success of workplace integration.

3.2.3.1 Subtheme: Differences in Nursing Training

This subtheme describes perceived differences in the nursing training of DQNs and IQNs and its impact on workplace integration from the perspective of DQNs and IQNs.

Both DQNs and IQNs mentioned perceived differences in the nursing training curriculum. DQNs perceived the main difference to be that many IQNs were educated at university level, which was perceived as more theory-based than to the apprenticeship-based nursing education programmes in Germany, in hospital-based training institutes. Due to the differences in nursing training, some DQNs felt that IQNs needed more practical training, particularly in fundamentals of care such as personal hygiene, dressing, and toilet hygiene. Assisting patients with personal hygiene, getting dressed or toilet hygiene are significant parts of the nursing profession in Germany and are taught primarily in the first year of nursing training. In other countries, however, these activities may be done by relatives or care assistants and nursing aides. DQNs thought it was challenging for some IQNs to perform these activities. They indicated that special attention should be paid to orientating IQNs to fundamentals of care requirements to improve the integration process. Nevertheless, the professional expertise of many IQNs acquired through bachelor's or master's degrees in nursing internationally was appreciated and highlighted as valuable during the integration process.

"[...] the experience that the type of nursing training there is completely different than here, so especially from Serbia and Bosnia the training is more theoretically than in Germany, accordingly the knowledge of practical skills in general is simply very low and there is a great need to teach practical skills during induction". (DQN 3, Age 27, Female)

"Yes, that they have enormous expertise. It's just that because they can't express themselves like that [due to language barriers], it's not so noticeable." (DQNs 30, Age 60, Female)

IQNs agreed with this observation. They perceived that nurses in Germany were more involved in assisting patients in ADLs such as personal hygiene, showering and bathing. IQNs explained that for them, the main difference was that they were qualified to perform clinical procedures, such as drawing blood or carrying out blood transfusion, often considered an area of responsibility of medical staff in Germany instead of assisting

patients with personal hygiene and other basic needs. Many IQNs came from clinical practice environments where family members supported the patient with personal care.

“For example, in Italy, we do the blood transfusion; here, it's mostly done by the doctors. That is the big difference for me, and yes there are other differences, but this is a big difference for me.” (IQN 17, Age 35, Male)

"[...] we do more basic care here because we support the patients with personal hygiene, showering, and what do you call it, when they need help with going to the bathroom or something. [...] Because in the Philippines a patient needs at least one relative and the relative stays there the whole day." (IQN 35, Age 29, Female)

3.2.3.2 Subtheme: Philosophy of Nursing and Model of Nursing Care

This subtheme describes perceived difference regarding values, ethics, beliefs, and motivation for being part of the nursing profession and the impact on workplace integration from the perspective of DQNs and IQNs.

DQNs observed that the nursing philosophy, including values, ethics, and beliefs, as well as motivation for being part of the profession, differed between Germany and some other IQNs countries of origin. DQNs perceived that many IQNs would not question their assigned tasks but simply carry them out. In Germany, however, critically thinking is a fundamental responsibility in the nursing profession. It was seen as beneficial for the integration process if IQNs would be informed about these core practice difference. Interestingly, IQNs described experiencing a similar phenomenon. Some IQNs, depending on the country of origin, had noticed that DQNs simply carried out doctors' orders without critically questioning them. This difference was particularly evident when administering medication.

[...] the biggest problem is certainly that IQNs don't question anything. The doctor says: "Pull out the indwelling urinary catheter", for example, and then the indwelling urinary catheter is pulled out here at 11 o'clock at night, where we now perhaps think to ourselves what we may have learned, I would not do that now. [...] They do not question it, they just do whatever they're told. On the one hand, of course, it's good to do what you are told, but on the other hand, I personally think it's important, especially in our profession, to question things [...]". (DQN 20, Age n/a, Male)

“[…] the other colleagues [DQNs] with medication, I hope they know what it's for, why it's given, what we do before we give the medication because sometimes I... yes, not sometimes but... ah yes, sometimes I'm always... I was always surprised, for example, we give the patient Clonidine or Lasix. Normally you must check the blood pressure before you give it. Here they just....” (IQNs 34, Age 28, Female)

DQNs highlighted that to improve the integration process, it was necessary to know exactly what type of nursing education program IQNs had completed, where their professional expertise lay and how much work experience, they had prior to migrating to Germany. According to the DQNs, being aware of the differences in nursing training curricula could help to identify strengths and weaknesses and to use these in a targeted way to promote integration of IQNs into the German nursing workforce. Additionally, DQNs stressed that it was essential to recognise and discuss differences in nursing philosophy with IQNs in order to enhance workplace integration. Despite perceived differences in nursing philosophy or models of nursing care, DQNs mentioned that IQNs were very proud of the nursing profession and this was something from which DQNs could learn. Nevertheless, differences in the nursing training curricula and therefore in the philosophy of nursing created challenges for both DQNs and IQNs.

“Where a nurse then has completely different tasks to those here in Germany and that of course has an effect because we first have to teach them 'What are the requirements for Germany' and they are sometimes very surprised. […]. That's the first thing that takes their breath away.” (DQN 9, Age 45, Female)

“For example, I had the impression that some of those who were trained abroad are proud of their profession and perhaps even more than we are here in Germany." (DQN 10, Age 29, Female)

IQNs also mentioned perceived differences related to models of nursing care. IQNs, for example, explained that there were higher numbers of older people with neurological disorders such as Alzheimer’s disease in Germany compared to their home country, meaning adaptation in provision of care for patients with this disorder. Another difference that IQNs observed related to guidelines and expected standards of care. One IQN, for example, explained that in her/his home country, it was patient progress notes were documented in the patient's room, whereas it was it was common practice in Germany to complete documentation in the nurses’ station. Furthermore, some IQNs, particularly from the Philippines, explained that they work more closely with physicians in their home country and therefore gained increased clinical knowledge and expertise compared to DQNs in Germany. IQNs also stated that in their home country, relatives were always in the hospital with the patients and took on many personal care needs that were carried out by nurses in Germany. IQNs were unfamiliar with role of (lack of) relatives in Germany due to cultural differences from their previous working environment. IQNs perceived not only differences related to models of nursing care and the philosophy of nursing between them and DQNs, but also between themselves and other IQNs from other countries.

“For example, a girl from Africa who came to Germany to study nursing and she got a job and the way she treats a patient is different and a guy who studied in Africa and he moved to Germany and he got a job and the way he treats the patient is different. Because when you study in Germany you learn lot of stuff, how the people and everything but this person he just moved to or she just moved to Germany just to work so she don't know because she wasn't... she hasn't been with many other people in this country. So the way she treats the patient is different.” (IQN 19, Age 29)

3.2.3.3 Subtheme: Recognition of Professional Experiences

This subtheme describes the (lack of) recognition of previous professional experiences of IQNs and the impact on workplace integration from the perspective of DQNs and IQNs.

Although the years of work experience of IQNs varied, DQNs highlighted the importance of recognising IQNs' previous professional experiences. Most DQNs found that by the time they migrated their internationally qualified colleagues had built up considerably more clinical practice experience. Additionally, many IQNs demonstrated expert professional expertise, many with advanced nursing practice and expertise. However, the German working environment and the regulations for practising as a nurse prevented IQNs from utilising their full scope of professional skills and competencies. DQNs recognised that this circumstance was very difficult for their internationally qualified colleagues and may have had a negative impact on the integration process. They concluded that not considering the work experiences their internationally qualified colleagues gained in their home country during the integration process might lead to frustration and deskilling. Nevertheless, DQNs stressed that, on the other hand, there were instances where a combination of little work experience and lack of German language proficiency had a negative impact on the integration process.

"And I can... I imagine it is stupid when I have professional experience, no matter how old I am, and then I come to another country and am told: "You have to learn everything all over again like a nursing student […]." (DQN 30, Age 60, Female)

“[...] sometimes the older nurses from the respective countries, some of whom have already practised during the Kosovo war and have treated wounds where we could not even imagine, which we have perhaps never seen in our lives, but young nurses from abroad are usually still very inexperienced […]” (DQN 20, Age n/a, Male)

“And then, of course, the orientation period will be much more difficult than someone who A comes with good German language proficiency and B already has a few years of professional experience. It's the same with triple-win employees: We had a colleague who I think had twenty years of professional experience in Bosnia, she was an OR manager, so of course it's different to someone who has zero professional experience.

She spoke little or no German, but she knew and understood the nursing tasks." (DQN 24, Age 48, Female)

IQNs confirmed these observations. Furthermore, they indicated that several years of professional experience enabled them to identify potential for practice improvements in their host country. IQNs explained that they could contribute more than the practice environment allowed. Their professional experiences and qualifications enabled them to perform different additional procedures. They mentioned the desire to apply these skill sets and competencies. However, differences in the Standard of Practice in Germany due to differences in the nursing education programmes and their home countries prevented them from completing certain procedures and working to the top of their professional scope.

"But yes, sometimes I find it hard because I know that I can do more, for example, I can insert the cannula, I can administer the blood transfusion, sometimes I find that.... I want to do more but..." (IQN 34, Age 28, Female)

3.2.4 Theme II: Nursing Scope and Standard of Practice

This theme describes perceived differences related to services that a qualified nurses is deemed competent to perform in keeping with the terms of their professional license and related context factors such as working as nursing team or available working material and resources.

3.2.4.1 Subtheme: Collaborative Teamwork

This subtheme describes aspects related to interprofessional teamwork and its impact on workplace integration from the perspective of DQNs and IQNs.

DQNs perceived differences in the hierarchical order within the interprofessional team. They explained that in Germany, medical staff and qualified nurses worked together as equals. In addition, interprofessional teamwork consisted of different healthcare professionals complementing each other without a strict hierarchical order. This hierarchical order, however, would differ in some IQNs home countries due to the culture e.g., where nurses were subordinate to medical staff. Furthermore, some DQNs observed that other health professions did not always readily accept IQNs in the team. In particular, some medical staff did not recognise that IQNs were responsible for patients and would, therefore, always consult with DQNs. In addition, the reserved nature of some IQNs led to them to potentially being taken advantage of by other healthcare professionals or other domestically qualified nursing colleagues. Nevertheless, most

IQNs had an excellent overall experience with their medical and nursing team members and did not report such experiences.

"Yes, exactly, fear of the new, because in the Philippines it is entirely different, yes, [...] Here it is so that we are a team, that we simply complement each other. The doctor says something, and we complement it; that is how it is. And in the Philippines or in India, let's say, it is different, the hierarchy, the doctor is at the top." (DQN 28, Age 40, Female)

"[...] sometimes I even have the feeling that [...], that they are [IQNs] more likely to be exploited: Yes, they are [IQNs] on duty this afternoon, then we will postpone activities until the afternoon." (Nurse 29, Age 42, Female)

IQNs also remarked on differences in power dynamics in the healthcare team. Some stated that although they had to adjust to being part of an interprofessional team where medical staff and nurses cooperate closely, they evaluated this teamwork climate positively. Other IQNs, on the contrary, indicated that they were accustomed to working with physicians as a team and felt this was not the case in their new work environment. However, a bigger challenge for many IQNs was not knowing which activities they could perform and which were considered the medical scope of responsibility in Germany. This difference created uncertainty and had a negative impact on teamwork. In addition, both groups perceived differences in professional autonomy. Depending on the country of origin, IQNs had more or less autonomy compared to their domestically qualified peers, which further exacerbated confusion at times about responsibility and challenged effective teamwork. According to DQNs, another issue that challenged teamwork was that some IQNs did not dare to ask if they did not understand something or to ask for help. DQNs stressed that constant negative feedback about work practices or lack of German language proficiency made workplace integration more difficult for both groups. These additional stressors increased conflict potential within the nursing team and added strain to the daily work routine.

"When I started here, I also did it like at home: "Good morning, NAME." And he said, "You can sit and say that." I think that's a bit of a different culture here, I think that's good. We also have our own respect or something for our profession and everybody is very grateful also from us. […]." (IQN 32, Age 26, Female)

"Which, of course, means that if there is a problem, these colleagues are ignored, and then the direct approach is made to me. Whereby I am also very tightly positioned and then also say quite clearly, 'I am here to give security, and if it does not go any further, to intervene'; otherwise, please talk to my colleague because she is also the responsible nurse. There, too, as I said, these stories and yes, as far as professional competence is concerned, you notice right from the start that they naturally also have problems with some orders because we work differently in Germany [...]". (DQN 9, Age 45, Female)

“If they [IQNs] always forget something every shift and you ask, 'did you do this and that', 'Oh no, I forgot', they are only burdened with negative feedback. It is always 'that is important, and you did not do that, that is also important, you did not do that either' […].” (DQN 6, Age 35, Female)

Both groups described how the nursing team was essential in successfully integrating IQNs. DQNs saw team meetings in which challenges were discussed as a team to be particularly helpful. Additionally, DQNs found that understanding and patience for IQNs was necessary to support workplace integration. Moreover, the nursing team should show their internationally qualified team members that they value and appreciate them. Almost all DQNs explained that despite the challenges of multicultural nursing teams, they enjoyed working with their internationally qualified colleagues. Most IQNs backed these statements. They stated that their nursing team supported them in different ways by, for example, always being open to questions or standing up for them. This support significantly facilitated the integration process. However, not all IQNs shared this opinion. Some pointed out a need for more support from domestically qualified colleagues when caring for patients. This lack of support was described as particularly frustrating. Almost all DQNs explained that after a couple of years, most IQNs were well integrated within the team, and initial difficulties had been overcome.

"I have to say that with us, I come from (ward), they are well integrated into the team, they are accepted by everyone. Of course, it is also discussed with the ward manager, 'Where are the deficits, what can still be done?' We don't write off anyone who has real difficulties, you can see that some really need a lot of time and others find it easier. And I have to say that the team has really taken them in. […]. (DQN 4, Age 34, Male)

“[…]. I think we should tell them [IQNs] that we are very grateful that they come to us and fill in the gaps.” (DQN 5, Age 58, Male)

"Well, at that time I had, well, yes, it's mainly the support from the nursing team, that's definite. Because you don't know anyone, you don't have any relatives here, you have to rely on your team for the time being." (IQN 15, Age 50, Female)

DQNs in particular explained that team-building measures had contributed significantly to the integration process. Some DQNs stated that they felt it enhanced workplace integration to include IQNs not only in their day-to-day work on the ward but also to engage with them outside of work. DQNs found meeting their internationally qualified colleagues outside of work or organising joint leisure activities such as little parties was experienced as extremely beneficial. IQNs confirmed this statement. Joint activities in their free time or company celebrations, such as a summer or Christmas party, allowed them to get to know their domestically qualified colleagues better, to integrate more

effectively into the nursing team and eventually feel that they belonged as part of the nursing team.

I1: “Ah okay. Yes, good. And you said that the integration of your colleagues from abroad into the team went very well. How did you know that […]" DQN: “That they... yes, that... I noticed that they quickly made contact within the team or did leisure activities together.” I1: “Ah okay, so they weren't just integrated into the team, but also in their free time?” DQN: “Yes, exactly.” (DQN 22, Age 40, Male)

3.2.4.2 Subtheme: Experiences with Patients

This subtheme describes positive or negative experiences with patients related to workplace integration from the perspective DQNs and IQNs.

DQNs described both positive and negative patient experiences. DQNs mentioned that some patients did not accept IQNs as their responsible nurse; this was frustrating for IQNs and unacceptable for their domestically qualified colleagues. Moreover, patients sometimes did not get along with their IQNs and did not feel cared for adequately. DQNs reported that some patients requested a nurse who had been trained in Germany, especially when internationally qualified colleagues had only been in Germany for a short time and their language skills needed to be improved. Nevertheless, most patients appeared to be appreciative of receiving nursing care regardless of whether this was IQNs or DQNs, as they were aware of the nursing workforce shortage. IQNs reported similar experiences, in that some patients indicated not feeling adequately cared for by IQNs and acted rudely towards them, whereas the majority appreciated the care provided by IQNs and were courteous and understanding.

"So there are also patients who say that maybe they did not feel so well looked after in the morning, but many also say that the nurse was great […].” (DQN 16, Age 22, Female)

“The patients are, in the phase in which the [internationally qualified] colleagues are only there for a short time and are still being trained, and have only a little knowledge of German, but work with the patients already. Then the patients are sometimes a little suspicious or uncertain and say 'Can you, oh, could you better do that' [...]." (DQN 8, Age 56, Female)

"[...] sometimes there are patients who are aggressive or not nice ... but most of them are nice […].". (IQN 13, Age 29, Female)

3.2.4.3 Subtheme: Delivery of Patient Care

This subtheme describes aspects related to delivery of patient care in the context of workplace integration of IQNs from the perspective DQNs and IQNs.

The perceived differences in nursing training curricula were also reflected in observations about the delivery of patient care. DNQs stated some IQNs had deficits, especially in assisting patients with providing fundamentals of care, due to this not being part of their nursing training in their home country. IQNs confirmed this. Many reported that in their home country, relatives were responsible for helping patients with fundamentals of care. Thus, IQNs, as well as DQNs, stated that assisting patients with fundamentals of care was particularly challenging. Nevertheless, IQNs mentioned the positive aspects of this nursing intervention, such as obtaining a holistic picture of the patient's state of health.

"Or they have to get used to it first, because they don't even learn it concretely. They don't have any lessons on supporting patients with personal hygiene during the nursing training, because at least in Serbia, I know for sure that they strictly expect relatives to do it and if relatives are not there then it doesn't happen. (DQN 5, Age 58, Male)

"[...] but here we do more patient care than in the Philippines because in the Philippines we do more medical tasks than here. […]." (IQN 35, Age 29, Female)

DQNs described perceived differences in infection prevention and control principles in the hospital environmental hygiene and hand hygiene. DQNs stressed that standards and policies needed to be maintained to ensure a safe clinical environment. DQNs mentioned that IQNs not following hygiene guidelines and not performing basic nursing care tasks according to German guidelines and standards of care negatively impacted on the integration process. IQNs would not pass the recognition exam due to failures in these areas. IQNs also talked about infection prevention and control. Although IQNs perceived differences in hygiene standards in Germany compared to their home country, they indicated that they had different priorities. For some nurses, a key challenge during the delivery of patient care was consistency of messaging e.g., that guidelines and policies were not taught adequately or were taught differently by different nurses. Additionally, the nursing training some IQNs received in their home country enabled them to take on tasks that belonged to the medical scope of practice in Germany. An adequate orientation phase including teaching, guidelines and policies correctly, was necessary to overcome this challenge. However, this was not the case for all IQNs and, therefore, impacted the delivery of patient care and the success of workplace integration negatively.

"[...] we also have to pay specific attention to hygiene standards. That is something where the basic understanding is simply different from ours. So these are different countries, this is the case in India, this is the case in the Philippines, [...]." (DQN 29, Age 42, Female)

"[…] In India you would have infection control you know but yeah so it's like everything should be labelled, when did you put the catheter when did you put the venous cannula everything we have date and we even track if patient has further infection then they have

this infection control to check ok, after three days you have to remove the venous cannula after one week you have to remove... all these things but I don't know how these things work in Germany.“ (IQN 19, Age 29, Female)

3.2.4.4 Subtheme: Materials and Resources

This subtheme includes perceived differences in material and resources available for patient care from the perspective DQNs and IQNs.

Many DQNs described that they had learned to appreciate the wealth of resources and material available in Germany. They learned that this was not the case everywhere. IQNs backed this view and mentioned that the supply of medical resources, such as wound dressings, differed from their home country. They explained that they, needed to first receive training on how to use different wound dressings available in order to treat patients wounds appropriately. One IQN also described the difference between medical devices in Germany and her home country.

DQN 31: “The way of working, the wealth of working materials, the tools, the modernity of what we have, I have simply learned to appreciate it. Under what conditions IQNs work….” I1: “Did they talk about it; did they tell you that?” DQN 31: Yes, we have… we sometimes meet… yes, we tried to meet every two months for a cup of coffee and then sit down together and exchange ideas and yes, so when we think we have to somehow make something helpful out of a stomach tube bag, these are disasters, they don’t have anything like that, so they take rubbish bags or something.” (DQN 31, Age 36, Female)

IQN 35: “There are so many materials here. Many, what is it called, the – what is it called, disinfectants, bandages.”I1: “Is it just different here or more than in the Philippines?” IQN 35: “More, more, much more than in the Philippines.” (IQN 35, Age 29, Female)

3.2.5 Theme III: Social and Cultural Aspects

This theme describes social and cultural aspects related to workplace integration.

3.2.5.1 Subtheme: Racism, Discrimination and Othering

This subtheme describes racist and/or discriminatory behaviour towards IQNs and aspects related to othering and its impact on workplace integration from the perspective DQNs and IQNs.

Racism and discrimination are concepts known to have a profound impact on mental and physical well-being. DQNs, described observing racist behaviour towards IQNs from colleagues or patients and recognised the need to address this issue. IQNs reported experiences of racist behaviour from patients and that it made them feel insecure and frustrated. However, in general, racist behaviour or discrimination were only occasionally described by both, internationally and domestically qualified nurses.

"Yes, what we discussed, but of course also on the ward there is always potential for improvement, somehow also to make the staff who already work on the ward more open to it. Well, I once had a colleague, so I think it is hard to change something like that, but she also made racist comments about the internationally qualified stuff, and everyone knew that [...]. (DQN 16, Age 22, Female)

"Sometimes, some patients are not so warm and welcoming because I have a different face and do not speak German correctly. Sometimes these patients get annoyed with me because I cannot understand them well, and they do not understand me [...]. They are looking for, "There are German nurses?" That is not… I do not feel good about it, but some patients are friendly, and they are good. They... and yeah, when I have these patients, I'm happy [...]."(IQN 36, Age 30, Female)

Another barrier to workplace integration that DQNs highlighted was the identification of IQNs as 'other' due to perceived cultural differences. Some DQNs mentioned that IQNs held different values or different practice routines coming from their country of origin. DQNs did not always know how to deal with this challenge. Moreover, some DQNs perceived that their internationally qualified colleagues preferred to be with other IQNs instead of socialising with DQNs. Identifying IQNs as 'other' led to sub-group formation and a sense of 'them and us'. Some DQNs felt offended by IQNs talking in their mother language with other IQNs instead of speaking German while they were on duty. They indicated that they felt excluded. IQNs, on the other hand, felt that the support from their IQN peers was invaluable and helped them overcoming feelings of being an outsider and feeling a sense of belonging with those going through similar experiences.

"[…] I'm annoyed by this, speaking Russian in one corner, then speaking Greek, then speaking Albanian and then something in between. It used to be the case that foreigners discriminated against you and I don't want to discriminate against anyone, but you have to be able to communicate in the country you're in and if you want to talk about private matters in Russian then please do it after work or during the break. But I find it unacceptable […]." (DQN 7, Age 38, Female)

IQN 27: "We are the first group from the Philippines." I1:" Yes." IQN 27: "Filipino, but I think it is better if others, for example, we have this second Filipino group, and I think it is better for them.... uh for the other group because we have... we have the other group support, we support, yeah." I1: "Yeah, so the ones already there can support the ones coming, yes." IQN 27: "Yes, exactly." (IQN 27, Age 30, Male)

3.2.5.2 Subtheme: Cultural Differences

This subtheme describes perceived negative and positive aspects related to cultural differences its impact on workplace integration from the perspective DQNs and IQNs.

DQNs mentioned that both DQNs and IQNs had to adapt to different mindsets and cultural values to influence the integration process positively. Some DQNs described

feeling awkward because IQNs assigned to them sometimes behaved (in their view) excessively grateful or submissive towards other healthcare professionals, patients, and their families. This cultural difference was perceived as challenging by DQNs particularly at the beginning of the integration process. Furthermore, DQNs observed that, while some IQNs were very motivated and worked hard, other IQNs had different attitudes and sometimes tended to overlook individual patients' needs. IQNs perceived nothing of the sort or at least did not mention it.

"It's just this Filipino-Thai thing, yes, but for us Germans, it's often inappropriate, simply not appropriate or unnecessary, and you feel a bit like, yes, you don't want to say anything brash, but they apologise and bow down, and yes, that was difficult at the beginning." (DQN 31, Age 26, Female)

"For example, with certain colleagues, you can see that they work, work, work, but I would say that the interpersonal level is often absent mainly the work. […]. It's work, work, work, but the interpersonal level is often missing." (DQN 26, Age 29, Female)

Some DQNs indicated that it would positively impact the integration process if IQNs were offered training in cultural differences between their country of origin and Germany. Additionally, DQNs stated that they were able to reflect on and improve their own working method by working with IQNs. The majority of DQNs found that the migration of IQNs brought valuable diversity to the nursing team. They considered getting to know other cultures and views to be worthwhile and to benefit to develop the nursing profession in Germany further. DQNs saw an exchange regarding cultural differences in healthcare delivery between DQNs and IQNs as necessary to improve the integration process. They highlighted that learning from each other and recognising cultural differences in healthcare delivery would assist in creating improved clarity and positively affect workplace integration. IQNs also saw the potential benefits of international exchange and learning from each other. DQNs highlighted that ideally IQNs should be informed about these differences to prepare them properly before migration to Germany.

"[…] I briefly thought about whether it would make sense to have a crash course in 'German mentality' or 'German patient in hospital', because Arab patients behave completely differently […]." (DQN 5, Age 58, Male)

"In any case, it is a way of learning with and from each other, and I always find it very exciting to hear how nursing is understood and taught in other countries. Here in Germany, we can also learn something from each other or simply benefit from each other's culture and attitude." (DQN 10, Age 29, Female)

"[…] I think [migration of nurses] that's good because we can exchange interculturally, we can learn something new from each other and we can change our... how can I say this? Our way of healthcare delivery if we work from for example international care, I think that's good […]." (IQN 33, Age 29, Female)

IQNs described structural differences regarding work guidelines. A few IQNs highlighted legislation regulating working hours and statutory rest periods between shifts. DQNs reported nothing regarding perceived structural differences. Cultural differences in lifestyle were also experienced outside the workplace by IQNs. They described travelling to work as much easier to manage, but then reported the inconvenience on Sundays where retail shops are closed in Germany.

"[…] I mean in Germany you have like strong policies: One person cannot work more than (fifteen) hours and the person who might have next shift they should have at least eleven hours of rest and all this stuff. In India you don't have these policies so when a person is not coming for the evening shift and they will ask you and ask the one who is working in the morning if they can the double shift but sometimes it is not even an option, you have to do double shift." (IQN 19, Age 29, Female)

3.2.6 Theme IV: Lack of German Language Proficiency

This theme describes the impact of the lack of German language proficiency of IQNs on workplace integration.

3.2.6.1 Subtheme: Impact on Delivery of Patient Care

This subtheme includes factors related to the lack of German language proficiency of IQNs and its impact on healthcare delivery from the perspective DQNs and IQNs.

Lack of German language proficiency had, according to DQNs, a direct impact on the quality of patient care. DQNs mentioned that the quality of patient records was impacted due to incorrect expressions. Furthermore, DQNs highlighted that some IQNs did not understand what had been said due to language barriers and stressed that misunderstandings or "getting lost in translation" could negatively impact patient safety and quality of patient care, particularly if IQNs did not admit they had not understood something and nevertheless, performed the nursing task. Moreover, DQNs mentioned that due to language barriers some nursing activities were either not carried out or not carried out correctly. Sometimes essential information regarding patients was not handed over adequately due to miscommunication or misunderstandings. This led to a reduction in the quality of nursing care and had a negative impact on patient safety. Moreover, DQNs indicated that it was sometimes difficult to explain nursing tasks due to language limitations.

"[...] it is difficult, yes, because patients say something they need, for example, they are in pain, and internationally qualified colleagues do not understand that and maybe do not give you that information, which also affects the patient." (DQN 25, Age 30, Female)

"[…] because you couldn't explain some things, but you would have liked to, you would have liked to talk to the people, but that wasn't possible […], because you want to teach, you want to explain, but you can't do it […]." (DQN 26, Age 29, Female)

For IQNs a key challenge was to master the German language. Different dialects and accents exacerbated the problems related to a lack of German language proficiency. They stated that learning German was difficult, but understanding different dialects was even more challenging. In addition, some IQNs explained that they were afraid of doing something wrong and putting patients at risk because they had not understood something due to language barriers. Learning the German language and adapting to the new working environment was exhausting for most IQNs.

"I have also experienced language barriers, […] words were simply confused like 'his or hers', it was then formulated differently in patient records. And sometimes, somehow, I have experienced that IQN were perhaps not able to admit that they had not understood the language or the content but did not admit it. So that they acted but actually did something different from what they had been told to do or how it had been explained to them. That can end dangerously, […]." (DQN 10, Age 29, Female)

"Yes, also with the patient because everyone speaks a bit of dialect and yes every day a new word and always has to learn, learn and yes." (IQN 17, Age 17, Male)

In addition, language barriers also affect the therapeutic relationship with patients and relatives negatively. In Germany, a large part of establishing a relationship with patients was by communicating with them using day to day small talk, but this was often impossible due to the lack of German language proficiency of IQNs. DQNs highlighted that without an adequate command in German language IQNs were not able to take care of patients according to certain standards. An adequate command in German language was seen as essential to be a nurse in Germany. The use of specialised medical and nursing terminology during work further exacerbated communication issues. IQNs agreed with these statements. A further problem was documentation. IQNs reported that that it was difficult to understand and learn medical abbreviations in another language.

"They don't even talk, like, "How was your day?" Something like that, […] Well, they might not be interested at all, but it's our main business and the patients feel better if they have someone to talk to for a short while, because if they lie here 24/7 in the rooms without anyone coming and maybe watch TV or read a newspaper from time to time, but they also want to talk to someone." (DQN 20, Age n/a, Male)

“Now, I have to think about it. When it comes to challenges regarding delivery of patient care, I always have to get to the language proficiency first, because if you don't understand the patients, you can't care for them adequately. Then they don't know where the pain is and what kind of complaints they have. So language really is the first challenge […].” (DQN 4, Age 35, Male)

"Sometimes I might have difficulties with the documentation, that's because I don't know these abbreviations yet and I struggle to learn any new words and these medical words that I don't know yet […]." (IQN 14, Age 31, Male)

3.2.6.2 Subtheme: Impact on Teamwork

This subtheme includes factors related to the lack of German language proficiency of IQNs and its impact on healthcare teamwork from the perspective DQNs and IQNs

DQNs described interprofessional collaboration and teamwork as challenging due to lack of German language proficiency. They highlighted potential conflicts due to language barriers and misunderstandings between IQNs and medical staff. A particular issue was that medical staff tended disregard IQNs due to language barriers and requested a DQN during ward rounds. DQNs had the impression that medical staff could be more understanding and support IQNs in achieving a sufficient command in German language by being more responsive to IQNs. Furthermore, DQNs had the impression that many IQNs were insecure, and some IQNs would not admit when they did not understand what had been said particularly when they talked to medical staff. Many IQNs, like their domestically qualified colleagues, expressed the challenges that ward rounds with medical staff brought. They said medical staff usually spoke too quickly and paid little attention to whether what was said was understood.

"In the beginning, I noticed that during rounds, which are interprofessional with doctors and nurses, there can be problems when certain things were discussed and determined by the doctor, and the IQNs did not understood those things sufficiently due to language barriers.” (DQN 10, Age 29, Female)

"For me it's still the language, yeah, because when I... when I understand something it's easy for me to do it, yeah, because sometimes I have to think, "Did I understand it right?" [...] especially on doctor rounds, I always asked the doctor yes, did I get it right [...] That's always my problem, yes. Yes."I1: "Ok. And so you are also afraid if you got it wrong?" IQN 27: "Yes, right [...] Because I treat a living patient, yes, therefore, yes." (IQN 27, Age 30, Male)

DQNs said listening and communicating with IQNs was challenging, especially during a stressful working day. It was essential to listen carefully and to remember that internationally qualified colleagues were not native speakers. Although language barriers

increased the workload for both groups, DQNs reported feeling overwhelmed at times due to the additional burden of supporting their internationally qualified peers. IQNs backed this statement. They, like their domestically qualified colleagues, explained that talking in a foreign language was exhausting. DQNs stated that they would have liked to talk to their internationally qualified colleagues and engage in dialogue, but that the language barrier did not always allow this. This made them feel frustrated and had a negative impact on teambuilding. IQNs, on the other hand, expressed their gratitude towards their domestically qualified colleagues. They stated that their domestically qualified colleagues usually were very patient and tried to support them in improving their German language proficiency. Nevertheless, the lack of German language proficiency had a negative impact on the self-confidence of some IQNs. The lack of self-confidence was evident in their professional integrity and personality. DQNs felt that talking on or answering the telephone was a further challenge for IQNs, and IQNs agreed that making a call in a different language was extremely difficult. However, both groups confirmed that language barriers could be overcome over time.

“That was extremely difficult. Yes, you explain, you really want to give them a chance and you also want them to be able to establish themselves [...] but if you have that day after day and you explain something today and you know exactly tomorrow you have to explain it again, because you don't know what has stuck due to lack of language proficiency, then in the long run, if it goes on for months, it is extremely exhausting [...].” (DQN 6, Age 35, Female)

“Yes, friendly, nice, at the beginning I have difficulties with the language but everyone is very nice.” (IQN 32, Age 26, Female)

“What do you think that's a big problem, when the phone rings for the first time here, I say: "Here, answer it, please". Then they, yes, they panic. And then they hide in the break room and make their phone calls there.” (DQN 20, Age n/a)

“Talking on the phone at the beginning is very difficult because I do not understand the language. I always have to say, "Can you repeat that?" And so, but now I try to pass everything.” (IQN 35, Age 29)

3.2.6.3 Subtheme: Language Lessons

This subtheme describes the benefits of additional German language lessons to facilitate workplace integration from the perspective DQNs and IQNs

All IQNs who participated in an interview, stated that they had received some form of language lessons either before migrating to Germany in their home country or when they arrived. Although both groups of nurses considered language lessons beneficial, DQNs

indicated that many language courses lacked practice expression in medical and nursing terminology. DQNs suggested that specific language courses or role plays would influence the integration process positively. A few DQNs mentioned that offering IQNs intensive German language lessons (including medical and nursing terminology) would make sense before they start to work on the ward to eliminate challenges related to lack of language proficiency and work-related stress due to working in an unfamiliar work environment. IQNs agreed that additional language lessons, including medical and nursing terminology, could be beneficial and enhance workplace integration. However, working full-time and attending a language course was exhausting for IQNs.

"[…] we also do a bit of practical language training, because they get their language training, the general I would say, but not the medical terminology, and on our ward we do a little training on 'how to communicate with the patient', and we also do role plays and do very simple things like 'how to change a dressing on a wound' or 'how to change a tube dressing', so we integrate that with communication." (DQN 4, Age 35, Male)

"Yes, (...) at the moment, I started in November 2018. And at the beginning it was difficult for me because of the medical terminology language, I came here with B1 level. And I also had school and work at the same time and for me that was a difficulty, (...) because I was full time at work and full time at school".(IQN 12, Age 32, Male)

3.2.7 Theme V: Organisational Role

This theme describes the role of the management of hospitals in workplace integration of IQNs from the perspective of IQNs and DQNs.

3.2.7.1 Subtheme: Appropriate Placement

This subtheme describes the impact of the (in)appropriate placement of IQNs and its impact on workplace integration from the perspective DQNs and IQNs.

DQNs mentioned that placing IQNs appropriately on nursing units based on their education or qualifications was essential to promote successful workplace integration. The appropriate placement of IQNs was crucial not only for themselves to develop professionally but also for DQNs to organise the integration processes as efficiently as possible. Furthermore, DQNs stressed that it was very challenging for IQNs to be placed on an intensive care unit without previous professional experience in this work environment. According to DQNs, it would facilitate the integration process more effectively if IQNs first worked on regular wards enabling them to improve their language proficiency, gain work experience in the German healthcare system, and get to know the hospital structures in a non-critical environment. IQNs agreed with this. They explained

that working in on a ward significantly different from the one they had previously worked on at home was difficult. A small number of IQNs also mentioned challenges related to inappropriate placement.

“One of my colleagues had worked in a large operating theatre [in her home country]. It is therefore clear that she has problems with patient care at a normal ward, which was of course something completely different for her […].” (DQN 26, Age 29, Female)

“[…] I have the fear, I have the fear when I work on outpatient care unit or at the OR. I think that's my weakness, yeah. The intensive care unit is still ok, but I like to work on a normal ward.” (IQN 35, Age 29, Female)

3.2.7.2 Subtheme: Recruitment Process

This subtheme includes factors related to the recruitment process of IQNs and the impact on the integration workplace from the perspective of DQNs and IQNs.

DQNs stressed that the recruitment process played an important role in the success of workplace integration. They indicated that many IQNs arriving at once made the integration process more difficult. In addition, it depended on different factors, such as professional experiences or personal attributes, as to whether an IQN could be integrated effectively into the nursing team in a timely way. One DQNs mentioned that not only a high number of IQNs, but also IQNs from different countries further challenged the integration process. In this context, enough time for a good orientation programme and suitable personnel played an important role in facilitating integration. IQNs, on the other hand, appreciated the support from their fellow internationally qualified nurses. They stated that it was beneficial to be together with other IQNs and support each other compared to being alone. DQNs being involved in the recruitment process and being able to express their thoughts regarding the suitability of the IQNs for the position was seen as a valuable idea.

"It always depends on the number of IQNs who come at once [...]. Nevertheless, you should not take just any applicant; you should consider it and have a 4-week probationary period. And then also discuss this with the colleagues on the ward [...], but as I said, the number of IQNs plays a role". (DQN 5, Age 58, Male)

DQNs and IQNs mentioned the importance of adhering to Ethical Guidelines in international nursing recruitment. Both groups talked about the shortages of qualified nurses internationally in health systems. DQNs said they were not comfortable recruiting exclusively from one country. Recruiting internationally qualified nurses exclusively from one country was considered ethically unacceptable as there is a great need for qualified

nurses in almost every country. IQNs agreed with this. Nevertheless, DQNs and IQNs agreed that everyone should be free to migrate to another country and work there, especially if there were no job opportunities in their home country.

"However, I believe that you have to do it in a targeted way and consider from which countries […] what I see critically is that the amount that is recruited, depending on which countries they come from, naturally also brings a disadvantage for the countries themselves at some point." (DQN 22, Age 40, Male)

"I think there are shortages of nurses all over the world. I think [migration of nurses] that's good because we can exchange interculturally, we can learn something new from each other and we can change our... how can I say this? Our way of healthcare delivery if we work international, I think that's good, but also in the Philippines there is a lot of staff shortage, but we don't get enough money there, so we have to work in other countries." (IQN 33, Age 29, Female)

Nevertheless, IQNs had their reasons for migrating to another country. They stated that they emigrated to Germany for different reasons, mainly to find employment, higher income, improved working conditions, occupational safety, and the opportunity to support their family in their home country. However, the IQNs' descriptions of their daily work showed that their desire for better working conditions, in particular, was not always fulfilled. Opinions on the earning potential varied between IQNs. Some IQN described earning more money in Germany. Others explained that because their professional qualification still needed recognition, so they earned less money despite doing the same work as their DQNs. This system frustrated IQNs and made them question their decision to emigrate.

"And here [Germany] we have a lot more opportunities than in [country] and you earn more money and you have a lot more [occupational] security also here as a nurse and in [country] is also.... I work in a small hospital, there are only few special things for the patients." (IQN 32, Age 26, Female)

3.2.7.3 Subtheme: Orientation Phase

This subtheme includes factors that may enhance the orientation phase of IQNs from the perspective of DQNs and IQNs.

Strategies considered to impact on the integration process positively were, for example, to giving IQNs sufficient time to adapt to the German healthcare system and addressing anxieties. Nevertheless, some DQNs considered that it was beneficial to promote IQNs

based on their professional skills and to trust them with specific nursing tasks in patient care despite the challenges of working in a different work environment. This approach increased the self-confidence of young IQNs in particular and positively contributed to workplace integration. Regular team meetings to discuss challenges in the workplace and ways to improve the integration process were perceived as beneficial by DQNs. IQNs backed this statement. Furthermore, they explained that being able to ask colleagues if they were unsure or unclear was very helpful during the very beginning of their orientation.

"You just have to give them enough time, we notice that it... well, that it is good... how do you say... the fruits, then we can also harvest the fruits, if you care for them properly from the beginning, yes, that you also have to... You also have to take them on board, no matter what, just take away the fear." (DQN 28, Age 40, Female)

DQNs indicated that access to information about the workplace and knowledge about facts for managing nursing work (e.g., policy documents and guidelines) were essential in supporting the integration of IQNs. Additionally, DQNs stated that it was considered helpful not to initially schedule IQNs as fully qualified nurses but to schedule them in intermediate shifts with fully qualified nurses as buddies to give them time to get to know the nursing ward processes. Some DQNs explained that checklists with specific nursing tasks were handed out to IQNs. Those tasks needed to be completed under supervision during the orientation phase. Both DQNs and their IQNs were responsible for completing the checklists. This concept was perceived as supportive by DQNs and IQNs.

"Well, there are very clear guidelines, we have our lists, they have to be worked through, they are mandatory, they and we have to sign them off to prove it." (DQN 9, Age 54, Female)

"Yes, so the planning is clear here too. I got a book from my supervisor, he/she always entered tasks we completed, so we didn't have these discussions every month, but every three months or four months […]." (IQN 21, Age 24, Male)

Orientation folders designed to communicate essential information in plain language were perceived as beneficial for IQNs by DQNs. DQNs indicated that the implementation of a structured orientation program would improve the integration process, especially if it included things such as additional language courses and practical training a pocket guide with helpful information and translations, a timetable of regular meetings, a description of practice standards, additional introduction days, and teaching material. The IQNs supported this statement, with some stating that it would be beneficial to have structured information about the nursing tasks to be completed on each shift. IQNs stated

that additional practical training, especially in German practice standards according to hospital policy, was necessary to facilitate integration. In this context, however, it was important to ensure that the practice standards were not taught differently.

"[…] the clinic should definitely implement a structured programme, a structured induction concept, …, that works with guidelines and perhaps applies across hospitals." (DQN 10, Age 29, Female)

"Well, it would be good if the procedures were written somewhere like a list. So the morning shift has to 'do this and this and this', afternoon shift has to 'do this and this and this' and night shift has to 'do this and this', i.e. the tasks and the processes […]." (IQN 11, Age 26, Female)

"Because nobody is teaching me, nobody is training me according to the hospital policy so this is a major missing I'm feeling because when I... […] so nobody is like teaching me like how I know that here the doctors will do catheterization or doctors will do the IV canula and everything but there are like some certain things nurses also do but I just there I don't even know if she is doing right or if she is just like doing it her own way so I'm just learning from her so when I'm with other staff assuming staff next other day then I'm learning from person." IQN 19, Age 29, Female)

Although offers for professional development were perceived as essential by IQNs, it was necessary to adapt the training program to the contents of the nursing training of the IQNs. IQNs stressed that it was challenging for them to attend advanced training courses with DQNs even though their nursing training differs. The greatest challenge for most IQNs in the orientation phase was the examination to recognise their professional qualifications acquired abroad. Nevertheless, was passing the exam something IQNs looked forward to as it meant that they regained their ability to work independently and develop themselves further.

"Advanced training courses yes but that is... I think... I am attending them but I mean I am attending them with the other staff, those who are working already. There... it is just there are getting points so they are just sitting there and listening to them but unfortunately nobody is teaching me because I am new but I am sitting with other people who are all know more than me because I am just new and also, I am not German, I didn't study in Germany, I'm from another country, we have different way of practice and everything. […]. " (IQN 19, Age 29, Female)

"[…] now it is necessary for me to wait a bit until the time passes and I pass my examination and then I will get my recognition of my professional qualification and after August I will have a new life here in Germany because then I will be recognised and do all things independently." (IQN 14, Age 31, Male)

3.2.7.4 Subtheme: Leadership Support

This subtheme describes the impact of (the lack of) supportive leaders on workplace integration from the perspective of DQNs and IQNs.

DQNs highlighted that a facilitator for successful workplace integration would be if the hospital management regularly sought exchange with the IQNs to intervene early in case of challenges. IQNs backed this view and stated that they valued the support they received from their ward managers. They indicated that they felt supported and respected most of the time. In addition, IQNs stated that a supportive relationship with their ward manager positively impacted the integration process and their decision to stay or leave their position. Nevertheless, some IQNs wished for more support and recognition during their integration process. The same was true for DQNs. Although most DQNs considered the support from management to be helpful and sufficient, they also wished for a greater understanding of challenges and problems.

"So there are different nursing directors, and there are different ward managers, but I have had experiences with good ones; yes, someone comes up to you and asks if everything is okay, if there are suggestions for improvement, if I am missing something [...]." (DQN 4, Age 34, Male)

"Yes, my ward manager has given me good support [...] I have already said that I am very satisfied. [...] Therefore, yes, I would like to stay here […]. What do I mean? One factor that a person like me, an employee, stay because the people or the… supervisor." (IQN 34, Age 28, Female)

3.2.7.5 Subtheme: Support by Preceptors/ Mentors

This subtheme describes the perceived benefits of individual support by a preceptor or a mentor for IQNs and the impact on workplace integration from the perspective of DQNs and IQNs.

DQNs highlighted the role of preceptors or mentors to help facilitate the integration process. They explained that preceptors or mentors could provide consistency during the early stage of integration. Most DQNs described that it was possible to organise a preceptor/mentor for each IQN to structure the orientation phase. However, some IQNs could not back up this statement. They stressed that they had to work with different nurses daily, making getting to know their new work environment challenging. DQNs also describe the advantage of training in practical skills that nurses in Germany were required to have. This practical training could be offered with the help of preceptors or mentors. Preceptors could unburden DQNs who work permanently on the ward by taking

over some of the practical training of IQNs and attending to the ward on fixed days to instruct IQNs. Moreover, preceptors or mentors could observe the learning progress of IQNs during the orientation phase and adapt the training accordingly. DQNs explained the benefits of the mediating role of preceptors or mentors. Furthermore, preceptors or mentors could help IQNs pass their accreditation exams and teach the required practical nursing tasks in advance.

“Yes, how can it work well? On my ward it is actually optimal if I really manage to have the nursing staff with one person and in one area for a whole week and then really the same thing every day and the same procedures every day and if I always have the same specialist in the area, then nothing changes. Yes, it is simply routine, I would say.” (DQN 31, Age 36, Female)

“They have their lessons, their classes and have to prepare for them. I do believe that all of this is dealt with and that we in the practice are the ones who teach it and that's perhaps the point where I would say that we could use more people to support those who are on the ward anyway. Well, we have the preceptors/mentors, but they are also taken off somewhere where they actually work, they have their fixed day. I mean, we could do with an increase in staff." (DQN 8, Age 56, Female)

"I would need a good induction and I didn't get that. What would be ideal for me is that I would work with the same person for a week […]. But I always worked with someone else and so that was the (...) some people know it this way and some people know it differently and you get shown everything but different sometimes." I1: "Okay." IQN 11: "Do you understand what I mean?" I1: "Yes, I understand, you also get really confused at the end." IQN 11: "Yes, exactly." (IQN 11, Age 26, Female)

3.2.7.6 Subtheme: Nursing Workforce Management

This subtheme describes the impact of nursing workforce management on workplace integration of IQNs from the perspective of DQNs and IQNs.

DQNs perceived benefits regarding the integration of IQNs. They mention that a sufficient number of nursing staff were more regularly available to fill roster gaps and to deliver patient care professionally. DQNs stated that IQNs were essential to their nursing team after passing the practical examination and highlighted the importance of recognition of foreign qualifications and induction training. With IQNs, day-to-day work could be carried out adequately. According to DQNs, one challenge was to ensure a balance between DQNs and IQNs per shift. Additionally, a diverse nursing team was mentioned as having an advantages. They indicated that as the number of patients unable to speak German increased, IQNs could translate if they were from the same country of origin or spoke the same language as the patient. In addition, DQNs also

spoke about the great support provided by IQNs in caring for patients, that they are happy to work with IQNs and value their expertise.

“They're all great people and I like them all, […], because now we really have people here, especially after the recognition, you notice that you can also write good rosters, because you really have people here who have their recognition, they have their certificate, they can work here and that's okay and of course you're happy about that […].” (DQN 20, Age n/a, Male)

"[…] Well, he is Italian [the IQNs], for example, if we have Italian patients and we do not understand them, and they do not understand us, he [the IQNs] is worth his weight in gold because he translates everything, [...]." (DQN 18, Age 30, Female)

However, DQNs highlighted that constant shortages of nursing staff had a negative impact on the integration process. They explained that IQNs too often had to take responsibility for patients too early because of roster gaps. Due to staff shortage, the priority was care delivery rather than training new staff, including IQNs. In particular, due to the lack of nursing staff, questions by IQNs could not always be answered in detail, and there was not enough time to teach the correct procedures of nursing tasks, stressed DQNs. This situation increased the perceived workload for both groups and led to frustration. According to the DQNs, this unsatisfactory situation not only affected their own well-being but also impacted the job satisfaction of IQNs. DQNs explained that adequate induction training was essential for retaining IQNs, but this was often impossible due to a lack of time and nursing staff. IQNs backed this view, indicating that staff shortage increased personal workload. They indicated that due to nursing staff shortages and the resulting lack of time, it was often not possible to provide adequate care for patients. As a result, there was often no time to take a break, which had a negative impact on their own well-being. They also found that the constant shortage of qualified nurses had a negative impact on work environment and job satisfaction.

"Yes, and then there is also the difficulty that sometimes arises when there are few staff, IQNs may have to take on a lot of responsibility early on […], or do I have to check now when I am working on the ward and doing my area whether he or she is doing everything right in that area. […] that can be stressful for everyone." (DQN 8, Age 56, Female)

“So, that's more for me.... means more responsibility for me and I have already worked alone without a responsible registered nurse. [...] Nursing is a lot of responsibility for me [...] I can say, "I can do it." But I always have a lot of fear in my head, but I find that a lot of fear, but I can still control and I find that good, that when I'm afraid, I'm more careful and so, yeah.” (IQN 33, Age 29, Female)

3.2.7.7 Subtheme: Additional Responsibilities and Increased Workload

This subtheme describes perceived additional workload of DQNs due to workplace integration of IQNs as well as perceived workplace pressure of IQNs.

DQNs indicated that integrating IQNs promoted cultural learning and reflection on one's own working methods. However, due to various factors, the workload of DQNs increased. DQNs, for example, explained that information got lost in translation during handovers. Thus, DQNs had to find other sources of information to care for their patients adequately, which increased their perceived workload. In addition, the training and integration of IQNs required patience and time and was often perceived as challenging for the whole nursing team. Particular language barriers negatively affected not only handovers but also day-to-day conversations. DQNs explained that it was always highly demanding to speak slowly and clearly to ensure their internationally qualified colleagues understood what they were saying. This increased the already very high workload. Thus, DQNs explained that giving IQNs enough time and patience was important, but this was often very difficult as the workload was generally high. The main challenge was, therefore, to adequately train IQNs and fulfil their needs while ensuring patient care. DQNs explained that determining whether their internationally qualified colleagues understood them correctly was the main challenge. They stressed that IQNs did not complete nursing tasks because they did not understand what they were told to do but did not admit it. Thus, DQNs felt the need to double-check if their internationally qualified colleagues understood them correctly, which put an additional burden on them. DQNs, especially at the beginning of the integration of IQNs, controlled the work of their internationally qualified peers to ensure that medical orders were carried out and patients were well cared for. This process increased their workload furthermore.

“[...] if I then hand someone over or have been handed over and it is then difficult to understand or I also find it difficult to understand what exactly is meant and queries can sometimes not be clarified and then even if no one else was there, no one else can answer the question, it then also makes it difficult or your own work process more protracted if you then have to get the information again from somewhere else". (DQN 16, Age 22, Female)

[...] that they learn how to talk to the patients, that they also understand them and that they are also open and honest and say 'Oh, I did not understand anything', that is always a barrier. That they try to say 'yes' or even if you give an order or want them to do something, they say 'yes' and then you go and say 'did you do it' and then they did not understand, so that's difficult for me.[...].” (DQN 4, Age 35, Male)

IQNs indicated that workplace pressure had a negative impact on their integration. They described feeling overwhelmed due to caring for seriously ill patients, adapting to a new work environment, learning how to maintain patient records correctly, being confused about responsibilities, and learning a new language simultaneously. According to IQNs, the challenging working environment affected the quality of their initial training. IQNs confirmed the statements of the DQNs. They explained that there was often no time to answer questions, that it needed to be more precise which tasks fell within which area of responsibility, and that other nurses turned down requests for help with patient care due to heavy workloads.

"[…] sometimes the shift is so stressful that we cannot... we want to do something, but we do not have the time, and that is really bad, but if we have enough time we can do well." (IQN 32, Age 26, Female)

3.2.8 Theme IV: The Role of Internationally Qualified Nurses

This theme describes the role of internationally qualified nurses' role have in their workplace integration.

3.2.8.1 Subtheme: Personal or Professional Challenges of IQNs.

This subtheme describes the impact of personal challenges of IQNs on workplace integration of IQNs from the perspective of DQNs and IQNs.

DQNs indicated that there might be personal challenges or problems related to migration to Germany that IQNs had to overcome to be integrated successfully. They felt that the nursing team or the management should address personal challenges such as being homesick or missing family members, as that would affect well-being and therefore integration in the workplace. Moreover, perceptions held by IQNs regarding their migration, e.g., earning capacity, housing, subsequent immigration and integration of family members, and false expectations regarding the cost of living, could influence the integration process. The hospital management should discuss these perceptions in detail before migration with IQNs. IQNs backed this statement. They stated that homesickness and feeling alone affected their mood negatively. In addition to the feeling of homesickness, IQNs described the fear of doing something wrong or misunderstanding something, which made them feel insecure and lonely. However, they mentioned that their nursing team helped them to overcome feeling alone and homesick. The process of recognising professional certificates acquired abroad also had a negative impact on integration. The process often depended on the country of origin and needed more transparency. In addition, there was the pressure of passing the language test and the

practical examination. According to the DQNs, this pressure strongly impacted the well-being of their internationally qualified colleagues.

"And I still think that you can't leave that out of the equation - it has to be somehow, and yes, sometimes it's like that, too, so a colleague has always had terrible, well, she's just had real psychological problems because her children have been away - she didn't imagine it like that before, and that has an effect, and you have to deal with that somehow, too". (DQN 8, Age 56, Female)

"Yes, so I was always alone in [...], so I did not want to talk to anyone because I did not learn anything here, and that is why it was so hard at the beginning, and it was hard to stay for 8 hours, so to work with no one, so to talk, yes, and so I think the team helped me, yes, I had many problems in any case because of the language, and it was exhausting." (IQN 21, Age 24, Male)

According to the DQNs, many factors could positively influence workplace integration. For example, IQNs could also be integrated outside work by offering them sports activities, organising that they could move in with German host families, helping them find a shared apartment, showing them they were welcome, or offering them language courses alongside work. They could connect with student nurses from Germany by being given a room in the staff accommodation buildings. In addition, IQNs needed to meet with not only other IQNs in their free time but also with DQNs.

“[...] And for me, integration is also important, that they are not only together with the Serbian and Bosnian colleagues but also with the German colleagues or also through hobbies or sports activities [...] but I think that when they are finished, the integration will be supported a little bit and not only working on the ward but also the surrounding is important [...].” (DQN 4, Age 35, Male)

DQNs mentioned that enough time was an essential factor for successful integration. They indicated that they had the impression that the pressure to learn German as quickly as possible and study for the recognition examination overwhelmed IQNs and negatively affected the integration process. DQNs found that IQNs felt more comfortable once these hurdles were removed. Challenges faced by IQNs were many and varied. Many faced professional and communication challenges due to a lack of German language proficiency that they had to overcome daily. Furthermore, being responsible for patients too early made them afraid and overwhelmed.

DQN 23: "I think it is simply a process. [...] we have now noticed that they have also made a huge leap in communicating in German since they are fully recognised, [...] it is the elimination of this pressure.” I1: Yes! DQN 23: "I have to manage this; I have to manage this." By releasing the pressure, a lot of... a great deal of tension is gone, and they are now simply more open to other things.” (DQN 23, Age 42, Female)

“I'm always scared because sometimes I cannot... I have a question and I cannot explain well, and I cannot ask well and sometimes that comes out wrong and I cannot find the right word.” (IQN 36, Age 30, Female)

3.2.8.2 Subtheme: Personal Attributes of IQNs

Some DQNs stated that the individual characteristics of IQNs had an impact on the success of the integration. They perceived IQNs who seemed ambitious, motivated, and interested in learning new things were more likely to be integrated into the German nursing workforce. Other DQNs stated that although individual character traits would affect integration success, this also applied to nurses trained in Germany who were new to the nursing team. They indicated that the character was very individual and had nothing to do with the home country. Overall, however, DQNs felt that IQNs who were enthusiastic and determined, had a certain amount of work experience, and found it easier to learn the language could be integrated more easily and quickly. Nevertheless, DQNs repeatedly highlighted that it contributed to successful integration if the nursing team and the hospital management could consider individual character traits during the integration process. IQNs were able to confirm this view. They said they could positively influence workplace integration if the process were approached openly and considered why they had accepted this challenge. In addition, some IQNs saw migration as a new beginning and an opportunity to grow professionally and as a person.

"Regardless of the country of origin, it has been shown that it depends on the personal attitude how quickly colleagues can be integrated; it depends on how ambitious they are.” (DQN 9, Age 45, Female)

“And that has to come from each other, so you have to be a bit extroverted, good or try to be, well, I mean, at that time, I did not meet with someone every day, mainly in the ward and I had this ambition. And I repeat myself unfortunately, it always depends on what you want, do you want, why did you leave your home country, what reasons do you have and half of it depends at least on the person. Whether you want to be integrated.” (IQN 15, Age 50, Female)

3.2.9 Facilitator and Barriers to Workplace Integration of IQNs

In summary, following in-depth analysis of qualitative data workplace integration of IQNs into the German nursing workforce in the context of nursing workforce shortage in a clinical setting may consist of three stages: Recruitment, Orientation, and (sustainable) Integration, including 13 facilitators and 12 barriers that interact (Step 10 Figure 11) (Table 11).

Table 11: Overview of Facilitator and Barriers related to Workplace Integration of IQNs

Stages of Workplace Integration:	Stage I Recruitment	Stage II Orientation	Stage III Integration
Facilitator related to Workplace Integration			
Supportive (host) Nursing Team		x	x
Multicultural Nursing Team		x	x
Peer Support	x	x	x
Team Meetings		x	x
Practical Training		x	
Cultural Learning and Exchange		x	x
Language Lessons including Medical and Nursing Terminology	x	x	
Appropriate Placement	x		
Structured Orientation Program		x	
Leadership Support		x	x
Support by a Preceptor and/or Mentor		x	
Individual Characteristics*	x	x	x
Professional Experiences of IQNs	x	x	
Barriers related to Workplace Integration			
Lack of Professional Experiences of IQNs		x	
Differences in the Nursing Training		x	
Difference in the Standard of Practice or Nursing Philosophy		x	
Multicultural Nursing Team		x	x
Different Guidelines and/or Priorities related to Delivery of Patient Care		x	
Cultural Differences (e.g. Power Dynamics)		x	x
Lack of German Language Proficiency		x	
Different Material and Resources		x	
Racism, Discrimination, and Othering	x	x	x
Nursing Workforce Shortage	x	x	x
Additional Responsibilities and High Workloads		x	
Personal and/or Professional Challenges	x	x	

This table shows identified facilitator or barriers related to workplace integration of IQNs into the German Nursing workforce. These factors seem to influence each other and may have an impact on the success of workplace integration at different stages.

4 DISCUSSION[11]

4.1 Discussion of the Research Questions

The quantitative part of this research study (Part A: Survey Study) aimed to investigate the experiences of IQNs and DQNs regarding safety culture, work-life balance, burnout, and job demand during workplace integration. It also aimed to determine whether the experiences of the two study groups were different or similar. The aim of the Survey Study was to answer Research Question 1: *What are the experiences of internationally qualified nurses and domestically qualified nurses regarding safety culture, work-life balance, burnout, and job demand (SCORE) during workplace integration? Are the experiences of the two populations different or similar*?

Nurses who qualified internationally reported lower burnout climate than nurses who qualified domestically in Germany. DQNs indicated higher perceived workload and lower work-life balance than their internationally qualified colleagues. Room for improvement was detected on each of the four subscales of the Engagement Assessment Tool (Growth Opportunities, Workload, Participation in Decision making, and Advancement), the Teamwork Climate, and the Safety Climate in both study groups. A higher level of language proficiency was associated with a lower perceived burnout climate, better work-life balance, and lower perceived workload in internationally qualified nurses. IQNs with less than one year of professional experience perceived the learning environment as slightly less supportive.

The qualitative part of the research study (Part B: Interview Study) explored how domestically and internationally qualified nurses experienced workplace integration of IQNs in the context of the nursing workforce shortage in Germany. The Interview Study aimed to answer Research Questions 2 and 3: *How do domestically qualified nurses who work with internationally qualified nurses experience workplace integration? How do internationally qualified nurses experience their integration into the German nursing workforce*? The overall aim was to identify factors that facilitate or hinder successful

[11] Parts of this chapter have been published in the following publications: **Roth, C**., Berger, S., Krug, K. et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life balance, burnout, and job demand during workplace integration: a cross-sectional study. BMC Nursing 20, 77 (2021). https://doi.org/10.1186/s12912-021-00581-8; **Roth, C**., Breckner, A., Wensing, M., Mahler, C., Krug, K., & Berger, S. (2023). Barriers and enabling factors for workplace integration of internationally qualified nurses: A qualitative study of perceptions of German nurses. Nursing Open, 00, 1– 11. https://doi.org/10.1002/nop2.1760; **Roth, C**., Wensing, M., Breckner, A. et al. Keeping nurses in nursing: a qualitative study of German nurses' perceptions of push and pull factors to leave or stay in the profession. BMC Nursing 21, 48 (2022). https://doi.org/10.1186/s12912-022-00822-4

workplace integration into the German nursing workforce from the perspective of internationally qualified and domestically qualified nurses.

The Interview Study revealed that workplace integration of IQNs into the German nursing workforce in the context of nursing workforce shortage in a clinical setting may consist of three stages: Recruitment, Orientation, and (sustainable) Integration, including 13 facilitators and 12 barriers that interact. Factors that were considered as facilitating workplace integration of IQNs into the German nursing workforce varied; the most prominent factor was a supportive and engaged (host or local) nursing team, including regular team meetings to address challenges that arose during the integration process. Moreover, the support of ward managers and preceptors and/or mentors responsible particularly for IQNs and a structured orientation program were perceived as factors that enhanced workplace integration. Although additional language and practical training for IQNs during orientation was considered beneficial, it had to be adapted to the professional expertise and competencies of IQNs attending the training courses. Cultural learning, e.g. learning from each other and a diverse nursing team, was something almost all nurses appreciated. International exchange of nursing knowledge was perceived as valuable for developing the nursing profession further. Personal characteristics of IQNs, such as internal motivation and ambitions, facilitated workplace integration. In the context of nursing workforce shortages, the recruitment of IQNs was considered a valuable measure but only in compliance with ethical guidelines.

Factors perceived as hindering workplace integration of IQNs into the German nursing workforce were multifaceted. Nevertheless, the most prominent factors were the lack of German language proficiency and differences in standard of practice, mainly due to international differences in nursing education programmes. A lack of recognition of IQNs work experience and nursing competencies by management negatively impacted workplace integration. Deskilling was perceived as a factor that created feelings of disempowerment and frustration. Inappropriate placement of IQNs impeded workplace integration and increased work-related stress and workload in both DQNs and IQNs.

Moreover, racism, discrimination and the phenomenon of “othering” were perceived as factors that caused conflicts within the multicultural team, negatively impacting workplace integration and the overall well-being of IQNs. Perceived differences in the hierarchical order, nursing autonomy, and unfamiliar power dynamics were considered hindrances of workplace integration. The fact that some medical staff, other healthcare professionals or patients did not accept IQNs as full team members created conflict

potential within the multicultural nursing team. Personal challenges of IQNs, such as being homesick also negatively impacted the well-being of IQNs and hindered workplace integration further. Constant nursing staff shortages increased the perceived workload in both groups and, in turn, negatively impacted workplace integration.

4.2 Discussion of the Findings

The results of both studies, the Survey Study and the Interview Study, are discussed below to provide a comprehensive picture of the experiences regarding workplace integration of IQNs into the German healthcare system. In part, the results of the Survey Study could be deepened and explained by the Interview Study.

4.2.1 Growth Opportunities, Professional Experiences, and Nursing Education

Growth Opportunities

Working conditions, higher standards of living, and professional development were the main factors that motivated IQNs of this Survey Study to join the German nursing workforce. IQNs who participated in the Interview Study confirmed these results, they stated as reasons for migration to Germany were better working conditions, a higher salary, job security, and the opportunity to support their families at home. These results are consistent with those of other studies (Buchan 2001; Kishi et al. 2014; Zander et al. 2013). Although professional development was a motivator for migration, IQNs who participated in the Survey Study tended to evaluate the possibility for professional growth and advancement opportunities only as moderate. This finding is consistent with previous findings (Winkelmann-Gleed and Seeley 2005). A study conducted in the United Kingdom (UK) between 2002 and 2003 found that some IQNs were denied opportunities to further professional development and only few migrant nurses were promoted after they adjusted to the UK (Winkelmann-Gleed and Seeley 2005). Previous research explored reasons for not being offered promotion opportunities and indicated that, for example, length of employment in the current position was one factor that contributed to the refusal of offering professional promotion to IQNs (Winkelmann-Gleed and Seeley 2005). Additional training and development opportunities such as skill-based training programmes, workshops, and seminars for migrant nurses may contribute to successful workplace integration, fulfilling their desire for professional development. However, educational programmes have specific requirements that should be planned to meet the needs of those for whom they are provided (Smith et al. 2022). Therefore, training opportunities for IQNs can only be successful if they build on their professional

experience and specific requirements (e.g., Language proficiency), yet they are necessary to promote professional integration.

Professional Experiences

Although the years of professional experience of migrant nurses may vary, nurses usually migrate after they completed their nursing education programmes and gained some years of work experience. About half of the participating IQNs in this Survey Study reported having professional experience of three to five years or more. This suggests that these nurses may have a level of competence beyond that of novice/beginner nurses and would be considered competent, skilled or possibly expert/experts in the country where they obtained their nursing qualification (Tilden et al. 1984; Tregunno et al. 2009). The competence levels of IQNs are often overlooked although migrant nurses often come from highly skilled nursing positions or have several years of professional experiences prior to migrating (Adhikari and Melia 2015; Matiti and Taylor 2005; Winkelmann-Gleed and Seeley 2005). Deskilling can cause frustration and lower job satisfaction (Adhikari and Melia 2015; Neiterman and Bourgeault 2015; Sheehy et al. 2023; Winkelmann-Gleed and Seeley 2005), which may in turn increases intention to leave the profession.

In the Interview Study, domestically and internationally qualified nurses highlighted the importance of recognising gained work experiences and professional competencies. Not recognising work experiences and professional competencies led to frustration and disempowerment impeding workplace integration. This result confirms previous findings (Adhikari and Melia 2015; Kumpf et al. 2016; Neiterman and Bourgeault 2015; Xiao et al. 2014). Adhikari & Melia (Adhikari and Melia 2015) explored the experiences of nurses from Nepal who migrated to the United Kingdom. Most Nepali nurses ended up in private care facilities and care homes although they were highly experienced senior nurses with high aspirations in Nepal. Kumpf et al. (Kumpf et al. 2016) conducted a study that explored the experiences of IQNs in Germany and found that the skills migrant nurses could potentially offer, were often undervalued, leaving them frustrated and disempowered. Xiao et al. (Xiao et al. 2014) conducted a study in two general hospitals in an Australian metropolitan city and found that inadequate regulatory policies used to classify the expertise and experiences of IQNs contributes to institutional discrimination. Overall, IQNs are at higher risk for marginalization, lack of support, unfair treatment and stereotyping and even rejection by patients (Xu et al. 2008). The lack of recognition of nursing qualification and previous professional experiences can increase the risk of discrimination and associated consequences and therefore negatively impact the

integration process. It can also lead to IQNs being passed over for promotion opportunities and denied the chance to develop professionally, thereby missing out on pay raises. The findings of these studies contrast with what IQNs hope to gain from their migration to Germany. To facilitate the integration of IQNs consistent, education policies, transparent measures within the framework of the recognition of professional experience and nursing qualifications are needed.

Nursing Education

Findings from the Interview Study, highlighted that (miss)understanding of it differences in the education of nurses internationally influences workplace integration. Nursing education curriculums differ internationally. For example, in Italy preparation to become a registered nurse is delivered as a three year university degree with a generalistic focus. Other countries, such as Germany, offer post state exam qualifications highly specialised training courses within a narrow scope e.g. intensive care nursing (Palese et al. 2007). Nevertheless, many migrant nurses have a high level of skill and expertise because they are competent and registered nurses in the country they were educated. This skill level positions them differently from, for example, novice nurses who only recently completed their nursing training in the destination country (Crawford et al. 2016). However, some national or state institutions do not recognise nursing qualifications achieved outside of the destination country (Walters 2008). In the United Kingdom, for example, nurses that have gained their nursing qualification outside of the United Kingdom may not be able to have their qualification recognised without further study, and therefore are pushed to work as a healthcare assistant in community or long-term care settings. These jobs offer lower wages and status than other healthcare roles (Stuart 2012). Problems with recognition of nursing qualifications between countries can mean that migrant nurses have to work in a different or potentially less respected position in the destination country (O'Brien 2007; Pütz et al. 2019). Pütz et al. (Pütz et al. 2019) conducted a study in Germany and concluded that the fact that IQNs were often employed as nursing assistants until their nursing qualifications were fully recognised which on occasion provoked for conflict and discrimination. Some IQNs in this Interview Study reported such experiences e.g., working at lower-level jobs such as nursing assistants until their credentials were fully recognised which made them feel marginalized and discriminated. One way to prevent disagreements and frustration related to differences in nursing education curriculums and recognition of nursing qualifications could be to provide IQNs with realistic, transparent, and accessible information about credentialing and the processes used within the healthcare organisation for adapting the IQNs within their system before the migrate to the destination country.

4.2.2 Leadership Support, Support by Preceptors, Local Nursing Team, and Multicultural Teamwork

Leadership Support

Nurse leaders can have a positive impact on their nursing team. If ward manager are fully committed to the success of their nursing team, team members will feel safe in their positions, grow as individuals and professionals, contribute to effective teamwork, and are able to deliver a higher quality of patient care (Grossman 2021). A study conducted in Sweden found that IQNs mainly evaluated the support they received from their line managers during the integration process as positive (Eriksson and Engström 2018). However, lack of supportive management and feedback created feelings of uncertainty about work efficiency and caused feelings of being taken advantages of by management in some migrant nurses (Eriksson and Engström 2018). These results are in part consistent with the findings of the Survey Study. IQNs in this Survey Study evaluated the degree of support they received from their nursing management as only moderately high, showing room for improvement. The results of this Interview Study support these findings. The findings of the Interview Study suggested that although perceived leadership support positively impacted the integration process of IQNs, some IQNs and DQNs needed more support than they received. A integrative review that explored facilitators and barriers encountered by IQNs as they adapt to foreign healthcare environments indicated that migrant nurses did not know who they should ask if they had questions and that they experienced a lack of support by supervisors (Kawi and Xu 2009). This was also something a few IQNs in this Interview Study experienced.

Intention to leave is associated with lack of support and an ineffective working relationship between the ward manager and the nurse (Wilson 2015). According to a study by Brunton et al. (Brunton et al. 2020), nurses across all cultures felt isolated and distressed due to a perceived lack of understanding of their management and the perceived unwillingness to address issues related to cultural differences (Brunton et al. 2020). Nurses need, according to Andrews et al. (Andrews et al. 2012), leaders who communicate expectations clear and offer recognition for employee contributions. Thus, a good relationship between ward manager and IQNs seems to be crucial in order to facilitate workplace integration. In Germany, for example, the University Hospital Charité in Berlin implemented formal integration management in 2016 to enhance workplace integration of IQNs. Since then, the management coordinated orientation and integration of the IQNs into the nursing workforce at the Charité successfully (Merten 2019). These findings confirm the importance of actively engaged leadership during the integration

process of IQNs. The example of the integration management of the Charité shows that a transparent and open management level can contribute to the successful integration of IQNs in the long term. It can be beneficial to appoint a person who acts as a first-level support person for IQNs and DQNs within the framework of the integration process.

Support by Preceptors/Mentors

Preceptors evaluate performance and provide feedback. Mentors are trusted advisors who work with employees to support their development within the department and the hospital (Wensel 2006). A mentor can be an experienced and competent staff nurses who serve resource for new nurses or student nurses. A preceptor is a nurse who has been trained to provide guidance and instructions to new nursing students. They usually play an essential role in the clinical training of nursing students (Wensel 2006). The Interview Study identified that the support of preceptors or mentors was appreciated by both study groups. These findings align with those by Xiao et al. (Bozionelos 2009; Xiao et al. 2014). Migrant nurses who participated in the study conducted by (Xiao et al. 2014) emphasised that although they received support at the organisational level, support by a mentor at the ward level is needed. In the study by Bozionelos (Bozionelos 2009), support by a mentor was positively correlated with job satisfaction and turnover intentions whereas peer support alone was only correlated with job satisfaction. Brunton et al. (Brunton et al. 2020) on the other hand found that most healthcare organisations did not provide mentoring for nurses from diverse cultures. Previous research indicates that mentors can play a significant role at the start of the integration process (Lin 2014; Vafeas and Hendricks 2018). A study conducted in Switzerland exploring preceptors' experiences supervising IQNs (Eriksson et al. 2023) found that being a preceptor for IQNs is challenging and significantly differs from supporting local nursing students. Challenges were supporting IQNs with varying levels of competence, lack of information, or language issues (Eriksson et al. 2023). These experiences indicate that while preceptors and mentors may be beneficial in supporting the integration process of IQNs, they also need to be prepared accordingly. These results showed once again how crucial organisational commitment to supporting IQNs is and how effective mentorship or preceptorship can enhance the integration process of IQNs.

Local Nursing Team

Previous research showed that IQNs have to cope with loneliness and social isolation and sometimes feel like outsiders within the host (local) nursing team (Kawi and Xu 2009; Moyce et al. 2016; Zhou et al. 2011). Lack of support from other IQNs fostered feelings of resentment and frustration (Kawi and Xu 2009). Additionally, the feeling of being lost

and not knowing who to ask or where to go to were shared by many migrant nurses (Kawi and Xu 2009). Findings of the Survey Study suggest that IQNs as well as DQNs evaluated the teamwork climate as neutral/moderately positive indicating that nurses felt like they were working effectively as a team and supported each other to some extent. A strong mentor system (Stubbs 2017) and a strong support system which can be found within the nursing team (Bond et al. 2020) has been proven to be beneficial to migrant nurses. Social groups and peer support can decrease stress in migrant nurses (Kawi and Xu 2009). The majority of IQNs in this Survey Study stated that they migrated to Germany without family or friends. Thus, the support from fellow migrant nurses was probably not available, which in turn highlights the importance of a strong support system and an open and welcoming host (local) nursing team.

The findings of the Interview Study showed that a motivated and engaged host (local) nursing team had positive impact on workplace integration of IQNs. IQNs, in particular, stated that the support of the host (local) nursing team was helpful in different areas, for example, professional or emotional support, e.g., teaching unfamiliar nursing procedures or being open to answering all sorts of questions. Understanding on the part of the nursing team and the high motivation of some DQNs to affect IQNs' integration positively and was perceived as helpful. This finding aligns with those by Allan et al. (Allan et al. 2004). Allan et al. (Allan et al. 2004) found that positive interactions between IQNs and host nurses have a lasting effect on workforce integration. Intercultural understanding and adhering to the ethical principles of egalitarianism, for example, contributed to positive interactions and, therefore, successful workplace integration (Allan et al. 2004). However, implementing the concept of egalitarianism is challenging due to the lack of knowledge of each other’s cultures, the existence of ethnocentrism, and racial discrimination (Allan et al. 2004; Ting-Toomey 2012). The results of Xiao et al. (Xiao et al. 2014) support this hypothesis. They found that although immigrant nurses acknowledged that host nurses were supportive, they experienced discrimination and cultural impositions. Lauxen et al. (Lauxen et al. 2019) concluded that to facilitate workplace integration of IQNs, systematically involving the host (local) nursing team in the integration process is essential. Moreover, to benefit from the INQs' expertise and advance the development of the nursing profession in Germany, it is necessary that DQNs and IQNs can meet at eye level. This is only possible if DQNs are involved in measures to promote workplace integration (Lauxen et al. 2019). In summary, the host (local) nursing team can positively influence the integration of IQNs. However, this requires an open, welcoming culture and an understanding of cultural diversity.

Multicultural Teamwork

Ineffective multicultural or interprofessional teamwork was an issue that concerned both DQNs and IQNs in the Interview Study in relation to workplace integration. Evidence clearly shows that interprofessional teamwork is a significant component of healthcare organisations (Fitch 2012; Gelfand et al. 2007). Effective teamwork results not only in higher levels of staff satisfaction (Wong et al. 2010) but also efficiency (Grover et al. 2017). Due to the migration of healthcare professionals, healthcare teams are increasingly diverse with team members coming from a range of cultural backgrounds. Multicultural teams can add numerous organisational benefits to the healthcare organisation; nevertheless, barriers to performance due to cultural differences may reduce effectiveness. The Interview Study suggested that differences in power dynamics and hierarchical order within the healthcare team were perceived as a hindrance to workplace integration by both DQNs and IQNs. This finding aligns with those by Brunton et al. (Brunton et al. 2020). They found that contrasting culturally defined perceptions of hierarchical order impacted organisational and patient outcomes negatively. The Interview Study indicated that a multicultural team added challenges to day-to-day work of DQNs and IQNs. DQNs indicated that a lack of German language proficiency increased conflict potential within the multicultural team and miscommunication increased their perceived workload. In addition, the ignorance of medical staff regarding IQNs as team members put an additional burden on the DQNs in this Interview Study. This result confirms previous research findings (Xiao et al. 2014). Xiao et al. (Xiao et al. 2014) found that both immigrant and host nurses acknowledged that the multicultural care team put additional stress on both host and immigrant nurses as they needed to learn from each other and make allowances for team members. It is well known that work in the healthcare sector can only function as a well-coordinated team (Fitch 2012; Gelfand et al. 2007). In the coming years, health teams will likely become increasingly diverse due to the recruitment of internationally qualified healthcare professionals and also global immigration and emigration. Therefore, promoting multicultural teamwork and implementing measures to improve teamwork sustainable it is essential. This can be done, for example, by nursing teams participating in team-building measures that deal with cultural diversity. Anti-racism workshops or training in the context of culturally sensitive care can also promote the strengths of a diverse nursing team.

4.2.3 Perceived Differences in the Autonomy and the Standard of Practice

Autonomy in Nursing

Nursing autonomy allows qualified nurses to use their nursing training, critical thinking, and knowledge about nursing care and management of patient to make decisions without the approval of medical staff or another member of the healthcare team. Nursing autonomy is associated with the experience of meaningful work, it includes participation in decision-making and the ability to influence work practices (Pursio et al. 2021). Differences in autonomy in nursing practice were a dominant subtheme within the Interview Study. Depending on the country of origin, IQNs perceived that qualified nurses in their home country had more or less autonomy. This discrepancy caused a shift in professional identity, which impacted workplace assimilation negatively. Interviews revealed that a central challenge for IQNs in this study was that they were competent and skilled to perform activities such as drawing blood that is considered within the medical scope of responsibility in Germany. The confusion about which activities were within the nursing scope of practice and which were not frustrated IQNs. This finding was also reported by Slotala & Bollinger (Slotala and Bollinger 2014) who conducted an interview study in Germany. They found that IQNs were accustomed to performing a range of clinical procedures that are reserved for medical staff in Germany. O'Brien (O'Brien 2007) found that overseas nurses who migrated to the United Kingdom perceived they had more autonomy in their home country. In contrast, nurses that migrated to the USA had varying responses depending on their country of origin (Sherman and Eggenberger 2008). The results by Xiao et al. (Xiao et al. 2014) suggest that immigrant nurses faced significant challenges in exercising autonomy and developing therapeutic relationships with patients due to differences in autonomy in nursing practice internationally. Levels of professional autonomy seem to vary widely across health and care systems, with some countries having greater emphasis on hierarchical management styles than other countries (Allen 2018). Research suggests that this variation does not seem to be fully recognised by nations recruiting IQNs. Thus, IQNs may have to engage in activities not previously seen as their practice or, on the other hand, are not able to perform activities, they consider their responsibility without being supported adequately (Choi et al. 2019). The Interview Study confirmed these findings, highlighting that IQNs may have to adapt to the political and cultural values underpinning healthcare delivery in the host country without appropriate support. This can have a negative impact on workplace integration. Thus, to facilitate the integration of IQNs, clear and transparent guides regarding autonomy in nursing practice are

needed. IQNs need to familiarise themselves with the guides but need to be supported by either the ward manager, the nursing team, a preceptor, or a mentor.

Standard of Practice

Although nursing practice has many similarities across countries, it is also socially, culturally and politically constructed in various ways (Higginbottom 2011). The DQN in this Interview Study perceived differences in the standards of nursing practice, mainly related to questions about delegated tasks and interactions with patients. These results confirm those by Schilgen et al. (Schilgen et al. 2019). They explored work-related barriers and resources of migrant and local homecare nurses in Hamburg in the North of Germany. They also detected differences in nursing practices and philosophy; German nurses in their study focused on obligatory work, whereas migrant nurses indicated the importance of being flexible and adapting to the client's needs (Schilgen et al. 2019). According to Pütz et al. (Pütz et al. 2019), differences in professional knowledge, practical skills, ethical behaviour, and independence in dealing with work tasks represented areas of tension between migrant nurses and host nurses. These results are in line with this Interview Study findings. Different views on the philosophy of nursing or standards of practice can hinder the integration of IQNs. A starting point to address this challenge would be implementing training courses that address diverse professional identities and roles.

Furthermore, findings of this Interview Study indicated that IQNs needed to adapt their nursing practice to the requirements of the nursing standards of the German healthcare system. Many IQNs had to unlearn and relearn certain nursing activities and new nursing care models. In particular, the lack of practical skills in the fundamentals of care consisting of self-care tasks such as maintaining personal hygiene was highlighted by DQNs. IQNs also recognised this difference. Most of them were not used to supporting patients with personal hygiene but were willing to adapt to this in the host country practice setting. This contrast can be explained by, for example, differences in developing countries in which families have the obligation to provide personal care (Brunton and Cook 2018; Zhou et al. 2011). IQNs in this Interview Study also recognised this difference. Nevertheless, many IQNs in this Interview Study indicated, that they would also like to apply skill sets and competencies they were qualified for in their country of origin but were not allowed to perform in Germany due to differences in the standard of practice. These findings are consistent with those by Xiao et al. (Xiao et al. 2014) and Jose (Jose 2011). Jose (Jose 2011) explored the experiences of IQNs in hospitals in the USA. They found that major differences in professional realities and nursing standards

impact IQNs' adaption to a new work environment (Jose 2011). Nevertheless, it is important to highlight that the expertise and skill sets of IQNs in this Interview Study were acknowledged and valued by their domestically qualified colleagues. DQNs recognised IQNs' strengths and the value they added to the organisation, particularly filling roster gaps that were becoming more frequent due to international nursing workforce shortages. In conclusion, understanding the role of IQNs in different healthcare systems and how they interact with medical staff, allied health professionals, and other healthcare team members is necessary for successful integration and promotes self-confidence and exercise of critical thinking skills. Although “nursing is nursing” and “patients are patients”, regardless of national context, different international standards of nursing practices must be taken into account to optimise workplace integration of IQNs. It is essential to develop and implement regulations regarding skills recognition and allowing competencies to be used in everyday nursing practice to facilitate integration and reduce frustration due to deskilling.

4.2.4 Racism, Discrimination, Othering, and Peer Support

Racism and Discrimination

Although racism, discrimination, and othering were only addressed by a few nurses in this Interview Study, it appeared to be a subtheme that impacted on workplace integration. Racism originates from the idea that there are different 'races' of people and that these have an order. Racism belittles, marginalises, harms and disadvantages certain people. Those people may be discriminated against based on different characteristics, such as skin colour, origin, language, religion, gender or way of life (Clarke 2017; Schmid 1996). The findings of this Interview Study confirm previous research that noted that racist behaviour and discrimination against immigrant nurses exist in the healthcare sector (Alexis et al. 2007; Allan et al. 2004; Brunton et al. 2020; Newton et al. 2012; Omeri and Atkins 2002; Schilgen et al. 2019; Smith et al. 2022; Wesołowska et al. 2020). IQNs in this Interview Study experienced racism and discrimination in different areas of their work life. DQNs described racist behaviour towards IQNs by nurses or other healthcare professionals (nurse-to-nurse racism); IQNs reported patients behaving in racist ways towards them (patient-to-nurses racism). These results reflected with those by Alexis et al. (Alexis et al. 2007). They explored the experiences of overseas minority ethnic migrant nurses in the National Health Service in the South of England. They found that some migrant nurses may experience discrimination from patients, other nurses, and service users (Alexis et al. 2007). A study conducted in Finland by Wesolowska et al. (Wesołowska et al. 2020) showed that

foreign-born nurses, particularly nurses who identified as female, were at higher risk of workplace discrimination compared to their native peers. A mixed-methods study conducted in New Zealand revealed that patients displayed racial intolerance towards migrant nurses leaving them heart-broken and depressed (Brunton et al. 2020). Migrant nurses in the study by Schilgen et al. (Schilgen et al. 2019) experienced racist behaviour from patients because of their skin colour or religion and sexual harassment. Passive or systematic racism can be compounded further by senior staff not managing or dismissing racist behaviour of patients (Higginbottom 2011). Host nurses in the study by Brunton et al. (Brunton et al. 2020) felt the need to remark that racist behaviour is not accepted. This was also true for some DQNs of this Interview Study; they indicated that racist behaviour and discrimination were not tolerated. Nevertheless, institutional racism may be reproduced through negative stereotypes of foreigners and professional hierarchies. Discriminatory and racist behaviour against IQNs can have long-term emotional and professional consequences (Dicicco-Bloom 2004; Xu et al. 2008). Evidence of racism in multicultural settings cannot be ignored. Moreover, Germany has a history of racism and discrimination etched in its national socialist past. However, a denial of racism still dominates the German public and popular discourse on race relations. This is evident in the absence of critical analyses and discussions of racism in different sectors including the healthcare sector. The *Allgemeine Gleichbehandlungsgesetz* [General Act on Equal Treatment] however, protects all people against discrimination in working life based on ethnic origin, gender, religion or belief, disability, age and sexual identity (FADA 2006). The healthcare sector is, therefore, not only ethically but legally obliged to fight institutional racism. In order to facilitate workplace integration of IQNs hospitals need to implement effective strategies to reduce institutional racism and to protect the rights of IQNs. Ward managers could be trained to be sensitive to discriminatory and racist behaviour. In addition, the management level needs to take a clear stand against discrimination and racism and pass this on to their staff. The guiding principle of hospitals should clearly state that discriminatory and racist behaviour is unacceptable.

Othering

Othering is by definition, when a group or a person distinguishes themselves from another group by describing the non-self-group as different and foreign. It usually happens in a relationship with a power imbalance. The group or person described as ‘others’ are affected by discrimination and have few possibilities to defend themselves against the attribution (Johnson et al. 2004). People who share similar social demographics such as ethnicity, country of origin, religion and other interests tend to develop social attachments and group cohesion while alienating those who differ from

them. This Interview Study reveals that IQNs tend to form sub-groups and sub-cultures in the healthcare organisation they work for. This was something particular DQNs found frustrating as it led to a sense of ‘them and us’. These results aligns partly with those by Xiao et al. (Xiao et al. 2014) they found that host nurses felt left out due to immigrant nurses formatting sub-groups. Lauxen et al (Lauxen et al. 2019) also concluded that DQNs attributed certain cultural traits to IQNs and thus created a distinction between “Us” and “Them”.

Peer Support

A study conducted by Beechinor and Fitpatrick’s (Victorino Beechinor and Fitzpatrick 2008) detected that Filipino nurses who worked together reported significantly lower levels of work-related stress compared to IQNs without peer support. IQNs who participated in the study by Aggar et al (Aggar et al. 2020) reported that peer support was beneficial. Migrant nurses in the study by Schilgen et al. (Schilgen et al. 2019) felt more comfortable to work with other migrant nurses, since they shared commonalities. The same was true for IQNs who participated in the study conducted by (Wolcott et al. 2013) who conducted a study on the experiences of IQNs migrating to the USA. IQNs in this Interview Study also valued the peer support. Research suggests that the first months following migration, feelings of cultural displacement can arise in IQNs, with fundamental changes in social and nursing values challenging personal identity (Higginbottom 2011). This may result in cultural dissonance and disillusionment (Choi et al. 2019; Kishi et al. 2014). Within this context, peer relationships allow IQNs to find an inclusive culture of friendship and significantly lower levels of stress. Cultural dissonance including anxiety as a result of learning to assimilate in a new country but also homesickness and disillusionment negatively impact workplace integration of IQNs (Newton et al. 2012). The feeling of being an outsider was well described by migrant nurses in an Icelandic study (Magnusdottir 2005). In this Interview Study, IQNs also struggled with homesickness, loneliness, and isolation. This feeling inhibited the integration process. In summary, it can be concluded that the support of fellow IQNs influences the integration process positively. These findings imply that healthcare organisation should organise their international recruitment process in ways that IQNs receive peer support to optimise integration. Additionally, the team spirit between DQNs and IQNs should be promoted through joint activities such as social events to counteract the "us and them" phenomenon.

4.2.5 Acculturation Process and Cultural Exchange

Acculturation Process

When migrant nurses move to another country they encounter language, social and workplace differences (Newton et al. 2012). Adapting to these differences is best described as ‘acculturation’. Acculturation includes cultural and psychological changes that take place as results of contact between culturally diverse groups (Berry 1992). Berry (Berry 1992) proposed four main categories of acculturation strategies: integration, assimilation, separation, and marginalisation. Integration refers to a strategy in which persons from another culture adopt the cultural norms of the country to which they have moved, while retaining their own culture (Berry 1992). Culture is deeply embedded in self-image, and cultural immersion is an essential source of a sense of belonging, even if it is taken for granted. Migration to another country with different cultural values can throw cultural identity into disarray (Al-Hamdan et al. 2015). Migrant nurses need on average 5 to 10 years to adjust completely to their new workplace (Adams and Kennedy 2006; Habermann and Stagge 2010). Ea et al. (Ea et al. 2008) detected that a level of acculturation is positively associated with job satisfaction for IQNs and benefits long-term integration into the nursing workforce. In this Survey Study, most migrant nurses have been in Germany relatively short (less than one year). This indicates that IQNs in this Survey Study were only at the beginning of their acculturation/integration process. Research showed that the first year of employment is the most difficult period for IQNs. They experience multiple challenges in dealing with cultural shock, conflict resolution, and intercultural communication while adapting their nursing knowledge and practice to the culture of the host country (Xu 2007; Yi and Jezewski 2000). Considering challenges during the integration process that arise after orientation phase is crucial for the retention of migrant nurses and sustainable integration. It is therefore important to not only support IQNs during their orientation phase but also in the long run-in order to positively influence the integration process.

Migrant nurses add various sub-cultures to healthcare organisations, including different values and ways of practising. Cultures create norms that prescribe acceptable behaviour and reactions. Social and cultural norms are rules or expectations of behaviour and thoughts based on shared beliefs within a social group. Although often unspoken, norms provide social standards for appropriate and inappropriate behaviour (WHO 2009). The challenges of acculturation in the workplace were a dominant subtheme within this Interview Study. DQNs indicated that different cultural values and ways of practice challenged workplace integration. They recognised the need to accommodate and support IQN having different cultural values and ways of practice. This finding aligns

with those by Xiao et al. (Xiao et al. 2014). They found that although migrant nurses are expected to adapt to the healthcare system in a host country, host nurses also accepted different cultural views and support IQNs to adapt to multicultural teams. Nevertheless, it is essential to acknowledge that working in a multicultural nursing team that encounters differences in the standards of nursing practices put additional stress on both DQNs and IQNs (Xiao et al. 2014). DQNs in this Interview Study also acknowledged this. Different ways of practices were mainly related to interactions with patients. In this Interview Study, DQNs stated that they had the impression that although IQNs were highly motivated, they were usually task orientated and less proficient in interpersonal relationships, and had the impression that IQNs could show more consideration to their patients. These findings are consistent with those of Brunton and Cook who conducted a qualitative study in New Zealand (Brunton and Cook 2018). They found that although nurses from diverse cultural backgrounds shared an aim to care for their patients in the best possible way, how this was best achieved could differ significantly (Brunton and Cook 2018). Another qualitative study that explored the experiences of healthcare professionals who migrated to Canada found that cultural differences were a key challenge to professional integration (Neiterman and Bourgeault 2015). Pütz et al. (Pütz et al. 2019) concluded that workplace integration could only work if IQNs adapt to the new cultural conditions and (partially) give up their former professional identity. If this adaptation fails, many IQNs choose the exit option, i.e., leaving the department, healthcare facility, or hospital to look for work in another country or return home. Montayre et al. (Montayre et al. 2018) suggests that IQNs require culturally targeted support in order to adapt to a culturally different work environment. Different cultural views in a multicultural team cannot be prevented. However, to organise the integration process of IQNs as positive as possible, the host (local) healthcare team should respect IQNs cultural views and practices. Additionally, IQNs should be supported in learning social and cultural norms and be offered training in the standards of practices of the destination country. In this context, Wolcott (Wolcott et al. 2013) suggests that greater consideration of the cultural components of IQNs can be crucial for a smoother transition for migrant nurses, where nurse preceptors and managers can work together to support IQNs better.

Cultural Exchange

Both groups of nurses in this Interview Study acknowledged the value of cultural exchange and the benefit of learning from each other to improve their nursing practice. Additionally, they indicated that cultural training courses for both domestically and internationally qualified nurses would support workplace integration. These results are

supported by Brunton et al. (Brunton et al. 2020) and Xiao et al. (Xiao et al. 2014). Brunton et al. (Brunton et al. 2020) found that although nurses in their study reported seeking input from colleagues from other cultural backgrounds, they clearly stated that ethical and cultural training is needed to maintain the quality of nursing care. Senior nurses who participated in the study conducted by Xiao et al. (Xiao et al. 2014) suggested there is a need to develop training programs or other resources to educate both host and immigrant nurses about cultural differences and ways of practice. According to a study conducted by Bozionelos (Bozionelos 2009) in Saudi Arabia, a lack of cultural similarity was the greatest predictor of intention to leave the destination country. However, cultural training before migration has not been shown to improve this situation (Bozionelos 2009). The need for IQNs and DQNs to learn from each other is evident in the daily work in multicultural teams but is not fully recognised. This is reflected in the lack of resources to support learning between team members. Thus, cultural education programmes for internationally and domestically qualified nurses during transitioning period may the key to successful workplace integration.

4.2.6 Lack of German Language Proficiency and Language Lessons

Lack of German Language Proficiency

In the Survey Study, IQNs with higher levels of German language proficiency indicated a lower perceived workload. One explanation could be that language barriers during patient care or teamwork decrease for IQNs with proficient German language. In turn, this may influence the degree of perceived workload positively. Research suggests that increased language proficiency is associated with better assimilation and experiences for nurses and the healthcare systems in which they work (Brunero et al. 2008; Kumpf et al. 2016; Sedgwick and Garner 2017). The language level proficiency B2 of the CEFR (Jones and Saville 2009) is required to receive full registration to practice as qualified nurse in most parts of Germany (Kohrs 2020). The results of this Survey Study showed that lower levels of German language proficiency predicted higher degrees of burnout climate, a higher perceived workload, and lower work-life-balance. Thus, how proficient IQNs are in the language of the host country seems to be an essential factor and may have a negative impact on the integration process. This finding aligns with those by Adams et al. (Adams and Kennedy 2006). According to their framework, language and communication difficulties are one key barrier that has a negative impact on the integration of migrant nurses into the host country (Adams and Kennedy 2006). A core competence in nursing is the communication with patients and co-workers, including medical staff and other healthcare professionals such as physiotherapists.

Miscommunication and communication errors are associated with lower quality of patient care and safety (Wilk et al. 2018). Moreover, inadequate patient care has a direct impact on the mental health of nurses and thus increased risk of emotional exhaustion and burnout (Aiken et al. 2001). Language and communication seem to be a major barrier to integration into the professional workforce.

Nursing is a profession that depends highly on clear communication to ensure patient safety and quality of care. Language proficiency ensures registration and employment in most countries that recruit IQNs. Lack of German language proficiency was a dominant theme throughout the Interview Study. Internationally and domestically qualified nurses in the Interview Study highlighted that language barriers were perceived as a hinderance to communication between nurses, other healthcare professionals and patients. These results not only help to explain the results of the Survey Study but also confirm earlier research findings (Brunton et al. 2020; Magnusdottir 2005; Pütz et al. 2019; Schilgen et al. 2019; Xiao et al. 2014). Brunton et al. (Brunton et al. 2020) found that problems with language presented barriers to communication between cultures. Moreover, host nurses particularly highlighted the frustration of migrant nurses speaking in their mother language (Brunton et al. 2020). This was also something DQNs in this Interview Study found frustrating. Moreover, intercultural communication and understanding language nuances was acknowledged as most challenging aspect by non-English speaking nurses who migrated to Australia (Xiao et al. 2014). IQNs in this Interview Study also indicated that understanding jargon or slang was perceived as challenging. Nurses who migrated to Iceland described being unable to understand the language around them as shocking (Magnusdottir 2005). Not being able to communicate properly due to language barriers decreased the self-esteem of migrant nurses, and their sense of professionalism suffered (Magnusdottir 2005). Lack of language proficiency also made IQNs in this Interview Study question their ability to practice as nurse and lowered their self-esteem. DQNs in this Interview Study mentioned the risk to patient safety and quality of care associated with a lack of German language proficiency and misunderstanding. Brunton et al. (Brunton et al. 2020) also found that patient outcomes were negatively impacted by lack of language skills and misunderstanding.

In this Interview study, DQNs highlighted the importance of carefully listening to their internationally qualified colleagues to avoid getting lost in translation. However, this increased their workload and put additional strain on them. This result confirms previous research findings (Brunton and Cook 2018; Schilgen et al. 2019; Xiao et al. 2014). Schilgen et al. (Schilgen et al. 2019) for example found that a leading stressor that

hindered the collaboration of colleagues from different countries were differences in language (Schilgen et al. 2019). Experiencing communication difficulties while working with IQNs put an additional burden on the DQNs of this Interview Study and negatively affected their way of practicing. This finding is consistent with Schilgen et al.'s (Schilgen et al. 2019). Autonomous homecare nurses in their study stressed that explaining simple nursing tasks such as filling in forms was challenging due to communication difficulties and put additional strain on them (Schilgen et al. 2019). However, the value of nurses who were able to communicate in language other than German was recognised by DQNs in this Interview Study, confirming previous research (Lynch et al. 2012). In conclusion, strong communication skills in the language of the destination country significantly influence workplace integration but also help to ensure cultivation of friendships and peer support. Thus, ensuring effective communication in a multilingual healthcare team is crucial to patient safety, effective teamwork, and successful workplace integration. This can be achieved, for example, by offering language courses in the home country of the IQNs before migration, but also by developing and offering language courses that included medical and nursing terminology in the destination country.

Language Lessons

It is commonly believed that becoming proficient in the language of the destination country is essential for IQNs to adapt successfully to a new work and social environment. However, this process has proven to be more challenging than previously anticipated, not only for IQNs but for others involved as well. Learning a new language is a time-consuming journey that should consider the social and cultural aspects of the local profession and community (Lum et al. 2015). Lack of German language proficiency was one of the key challenges not only related to delivery of patient care but also team communication and day to day life noted by both IQNs and DQNs in this Interview Study. To overcome these barriers, Moyce et al. (Moyce et al. 2016) suggest language lessons, including terminology commonly used in nursing practice, telephone communication, and transcription of orders and medications in communication to reduce adverse effects. The importance of offering language lessons was also indicated by DQNs and IQNs in this Interview Study. In particular, DQNs stated that language lessons should include medical and nursing terminology and would be best taught as role play. Hopkins et al. (Hopkins and Stephens 2020) conducted a literature synthesis on strategies to support IQNs with English as second language in Canada. They concluded that communication, lack of cultural competences, and critical thinking were common challenges for IQNs (Hopkins and Stephens 2020). They indicated that strategies to address these challenges are, for

example, simulation and role-play (Hopkins and Stephens 2020), confirming our findings. Some DQNs of this Interview Study, however, emphasised that a certain German language proficiency level is needed before working as IQNs on the ward in the clinical setting in Germany to enhance workplace integration. Acquiring the German language is essential to promote workplace integration of IQNs. However, the results of this Interview Study suggest that language courses that only teach everyday language need to be revised. Language training to achieve a certain CEFR language proficiency level is not equivalent to the language level needed to practice safely and feel part of the nursing team in everyday clinical practice.

4.2.7 Appropriate Placement and Orientations Phase

Appropriate Placement

The recruitment process of IQNs such as their placement, their transition into new working environment, or the number of IQNs within a nursing team was a topic that almost all nurses mentioned during the Interview Study. Structured recruitment programmes such as Triple-Win [Sustainable Recruitment of Nurses] have been developed to support the migration of internationally qualified nurses and protect their rights (Smith et al. 2022). The findings of the study conducted by Xiao et al. (Xiao et al. 2014), however, revealed that employer-sponsored visa schemes used as part of national recruitment strategies could generate discrimination if migrant nurses consent to work outside their area of expertise without adequate transitional support. These results are partly consistent with our own. Domestically qualified nurses in this Interview Study stated that the recruitment of a high number of IQNs led to not being able to adequately support them, especially if IQNs were placed on a ward contrary to their professional experience. Thus, these findings suggest that inappropriate placement of IQNs negatively impacts workplace integration. Moreover, this Interview Study revealed that the mismatch between IQNs and their professional expertise and the positions they fill was particularly profound in the ICU environment. These study findings are consistent with Xiao et al.'s (Xiao et al. 2014). They found that an unfamiliar work environment and nursing routine and practice put an additional strain on migrant nurses. The (mis)matching of IQN's expertise impacted their adaption and relationship with host (local) nurses. Moreover, local nurses' workload increased due to the additional support they had to provide (Xiao et al., 2014). This could also be an explanation for the high perceived workload by DQNs in the Survey Study. Brunero et al. (Brunero et al. 2008) investigated the experiences nurses who migrated to Australia. They concluded that finding employment in a position that the IQNs had prior experience in increased the

IQNs professional success, perception of competence and job satisfaction. Appropriate placement also reduced the likelihood of moving again (Cowan et al. 2007). These results indicate that, the employment of IQNs in an area outside their expertise without adequate support threatens not only the quality of care delivered to patients but also negatively impacts the relationship between DQNs and IQNs. Furthermore, inappropriate placement seems to profoundly impacts the integration process negatively. Inadequate support for IQNs to adapt practice can have lasting consequences on job satisfaction and well-being, such as low self-esteem, cultural pain and alienation within the nursing team (Xiao et al. 2014). These consequences compromise workforce integration and retention of IQNs. It is therefore of great importance to ensure that IQNs are assigned to wards based on the nursing qualifications they acquired in their home country and their professional experiences. The development and implementation of national guidelines that regulate the placement of IQNs based on their qualifications may be necessary. Moreover, recruitment policies and programmes should be coupled with resource development and regular review of the outcomes to address structural discrimination.

Orientation Phase

The arrival and initial phase of IQNs is described as a time that can evoke negative feelings such as anxiety and distress (Connor and Miller 2014; Vafeas and Hendricks 2018). Research shows that some IQNs are indicated to be supported adequately during their orientation; many IQNs describe negative experiences related to the absence of appropriate or sufficient support upon arrival to their destination country (Connor and Miller 2014; Higginbottom 2011). The systematic review conducted by Pressley et al. (Pressley et al. 2022) demonstrated that although details of admission criteria, adaptation and orientation/ induction programmes for IQNs vary depending on the destination country, the overall evidence indicates that, in general, healthcare organisations or institutes are not well prepared to support internationally qualified nurses adequately. Research suggests that innovative orientation/ induction programmes include two features, targeting immigrant nurses learning needs in academic settings and providing mentoring or preceptorship at ward level (Boylston and Burnett 2010; Hayne et al. 2009; Thekdi et al. 2011). Thekdi et al. (Thekdi et al. 2011) investigated an adaptation programme for IQNs who migrated to the USA that included a 6-months period were IQNs were supported by a preceptor at ward level. A programme for Korean nurses who migrated to the USA reported by Boylston et al. (Boylston and Burnett 2010) was offered by the hospital in cooperation with an education institute. The

programme covered different areas including professional topics but also English communication in intercultural encounters. In this Interview Study, nurses also highlighted the benefits of a structured orientation or induction programme including regular team meetings, support by preceptors or mentors, and booklet with important information such as clinical guidelines, and German language lessons including nursing and medical terminology. Xiao et al. (Xiao et al. 2014) also found that different information resources and programmes for migrant nurses particularly during the first six months can positively influence their workplace integration. Therefore, the development and implementation of a structured orientation programme for IQNs by hospitals in cooperation with learning facilities may enhance the integration of IQNs. Orientation programmes should be structured and adapted to the needs and skills of IQNs undertaking the programme. It may be best if IQNs who have been integrated successfully are involved in the development and implementation of orientation or induction programmes.

4.2.8 Work-related Burnout, Workload, and Nursing Workforce Shortage[12]

Work-related Burnout

One key factor contributing to nurses' decision to leave their profession (Toh et al. 2012) or migrate to another country (Zander et al. 2013) is inadequate working conditions, leading to burnout. Previous research suggests that IQNs from low-income countries indicated unfavourable working conditions and poor salaries in their country of origin as the primary motivators to migrate (Kishi et al. 2014; Lin 2014). Most IQNs of this Survey Study migrated from low-income countries (Bosnia and Herzegovina or Serbia) to Germany, considered a high-income country that is politically stable. The same was true for IQNs of this Interview Study**;** most migrated to Germany from the Philippines and India, both countries considered low-income. Participating nurses in these studies indicated that one of the main reasons for migration were poor working conditions in their home countries, confirming previous research findings. Nevertheless, findings of this Survey Study demonstrated that IQN and DQNs perceived a moderately high degree of burnout climate. Research suggests that inadequate working conditions are related to an increased risk of burnout and the intention to leave nursing (Aiken et al. 2013). It is, therefore, possible that the moderately high levels of work-related burnout in the participating IQNs of this Survey Study indicate inadequate working conditions. This

[12] Parts of this section have been published in the following publication: **Roth, C**., Wensing, M., Breckner, A. et al. Keeping nurses in nursing: a qualitative study of German nurses' perceptions of push and pull factors to leave or stay in the profession. BMC Nursing 21, 48 (2022). https://doi.org/10.1186/s12912-022-00822-4

means that the expectations related to an improved work environment of IQNs have not been met and the perceived working environment has not improved in their favour. These unmet expectations may impede workplace integration and negatively impact retain of IQNs. Furthermore, previous research suggests that a stressful work environment was associated with the intention to leave of migrant nurses who migrated from East Asia and India to Singapore (Goh and Lopez 2016). This could also be true for IQNs who participated in either the Survey Study or the Interview Study. However, cultural views and beliefs may differ between different groups of migrant nurses and need to be considered. Moreover, burnout usually occurs in those who have been exposed to excessive work-related stress over a period of time (Maslach and Leiter 1999). IQNs of this Survey Study reported that they had lived in Germany for less than a year and were probably working on the ward for a shorter time. This needs to be considered when interpreting burnout results in internationally qualified nurses of this Survey Study. Thus, the burnout climate levels in IQNs may increase further in the years to come due to inadequate working conditions. Research on nursing workforce burnout demonstrates that adverse job characteristics such as high workload and inadequate staffing are associated with a higher risk of burnout (Dall'Ora et al. 2020) and therefore the intention to leave the nursing profession. Therefore, the moderately high degree of burnout climate among domestically qualified nurses of this Survey Study could contribute to an increase in intention to leave the nursing profession and further exacerbate perceptions of inadequate working conditions (e.g., due to staff shortage).

Workload

DQNs in this Survey Study reported higher perceived workloads and higher degrees of personal than IQNs. Due to inadequate staffing, DQNs may have to take more responsibility for patient care in everyday hospital practice. In addition, DQNs have to supervise their internationally qualified colleagues during orientation and workplace integration. The combination of these factors may increase their perceived workload and could be one reason contributing to higher degrees of personal and workforce burnout (Dall'Ora et al. 2020). On the other hand, could the orientation phase, including additional theoretical training, language courses and adaption to a new work environment, influence how IQNs perceive their workload (Blythe et al. 2009). Eliminating factors that contribute to a stressful work environment and, thus, an increased risk of nursing workforce burnout is critical for the retention of IQNs and DQNS. Although IQNs of this Survey Study evaluated their perceived workload lower compared to their domestically qualified peers, the mean score was still moderately high. This finding aligns with those

by Blythe et al. (Blythe et al. 2009) and Takeno et al. (Takeno 2010). Migrant nurses stated that they are not accustomed doing total patient care and were overwhelmed by paperwork (Blythe et al. 2009; Takeno 2010). Although most IQNs adjusted to the workload (Takeno 2010), some migrant nurses left the nursing profession due to work-related pressure during workplace integration (Blythe et al. 2009). IQNs who participated in the Interview Study reported feeling overworked due to working with critically ill patients. In particular, lifting heavy and immobile patients was described as challenging. Schilgen et al. (Schilgen et al. 2019) found that migrant nurses connected working as nurses in Germany with better working and living conditions but often worked under very physical and psychologically stressful conditions (Schilgen et al. 2019). This Interview Study confirmed these findings. IQNs explained that learning a new language, adapting to a new work environment, patient care, and preparing for the recognition test were challenging and increased perceived workload. Therefore, it is essential to eliminate factors that place additional burdens on migrant nurses and increase their workload during their transition to influence the integration process positively. One possibility would be to reduce the total number of patients to be cared for or assign IQNs to patients who require less nursing care. In general, addressing factors that increase work-related stress or pressure should be a priority for hospital managers to retain internationally and domestically qualified nurses. Unrealistic expectations related to working conditions should be communicated as such. IQNs should be informed about the challenges nurses face in Germany. In addition, earning opportunities should be discussed transparently before migration to avoid frustration and disappointment. Nevertheless, targeted measures to address nursing workforce burnout and factors contributing to emotional exhaustion may vary across settings and must be considered.

Nursing Workforce Shortage

The findings of this Interview Study confirm previous studies that concluded that inadequate staffing negatively impacts the integration of migrant nurses and their job satisfaction (Brunton et al. 2020). The level of despondency of both domestically and internationally qualified nurses due to the constant shortage of nursing staff and thus having to cope with a care-rationed, time-constrained work environment led to frustration. This finding is consistent with those by Brunton et al. (Brunton et al. 2020). Staff shortages and increased workloads impacted the well-being of both host and migrant nurses (Brunton et al. 2020). This Interview Study suggests that DQNs appreciated the migration of nurses in order to address current nursing workforce shortage. Additionally, the increasing number of patients with several different social and cultural background is reflected by multicultural nursing teams that develop due to nurse migration. DQNs

and IQNs that participated in this Interview Study appreciated these aspects. This result agrees with those by Brunton et al. (Brunton et al. 2020) and Schilgen et al. (Schilgen et al. 2019). Nurses qualified in New Zealand expressed the desire for greater workplace diversity (Brunton et al. 2020). German nurses appreciated the support of migrant nurses as language or cultural interpreter (Schilgen et al. 2019). Thus, recruiting IQNs can mitigate consequences such as increased workload due to the shortage of qualified nurses. However, DQNs felt overwhelmed due to additional burden related to the integration and training of IQNs. Moreover, due to demographic trends, IQNs cannot meet the rapidly increasing demand for nursing staff. More and more vacancies continue to remain. On average, the occupation-specific unemployment rate for nursing staff was 2.5 per cent (37,000) in 2022 (Singer and Fleischer 2023). These results indicate that although recruitment of IQNs is a strategy to address high workload due to nursing staff shortages, it cannot be the only strategy to encounter nursing workforce shortage in the long term. Other strategies targeting nurses who have left the profession (e.g., probably registered as unemployed qualified nurses) need to be adapted to meet the high demand of qualified nurses in Germany.

4.3 Strengths and Limitations

The Survey Study of this research has some limitations that may affect interpretation of the findings. Although the design of the study allowed identifying associations casual inference cannot be made. In particular, the results of the stepwise linear regression model need to be interpreted with caution due to the relatively small sample size. This means that the results of the Survey Study in general also need to be interpreted with caution. All variables were assessed by self-reports; thus, results might be biased by common method variance, self-report, selection, or social desirability bias. Moreover, participating nurses completed the questionnaire while on duty, therefore responses could be influenced by events on the day or workload. Hence, the survey should be repeated to evaluate whether the results differ in terms of day and shift. The study sample was drawn from a study population of IQNs and DQNs employed at two university hospital in South Germany; generalising results beyond this study sample may be problematic. One of the hospitals is actively recruiting nurses from Balkan countries. Hence, results may not be generalizable to IQNs from other source countries. Further studies should be undertaken in different hospital settings with nurses who have obtained their nursing qualification in different countries. No difference between setting e.g. intensive care unit or normal ward was made. The work setting might have had an impact on the results, this needs to be further evaluated. The German language proficiency of IQNs may have had an impact on the proper understanding of the questionnaire.

However, language proficiency levels equal B1 or above indicate that the person is able to understand common expressions. Only a low number of participants was reached despite repeated reminders to increase response rate e.g. promoting the Survey Study during nursing manager meetings and email reminder, thus results must be potential biased by non-response bias. Nurses from both groups facing more challenges may have not completed the questionnaire, which may have had an impact on results e.g. the true burnout rates (underestimation). Due to the small sample size results need to be confirmed in further prospectively target studies, particularly regards the results on gender and migration alone or with family/friends.

Although qualitative interviews are considered an important research method to gain in-depth knowledge about the research subject and understand the target groups' perspectives, this Interview Study has some limitations that may affect interpretation of the findings. Semi-structured interviews were considered an appropriate research method to answer research question two and three of this dissertation. Data analysis was guided by appropriate methodological strategies to minimise bias and reduce the risk of losing relevant content. The recommendations of the COREQ checklist guided the reporting of qualitative findings (Tong et al. 2007). The authors background in public health, as a state-qualified nurse, and the diverse expertise of the researchers who were involved in the conduction of the study (Health Services Researchers, Sociologists, Nurses, and Psychologists) supported the method chosen for data collection, data analysis and interpretation of the findings. Nevertheless, some limitations must be acknowledged. Although the qualitative design of the interview study allowed for in-depth exploration of domestically and internationally qualified nurses' experiences regarding workplace integration, the findings of this Interview Study cannot be generalised beyond the study populations. DQNs and IQNs that participated in this Interview Study were employed in one of two university hospitals or one of two smaller public hospitals in South Germany. Thus, specific national and regional factors may have influenced the results. A similar study conducted elsewhere might get different results due to context. More nurses from different hospitals and different regions may have led to more diverse results. Although experiences related to workplace integration were relatively consistent within the study sample, all nurses may not share these experiences. In addition, nurses who voluntarily participated may have different experiences than nurses who choose not to participate. Social desirability in answers cannot be excluded. Quotes were translated from German into English; therefore, it is possible that the meaning of translated quotes subtly differed from the original meaning in German quotes. The transcripts were not returned to participants for comments and/or correction once the interviews were carried

out and transcribed. At the time of writing this dissertation, the participants have not provided feedback on the findings.

Additionally, the comparison of the two studies (Survey Study and Interview Study) must be interpreted cautiously. Although the groups of the two studies were recruited from the same study population, it cannot be guaranteed that DQNs or IQNs who took part in an interview also completed a questionnaire. Nevertheless, the results of the Interviews Study could be used to explain and deepen the results of the Survey Study.

4.4 Conclusion

Workplace integration of IQNs seem to be a complex process with several factors that interact. Limited resources, particularly human resources, in health service delivery exacerbate the challenges related to the workplace integration of IQNs. It, therefore, appears appropriate to mainly focus on facilitators. Findings of this research study suggest that workplace integration of IQNs can be divided into three stages: (I) Recruitment, (II) Orientation, and (III) (Sustainable) Integration, including several barriers or facilitators. IQNs go through these stages at different speeds and require different levels of support. It is, therefore, essential to consider IQNs individually. This research study showed that a positive influence on workplace integration can already be exerted during recruiting IQNs (Stage I Recruitment). For example, professional experience can be considered when selecting IQNs, and an appropriate position can be found. During the orientation phase, particular attention should be paid to language acquisition and learning German nursing standards and acknowledging differences in nursing autonomy. Nevertheless, professional experience and nursing training must be considered during this stage to avoid deskilling. The final stage is about sustainable integration of IQNs in the workplace, professionally, culturally, and socially. In particular, personal and professional expectations in the context of migration should be addressed here (e.g., expectations related to earning opportunities, professional development, and working conditions).

Furthermore, health services research, in the context of nursing workforce shortage and the integration of IQNs, should focus on monitoring and analysing specific data related to nurse migration. Open questions are, for example, how many nurses (per year) migrate to Germany, where they are from, what their qualifications are, how long have these nurses been available to the German labour market, and where are they employed (inpatient or outpatient sector). Moreover, particularly in Germany, longitudinal data on job satisfaction and acculturation as potential indicators for the successful integration of

IQNs is lacking. Facilitators and barriers identified within this research project could be used to develop an evidence-based integration concept for IQNs who migrate to Germany based on the three stages ((I) Recruitment, (II) Orientation, and (III) (Sustainable) Integration. The development and implementation of this concept need to be scientifically guided and should involve nurses from all management levels and IQNs who are integrated successfully. The lack of answers to these questions is a knowledge gap that cannot be accepted, given the increasing demand for qualified nurses in the years to come. Furthermore, health services research should focus on implementing evidence-based interventions that sustainably improve overall working conditions of nurses regardless of the country of origin to avoid burnout. Numerous interventions to improve the working conditions of nurses have already been investigated, but conditions do not appear to have improved over the years. This suggests that although the interventions are potentially effective, they cannot be successfully and sustainably implemented into practice. Further studies should explore why these interventions fail to be successfully and sustainably implemented into healthcare practice.

5 SUMMARY

This research study aimed to systematically explore the experiences of domestically and internationally qualified nurses regarding workplace integration of IQNs in the context of the nursing workforce shortage in Germany. A Survey Study was conducted to understand how DQNs and IQNs evaluated their work setting. In this context, the following aspects were considered in detail: sociodemographic characteristics, factors related to migration, safety culture, work-life balance, and job engagement (SCORE Questionnaire). In addition, a qualitative Interview Study systematically explored the in-depth experiences of DQNs and IQNs regarding workplace integration. The results of the interviews with the two study populations were first analysed individually, compared to identify differences and similarities, and presented as a comparison of the two study groups. The Survey Study results could be confirmed and deepened by the findings of the Interview study. Combining the results of both studies led to a comprehensive and systematic understanding of the experiences of DQNs and IQNs regarding workplace integration in the context of the nursing workforce shortage in Germany.

The findings of the Survey Study showed that nurses mainly migrated to Germany, seeking better working conditions, a higher standard of living, and growth opportunities. Despite these expectations of the German healthcare system, IQNs evaluated their workload as moderately high and reported a moderately high degree of workforce burnout, which suggests inadequate working conditions. In addition, growth opportunities and learning environment showed room for improvement. The same was true for the domestically qualified nurses in this study. These results imply that IQNs' expectations before migration to Germany may not have been met negatively impacting workplace integration. Moreover, the reasons why IQNs decide to migrate to Germany and leave their home country (e.g. higher salary, growth opportunities and better working conditions) are similar to why DNQs decide to leave the profession (e.g. inadequate pay, limited growth opportunities, poor work environments, and high workload).

The results of the Interview Study showed the complexity of integrating IQNs into the German nursing workforce. Factors that were perceived as hindering included mainly lack of language proficiency, differences in the standard of practice including discrepancies in the nursing training and resulting consequences such as lack of practical experiences in certain areas (e.g., assisting patients with personal hygiene), lack of recognition of professional experiences or credentials gained in the home country, perceived difference of hierarchical order and power dynamics resulting in conflicts, different priorities in hygiene standards, increased workload, constant staff shortage, personal and individual challenges of IQNs such as feeling homesick, and racism, discrimination or othering.

The factors that were perceived to be beneficial included, in particular, a supporting and open (host) nursing team, including regular team meetings but also the support by a preceptor or the management, appropriate placement based on previous professional experience, the offer of further training in language acquisition or the area of practical activities of a German nurse, and the implementation of structured orientation programs. A particular challenge for IQNs was that their professional experiences and qualifications were not fully recognised, which resulted in deskilling and frustration. Moreover, discriminatory and racist behaviour made IQNs feel uncomfortable and unwelcome. In addition, inappropriate placement increased work-related stress for both nurse groups. The experiences of DQNs were similar, although they indicated that lack of language proficiency and cultural differences were the most challenging for them.

The combination of Survey Study and the Interview Study results contribute improved understanding of sustainable improvements to optimise of workplace integration of IQNs in Germany, which in turn may attract IQNs to the German labour market in the long term. The comparison of the two studies showed that the integration of IQNs is complex and dependent on different determinants. Throughout the analysis, it is apparent that success of workplace integration of IQNs depends on complex factors contributing to the intention to leave the nursing workforce regardless of the country of origin. Workplace integration can only be successful if the overall work conditions for nurses improve and all relevant hindering factors that impede integration are addressed.

6 ZUSAMMENFASSUNG

Dieses Forschungsprojekt zielte darauf ab, die Erfahrungen von in- und ausländisch qualifizierten Pflegekräften in Bezug auf die berufliche Integration in das deutsche Gesundheitssystem im Kontext des Mangels an Pflegekräften in Deutschland systematisch zu untersuchen. In einer Befragungsstudie (Teil A) wurde untersucht, wie in- und ausländisch qualifizierte Pflegekräfte ihr Arbeitsumfeld bewerten. Zudem wurden die Erfahrungen, die in- und ausländisch qualifizierten Pflegekräften im Rahmen der Integration am Arbeitsplatz im deutsche Gesundheitssystem, gemacht haben in einer Interviewstudie (Teil B) systematisch erhoben. Die Ergebnisse der Interviews mit den beiden Gruppen wurden zunächst unabhängig voneinander Mittels einer qualitativen Inhaltsanalyse analysiert, dann verglichen, um Unterschiede und Gemeinsamkeiten zu ermitteln, und schließlich als Vergleich der beiden Gruppen dargestellt. Die Kombination der Ergebnisse der Befragungsstudie und der Interviewstudie stellt ein umfassendes Bild des Integrationsprozesses von Pflegekräfte, die im Ausland ausgebildet wurden, dar. Dieses kann zu einer nachhaltigen Verbesserung der beruflichen Integration von Pflegekräfte, die im Ausland ausgebildet wurden, beitragen. Eine Verbesserung der beruflichen Integration kann dazu beitragen den deutschen Arbeitsmarkt langfristig attraktiv für Pflegekräfte, die im Ausland ausgebildet wurden, zu gestallten.

Die Ergebnisse der Befragungsstudie (Teil A) zeigten, dass ausländisch qualifizierte Pflegekräfte hauptsächlich mit dem Ziel bessere Arbeitsbedingungen zu finden, einen höheren Lebensstandard zu erreichen oder Weiterbildungsmöglichkeiten zu nutzen nach Deutschland gekommen sind. Trotz dieser Erwartungen an das deutsche Gesundheitssystem bewerteten Pflegekräfte, die im Ausland ausgebildet wurden, ihre Arbeitsbelastung als mäßig hoch und berichteten über einen mäßig hohen Grad an Burnout, was auf unzureichende Arbeitsbedingungen schließen lässt. Auch Weiterbildungsmöglichkeiten und das Lernumfeld wurden als verbesserungswürdig evaluiert. Die Analyse der Fragebögen der inländischen Pflegekräfte kam zu ähnlichen Ergebnissen. Diese Ergebnisse deuten darauf hin, dass die Erwartungen, die die Pflegekräfte, die im Ausland ausgebildet wurden, vor der Migration nach Deutschland hatten, nicht erfüllt wurden. Darüber hinaus zeigte die Befragungsstudie, dass die Gründe, weshalb sich ausländisch qualifizierte Pflegekräfte für die Migration nach Deutschland entscheiden (z. B. höheres Gehalt, Aufstiegsmöglichkeiten und bessere Arbeitsbedingungen), ähnlich sind wie die Gründe, weshalb sich inländisch qualifizierte Pflegende für das Verlassen des Berufs entscheiden (z. B. unzureichende Bezahlung, begrenzte Aufstiegsmöglichkeiten, schlechte Arbeitsumgebung und hohe Arbeitsbelastung).

Die Ergebnisse der Interviewstudie (Teil B) zeigten die Komplexität der beruflichen Integration von ausländisch qualifiziertem Pflegepersonal in das deutsche Gesundheitssystem. Zu den

Faktoren, die als hinderlich wahrgenommen wurden, gehörten vor allem mangelnde Sprachkenntnisse, wahrgenommene Unterschiede in Pflegestandards einschließlich Diskrepanzen in der Pflegeausbildung und daraus resultierende Konsequenzen wie fehlende praktische Erfahrungen in bestimmten Bereichen (z. B. Unterstützung von Patienten bei der Körperpflege), fehlende Anerkennung von im Heimatland erworbenen Berufserfahrungen oder Zeugnissen, wahrgenommene Unterschiede in der hierarchischen Ordnung und Machtdynamik, die zu Konflikten innerhalb des Teams führen, unterschiedliche Prioritäten bei den Hygienestandards, erhöhte Arbeitsbelastung, ständiger Personalmangel, persönliche und individuelle Herausforderungen des ausländisch qualifizierten Pflegepersonals wie zum Beispiel Heimweh. Rassismus, Diskriminierung oder Othering wurden ebenfalls als hinderlich für die Integration wahrgenommen. Eine besondere Herausforderung für ausländisch qualifizierte Pflegepersonen bestand darin, dass ihre beruflichen Erfahrungen und Qualifikationen nicht vollständig anerkannt wurden, was zu Dequalifizierung und Frustration führte. Außerdem fühlten sich ausländisch qualifizierte Pflegepersonen aufgrund von diskriminierendem und rassistischem Verhalten unwohl und nicht willkommen. Darüber hinaus führte das Nicht-Übereinstimmen der im Ausland erworbenen beruflichen Erfahrungen und des Fachgebiets der neuen Station bei beiden Gruppen zu erhöhtem arbeitsbedingtem Stress. Die Erfahrungen der inländisch qualifizierten Pflegekräfte waren ähnlich, obwohl sie angaben, dass mangelnde Sprachkenntnisse und kulturelle Unterschiede für sie die größten Herausforderungen darstellten.

Zu den Faktoren, die als förderlich empfunden wurden, gehörten insbesondere ein unterstützendes und offenes Gast-Pflegeteam, einschließlich regelmäßiger Teambesprechungen, aber auch die Unterstützung durch Mentorinnen und Mentoren oder die Stationsleitungen sowie die Geschäftsführung, eine angemessene Platzierung auf der Grundlage früherer Berufserfahrungen, das Angebot von Sprachkursen oder Kurse zu Bereich der praktischen Tätigkeiten einer deutschen Pflegekraft und die Durchführung strukturierter Orientierungsprogramme.

Der Vergleich der beiden Studien zeigte, dass die Integration von ausländisch qualifizierten Pflegefachpersonen in das deutsche Gesundheitssystem komplex ist und von verschiedenen Faktoren beeinflusst wird. Die Ergebnisse beider Studien lassen darauf schließen, dass der Erfolg der beruflichen Integration von ausländisch qualifizierten Pflegefachpersonen von Faktoren abhängt, die zu der Absicht beitragen, den Pflegeberuf zu verlassen, unabhängig vom Herkunftsland. Demzufolge kann die Integration am Arbeitsplatz nur dann erfolgreich sein, wenn sich die allgemeinen Arbeitsbedingungen für die Pflegefachpersonen verbessern, und alle relevanten Faktoren, die die Integration behindern, adressiert werden.

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8 PUBLICATIONS

8.1 Publications Related to this Thesis

This thesis was written as part of the Nurse Migration project I initiated at the Deparment of General Health and Health Services Research at the Univeristy Hospital Heidelberg. It consists of two parts (Part A: Survey Study and Part B: Interview Study), equally representing this dissertations' central result. I initiated the research project, planned and carried it out with the support of Prof. Dr. Michel Wensing, Dr. Sarah Berger, and Dr. Katja Krug. I prepared an application for funding and successfully submitted it to the B. BRAUN Foundation. I collected, prepared, and analysed the data from the survey and interview studies.

The following publications made partial doctoral thesis results available to the public in advance:

Publikation 1

Roth, C., Berger, S., Krug, K., Mahler, C., & Wensing, M. (2021). **Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study**. *BMC Nursing*, *20*(1), 77. https://doi.org/10.1186/s12912-021-00581-8

Publikation 2

Roth, C., Wensing, M., Breckner, A., Mahler, C., Krug, K., & Berger, S. (2022). **Keeping nurses in nursing: a qualitative study of German nurses' perceptions of push and pull factors to leave or stay in the profession**. *BMC Nurs*, *21*(1), 48. https://doi.org/10.1186/s12912-022-00822-4

Publikation 3

Roth, C., Breckner, A., Wensing, M., Mahler, C., Krug, K., & Berger, S. (2023). **Barriers and enabling factors for workplace integration of internationally qualified nurses: A qualitative study of perceptions of German nurses**. *Nursing Open*, *10*(8), 5225-5235. https://doi.org/https://doi.org/10.1002/nop2.1760

8.2 Other Publications

I was significantly involved in the following research projects while writing my doctoral thesis: RECOVER-E, DEMAND, PrimaryCoVCare, and GeRas. During these projects, I created further publications in which I was the lead author or contributed substantially as an author:

RECOVER-E Project

Shields-Zeeman, L., Petrea, I., Smit, F., Walters, B. H., Dedovic, J., Kuzman, M. R., Nakov, V., Nica, R., Novotni, A., **Roth, C**., Tomcuk, A., Wijnen, B. F. M., & Wensing, M. (2020). **Towards community-based and recovery-oriented care for severe mental disorders in Southern and Eastern Europe: aims and design of a multi-country implementation and evaluation study (RECOVER-E**). *Int J Ment Health Syst*, *14*(1), 30. https://doi.org/10.1186/s13033-020-00361-y

Roth, C., Wensing, M., Koetsenruijter, J., Istvanovic, A., Novotni, A., Tomcuk, A., Dedovic, J., Djurisic, T., Milutinovic, M., Kuzman, M. R., Nica, R., Bjedov, S., Medved, S., Rotaru, T., Hipple Walters, B., Petrea, I., & Shields-Zeeman, L. (2021). **Perceived Support for Recovery and Level of Functioning Among People With Severe Mental Illness in Central and Eastern Europe: An Observational Study**. *Front Psychiatry*, *12*, 732111. https://doi.org/10.3389/fpsyt.2021.732111

Roth, C., Wensing, M., Kuzman, M. R., Bjedov, S., Medved, S., Istvanovic, A., Grbic, D. S., Simetin, I. P., Tomcuk, A., Dedovic, J., Djurisic, T., Nica, R. I., Rotaru, T., Novotni, A., Bajraktarov, S., Milutinovic, M., Nakov, V., Zarkov, Z., Dinolova, R., . . . Petrea, I. (2021). **Experiences of healthcare staff providing community-based mental healthcare as a multidisciplinary community mental health team in Central and Eastern Europe findings from the RECOVER-E project: an observational intervention study**. *BMC Psychiatry*, *21*(1), 525. https://doi.org/10.1186/s12888-021-03542-2

DEMAND Project

Breckner, A., **Roth, C**., Wensing, M., & Paulus, J. (2020). **Quo vadis 116117? Nationwide Overview of the Status Quo and Current Changes**. *Gesundheitswesen*, *82*(4), 324-327. https://doi.org/10.1055/a-1075-2330

Roth, C., Breckner, A., Paulus, J., & Wensing, M. (2020). **Implementation of a Standardized Initial Assessment for Demand Management in Outpatient Emergency Care in Germany: Early Qualitative Process Evaluation**. *JMIR Form Res*, *4*(9), e18456. https://doi.org/10.2196/18456

Breckner, A., **Roth, C**., Szecsenyi, J., & Wensing, M. (2021). **Enhancing implementation of a standardized initial assessment for demand management in outpatient emergency care in Germany: a quantitative process evaluation**. *BMC Med Inform Decis Mak*, *21*(1), 318. https://doi.org/10.1186/s12911-021-01685-6

PrimaryCoVCare Project

Stengel, S., **Roth, C**., Breckner, A., Peters-Klimm, F., Schwill, S., Mollinger, S., Buhlinger-Gopfarth, N., Szecsenyi, J., & Wensing, M. (2021). **Primary Care Strategies and Cooperation During the First Phase of the COVID-19 Pandemic in Baden-Wuerttemberg, Germany**. *Gesundheitswesen*, *83*(4), 250-257. https://doi.org/10.1055/a-1397-7527

Roth, C., Breckner, A., Moellinger, S., Schwill, S., Peters-Klimm, F., Szecsenyi, J., Stengel, S., & Wensing, M. (2021). **Beliefs and practices among primary care physicians during the first wave of the COVID-19 pandemic in Baden-Wuerttemberg (Germany): an observational study**. *BMC Fam Pract*, *22*(1), 86. https://doi.org/10.1186/s12875-021-01433-9

Stengel, S., **Roth, C**., Breckner, A., Cordes, L., Weber, S., Ullrich, C., Peters-Klimm, F., & Wensing, M. (2022). **Resilience of the primary health care system - German primary care practitioners' perspectives during the early COVID-19 pandemic**. *BMC Prim Care*, *23*(1), 203. https://doi.org/10.1186/s12875-022-01786-9

GeRas Project

Abel, B., Bongartz, M., Rapp, K., Roigk, P., Peiter, J., Metz, B., Finger, B., Buchele, G., Wensing, M., **Roth, C**., Schmidberger, O., Konig, H. H., Gottschalk, S., Dams, J., Deuster, O., Immel, D., Micol, W., Bauer, J. M., & Benzinger, P. (2024). **Multimodal home-based rehabilitation intervention after discharge from inpatient geriatric rehabilitation (GeRas): study protocol for a multicenter randomized controlled trial**. *BMC Geriatr*, *24*(1), 69. https://doi.org/10.1186/s12877-023-04634-2

Other publications

Breckner, A., **Roth, C**., Glassen, K., & Wensing, M. (2021). **Self-management perspectives of elderly patients with multimorbidity and practitioners - status, challenges and further support needed**. *BMC Fam Pract*, *22*(1), 238. https://doi.org/10.1186/s12875-021-01584-9

Strassner, C., Hoffmann, M., Forstner, J., **Roth, C**., Szecsenyi, J., & Wensing, M. (2020). **Interventions to Improve Hospital Admission and Discharge Management: An Umbrella Review of Systematic Reviews.** *Qual Manag Health Care*, *29*(2), 67-75. https://doi.org/10.1097/QMH.0000000000000244

Wensing, M., Paech, B., **Roth, C**., & Schwill, S. (2019). **Learning, understanding and the use of information technology: a survey study among primary care physician trainees**. *BMC Health Serv Res*, *19*(1), 728. https://doi.org/10.1186/s12913-019-4615-y

Wensing, M., **Roth, C**., & Krug, K. (2023). **Measuring valued output in primary care: challenges and reconciliation**. *Expert Review of Pharmacoeconomics & Outcomes Research*, 1-9. https://doi.org/10.1080/14737167.2023.2224566

APPENDIX

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Annexe 1 Ethical Approval

MEDIZINISCHE FAKULTÄT HEIDELBERG

Ethikkommission der Med. Fak. HD | Alte Glockengießerei 11/1 | 69115 Heidelberg

Herrn Prof. Dr. Michel Wensing
Universitätsklinikum Heidelberg
Abteilung Allgemeinmedizin und
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Prof. Dr. med. Johannes Schröder
Prof. Dr. med. Klaus Herfarth

Geschäftsleitung:
Dr. med. Verena Pfeilschifter

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BERUFSRECHTLICHE BERATUNG

Unser Zeichen: **S-367/2019 (Bitte stets angeben)**
Titel: **Employment conditions, collaborative teamwork and patient safety as factors influencing integration of foreign-trained nurses – a mixed-methods case study**

Sehr geehrter Herr Professor Wensing,

die Ethikkommission hat Ihr Forschungsvorhaben in der Sitzung am 03.06.2019 beraten und hat keine Bedenken gegen die Durchführung der Studie.

Sie gibt jedoch folgende Empfehlungen bzw. Hinweise:

Study Protocol:

1. Abschnitt 6.2: „Einwilligungsfähigkeit" sollte als allgemeines Einschlusskriterium genannt werden.
2. Abschnitt 11.3: Der Verweis auf § 6 Landesdatenschutzgesetz sollte gestrichen werden. Es sollte allgemein auf die Anwendbarkeit des Landesdatenschutzgesetzes verwiesen werden.
3. Es sollte ergänzt werden, dass die personenbezogenen Daten im Fall, dass die Teilnehmer ihre Einwilligung widerrufen, gelöscht werden oder die Teilnehmer gefragt werden, ob sie mit der weiteren Auswertung der Daten einverstanden sind.

Informationsschrift Interview (Pflegenden welche im Ausland ausgebildet wurden):

4. Da die Adressaten der Informationsschrift sich ggf. erst noch für die Teilnahme an der Studie entscheiden, sollte die Angabe „Sie nehmen aktuell an der Studie (...) teil, ..." entsprechend geändert werden.
5. S. 5, siehe „Alle Daten, die im Rahmen dieser Studie gespeichert werden, dienen allein der Beantwortung wissenschaftlicher Fragestellungen.": Es sollte konkreter darüber aufgeklärt werden, ob die Daten lediglich für die Zwecke des vorliegenden Forschungsprojektes oder auch im Rahmen anderer wissenschaftlicher Projekte verwendet werden sollen.
6. Die Zielgruppe sollte im Dokumentennamen enthalten sein.

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Annexe 2 Study Material Part A: Survey Study

A 2.1: The Information Leaflet of Part A: Survey Study

UNIVERSITÄTS KLINIKUM HEIDELBERG

Thoraxklinik Universitätsklinikum Heidelberg

Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Rekrutierung von Pflegenden aus dem Ausland

Rekrutierung von Pflegenden welche im Ausland ausgebildet wurden.

Informationsschrift
Schriftliche Befragung

Für Pflegende die an der unten genannten Studie teilnehmen:

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Finale Version

Sehr geehrte Kolleginnen und Kollegen,

mit diesem Schreiben laden wir Sie ein, an der oben genannten Studie teilzunehmen. Bitte lesen Sie sich die folgenden Informationen sorgfältig durch. Sie können dann entscheiden, ob Sie teilnehmen möchten oder nicht. Lassen Sie sich ausreichend Zeit und stellen Sie den Studienmitarbeiterinnen und Studienmitarbeitern alle Fragen, die für Sie wichtig sind. Diese Studie erhält keine Finanzierung.

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Welches primäre Ziel verfolgt die Studie?

Die Studie „Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen" hat sich zum primären Projektziel gesetzt herauszufinden, welche Ansichten Pflegende welche im Ausland ausgebildet wurden, bezüglich Teamarbeit und Patientensicherheit haben. Außerdem ist es Ziel, zu dokumentieren welche Meinungen und Ansichten Pflegende, welche ihre Ausbildung in Deutschland absolviert haben, bezüglich dieser Rekrutierung haben, wie sie die Einarbeitungsphase empfinden und welche Auswirkungen dies auf die Sicherheit der Patienten hat. Die Ergebnisse sollen dazu beitragen, die Arbeitszufrieden der Pflegenden zu steigern, Verbesserungspotenzial aufzudecken und die adäquate Versorgung der Patientinnen und Patienten zu gewährleisten. Zur Beantwortung der Forschungsfrage werden semi-strukturierte Interviews sowie eine schriftliche Befragung durchgeführt.

Wer ist an der Studie beteiligt?

Die Studie wird durch die Abteilung Allgemeinmedizin und Versorgungsforschung des Universitätsklinikums Heidelberg durchgeführt. Weiter an der Studie beteiligt sind das Universitätsklinikum Heidelberg sowie die Thoraxklinik Heidelberg.

Wer kann an der Studie teilnehmen?

Personen aus folgender Personengruppe können an der schriftlichen Befragung teilnehmen:

- Pflegende welche im Ausland ausgebildet wurden, nach dem 01.01.2017 rekrutiert wurden und einen Vertrag mit dem Universitätsklinikum Heidelberg oder der Thoraxklinik Heidelberg haben.
- Pflegekräfte die mit Pflegenden die im Ausland ausgebildet wurden zusammenarbeiten und einen Vertrag mit dem Universitätsklinikum Heidelberg oder der Thoraxklinik Heidelberg haben.

Zwingende Teilnahmevoraussetzungen sind, dass Sie entweder Deutsch oder Englisch sprechen und älter als 18 Jahre sind. Eine Einwilligungserklärung ist nicht notwendig. Das Ausfüllen des Fragebogens ist anonym und wird als freiwillige Einwilligung zur Teilnahme an der Studie gewertet.

Wie läuft die Studie ab?

Alle Pflegekräfte, welche an der Studie teilnehmen können, erhalten einen Umschlag. In diesem Umschlag befinden sich zwei Dokumente, die Informationsschrift sowie eine deutsche Version des Fragebogens. Außerdem liegt ein Rücksendekuvert bei. Der Umschlag mit den Dokumenten wird von der Stationsleitung oder deren Vertretung verteilt werden. Die

Stationsleitung wird vor Verteilung der Umschläge komplett über die Studie aufgeklärt. Die Teilnahme an der Studie ist freiwillig. Die Datenerhebung verläuft anonym.

Wie sieht die Teilnahme an diesem Forschungsprojekt aus?

Sollten Sie sich entschließen an diesem Forschungsprojekt teilzunehmen, werden Sie einen Fragebogen mit circa 60 Fragen erhalten (Zweitaufwand 25 Minuten). Die Fragen beziehen sich auf die Erfahrungen welche Sie im Zusammenhang mit Patientensicherheit, der Teamarbeit sowie ihren Arbeitsbedingungen gemacht haben. Die Befragung soll zwischen August 2019 und Februar 2020 stattfinden. Wir bitten Sie den ausgefüllten Fragebogen innerhalb **von 4 Wochen** an die Pflegedienstleitung zurück zu schicken oder in die Box auf Ihrer Station zuwerfen. Das Ausfüllen des Fragebogens verläuft **anonym**, daher bitten wir Sie weder Ihren Namen noch sonstige Daten auf dem Fragebogen zu notieren.

Habe ich einen persönlichen Nutzen?

Es ist nicht zu erwarten, dass Sie aus der Teilnahme an dieser schriftlichen Befragung einen direkten Nutzen für sich oder die Versorgung Ihrer Patienten haben werden. Das, was Sie uns durch die Teilnahme an der Befragung mitteilen trägt jedoch möglicherweise dazu bei die Arbeitszufriedenheit zu steigern, Verbesserungspotenzial des Integrationsprozesses aufzudecken und dadurch die adäquate Versorgung der Patienten zu gewährleisten.

Welche Risiken sind mit der Teilnahme verbunden?

Die Teilnahme an dieser Studie ist grundsätzlich mit keinen Risiken verbunden. Sollte es Ihnen jedoch schwerfallen bestimmte Fragen zu beantworten können Sie diese überspringen. Die Teilnahme an dieser Befragung ist freiwillig. Es steht Ihnen frei jeder Zeit Ihre Einwilligung zur Teilnahme zurückzuziehen. Beachten Sie jedoch, dass die Befragung anonym ist und das Ausfüllen sowie das Versenden des Fragebogens als Einwilligung gewertet wird. Nach Verschicken des Fragebogens ist eine Rückverfolgung nicht mehr möglich ist. Das heißt es ist uns nicht möglich den von Ihnen ausgefüllten Fragebogen zu identifizieren und von der wissenschaftlichen Auswertung auszuschließen, auch wenn Sie sich entschließen Ihre Einwilligung zurückzuziehen.

Informationen zum Datenschutz

Sie haben das Recht, vom Verantwortlichen (s.u.) Auskunft über die von Ihnen gespeicherten Daten zu verlangen. Ebenfalls können Sie die Berichtigung unzutreffender Daten sowie die Löschung der Daten oder Einschränkung deren Verarbeitung verlangen. Beachte Sie jedoch, dass Daten die bereits in wissenschaftliche Auswertungen eingeflossen sind oder Daten die bereits anonymisiert wurden oder anonym erhoben wurden, nicht mehr auf Ihren Wunsch gelöscht werden können. Der Verantwortliche für die studienbedingte Datenerhebung ist:

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Herr Prof. Michel Wensing
Abteilung Allgemeinmedizin und Versorgungsforschung
Universitätsklinikum Heidelberg, Marsilius-Arkaden, Turm West,
Im Neuenheimer Feld 130.3, 69120 Heidelberg
E-Mail: michel.wensing@med.uni-heidelberg.de

Bei Anliegen zur Datenverarbeitung und zur Einhaltung der datenschutzrechtlichen Anforderungen können Sie sich an folgenden Datenschutzbeauftragten der Einrichtung wenden:

Datenschutzbeauftragter des Universitätsklinikum Heidelberg
Im Neuenheimer Feld 672, 69120 Heidelberg
Email: Datenschutz@med.uni-heidelberg.de

Im Falle einer rechtswidrigen Datenverarbeitung haben Sie das Recht, sich bei folgender Aufsichtsbehörde zu beschweren:

Der **Landesbeauftragte für den Datenschutz** und die Informationsfreiheit
Baden- Württemberg
Postfach 10 29 32, 70025 Stuttgart
Königstraße 10a, 70173 Stuttgart
Tel.: 0711/61 55 41 – 0
Fax: 0711/61 55 41 – 15
E-Mail: poststelle@lfdi.bwl.de
Internet: http://www.baden-wuerttemberg.datenschutz.de

Welche Daten werden über Sie erhoben und gespeichert?

Es werden soziodemographische Daten, Alter, Geschlecht, Erwerbstätigkeit etc. erhoben. Diese werden für die soziodemographische Einordnung der Ergebnisse benötigt. Ansonsten werden keine persönlichen Daten erhoben. Alle Daten, die im Rahmen dieser Studie gespeichert werden, dienen allein der Beantwortung wissenschaftlicher Fragestellungen. Die Datenerhebung sowie die Datenspeicherung sind anonym. Das heißt, es ist nicht möglich die Personen welche den Fragebogen ausgefüllt haben und versendet haben zurückzuverfolgen. Alle erhobenen Daten werden ein Jahr nach Beendigung des Projektes durch den Studienleiter unwiderruflich gelöscht / vernichtet.

Freiwilligkeit / Rücktritt

Die Teilnahme an der Studie erfolgt **freiwillig**. Sie können die Einwilligung vor der Versendung des Fragebogens ohne Angabe von Gründen widerrufen, ohne dass Ihnen dadurch Nachteile entstehen. Sie können das Beantworten des Fragebogens jederzeit beenden. Beachten Sie,

dass Daten die bereits in wissenschaftliche Auswertungen eingeflossen sind oder Daten die bereits anonymisiert wurden oder anonym erhoben wurden, nicht mehr auf Ihren Wunsch gelöscht werden können.

Entstehen mir durch die Teilnahme Kosten? / Erhalte ich eine Bezahlung bzw. Aufwandsentschädigung?

Die Studienteilnahme ist für Sie kostenlos. Sie erhalten allerdings auch keine Bezahlung oder Aufwandsentschädigung.

Veröffentlichung

Die Ergebnisse der Studie werden ausschließlich in anonymisierter Form ohne jede Bezugsmöglichkeit auf Ihre Person in wissenschaftlichen Fachzeitschriften veröffentlicht. Die Beachtung der datenschutzrechtlichen Bestimmungen ist in vollem Umfang sichergestellt

Finanzierung

Diese Studie erhält keine Finanzierung.

Weitere Informationen

Für weitere Informationen sowie für Auskünfte über allgemeine Ergebnisse und den Ausgang der Studie steht Ihnen als

Interne Projektkoordinatorin:
Frau Catharina Roth GKP, B.Sc, MPH
Abt. Allgemeinmedizin und Versorgungsforschung
Universitätsklinikum Heidelberg
69120 Heidelberg
Telefonnummer: +49 6221 56-35736
Email: catharina.roth@med.uni-heidelberg.de

zur Verfügung.

Mit freundlichen Grüßen,

Prof. Dr. Michel Wensing
(Leiter der Studie)

Frau Catharina Roth
(Projektkoordinatorin)

Danke für Ihre Teilnahme!

A2.2: Printout of the Survey

UNIVERSITÄTS KLINIKUM HEIDELBERG
Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Thoraxklinik
Universitätsklinikum Heidelberg

Fragebogen für Pflegekräfte
Titel der Studie:

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Final Version

Sehr geehrte Kolleginnen und Kollegen,

vielen Dank, dass Sie sich die Zeit nehmen diesen Fragebogen zu beantworten. Mit Hilfe dieses Fragebogens möchten wir gerne mehr über Ihre Arbeitsbedingungen sowie Ihre Meinung zur Patientensicherheit und der Teamarbeit auf Ihrer Station erfahren.
Diese Studie erhält weder eine finanzielle noch eine ideelle Unterstützung.

Kreuzen Sie diejenige Antwortmöglichkeit an, die Ihnen spontan in den Sinn kommt. Sie können sich jederzeit entscheiden, einzelne Fragen nicht zu beantworten. Bitte bedenken Sie jedoch, dass eine vollständige Beantwortung aller Fragen für die wissenschaftliche Auswertung von großer Bedeutung ist.

Die Angaben stehen ausschließlich den an der Studie beteiligten Wissenschaftler/innen und zur Verfügung. Dritte werden keinen Einblick in die Studienunterlagen erhalten.

Bitte beachten Sie beim Ausfüllen folgende **Hinweise**:

- *Verwenden Sie nur Kugelschreiber.*
- *Kreuzen Sie die Kästchen deutlich an:* ☒
- *Bei versehentlicher Falschauswahl füllen Sie bitte das entsprechende Kästchen ganz aus* ■ *und kreuzen Ihre Auswahl erneut an:* ☒

Bitte stecken Sie den ausgefüllten Fragebogen in das beiliegende, Rücksendekuvert und verschließen dieses. Das verschlossene Kuvert geben Sie bitte bei der Pflegedienstleitung ab oder werfen es in die dafür vorgesehen Box auf Ihrer Station. Im Voraus bedanken wir uns herzlich für Ihre Teilnahme.

Die Befragung ist anonym, schreiben Sie daher bitte keinen Namen o.ä. auf den Fragebogen.

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Teil 1 – Demographische Hintergründe

Diese Informationen werden zur demographischen Einstufung genutzt. Bitte beantworten Sie jede Frage indem Sie die Box vor der zutreffenden Antwort ankreuzen. Wenn Sie sich nicht sicher sind welche Antwort die richtige ist, kreuzen Sie bitte die Antwort an die am ehesten zutrifft.

1	Welcher Altersgruppe gehören Sie an?	☐ 18 bis 29 Jahre ☐ 30 bis 40 Jahre ☐ 40 bis 50 Jahre ☐ Über 50 Jahre ☐ Keine Antwort
2	Welchem Geschlecht fühlen Sie sich zugehörig?	☐ Weiblich ☐ Männlich ☐ Divers ☐ Keine Antwort
3	Welchem Familienstand gehören Sie an?	☐ Single ☐ Verwitwet/ Verwittert ☐ Getrennt lebend ☐ Geschieden ☐ Verheiratet /Partner/in ☐ Keine Antwort ☐ Sonstige: _____
4	Haben Sie Kinder die noch unter 18 Jahre alt sind?	☐ Ja ☐ Nein ☐ Keine Antwort
5	Wie viele Jahre Berufserfahrung im Bereich Pflege (Nursing) ohne Ausbildung haben Sie?	☐ Keine Erfahrung ☐ Weniger als ein Jahr ☐ Zwischen einem und zwei Jahren ☐ Zwischen zwei und drei Jahren ☐ Zwischen drei und vier Jahren ☐ Zwischen vier und fünf Jahren ☐ Mehr als fünf Jahre
6	Was ist Ihr höchster Bildungsabschluss?	
7	Wie viel Prozent arbeiten Sie derzeit?	☐ > 100% ☐ 100% ☐ 75% - 99% ☐ 50% - 74% ☐ < 50% ☐ Aushilfe

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Teil 2 – Arbeitsbedingungen

*Bitte denken Sie an die letzten **sechs bis zwölf Monate** und beantworten Sie die Fragen bezüglicher Ihrer Arbeitsbedingungen. Wählen Sie Ihre Antworten anhand der untenstehenden Skala aus. Wenn Sie sich bei einer Frage nicht sicher sind, geben Sie die Antwort die Sie am passenden finden oder überspringen Sie die Frage.*

In den letzten 6 bis 12 Monaten wie oft…	**Selten bis nie**	**Manchmal (25%)**	**Gelegentlich (50%)**	**So gut wie immer (75%)**	**Immer**	**Nicht zutreffend**
…war es Ihnen möglich Pause zumachen wann Sie wollten?	☐	☐	☐	☐	☐	☐
...war genug Zeit vorhanden die Arbeit zu erledigen?	☐	☐	☐	☐	☐	☐
…wurden Sie bei einer Tätigkeit unterbrochen um etwas anderes zu erledigen?	☐	☐	☐	☐	☐	☐
…wurden Sie kurzfristig gefragt ob Sie arbeiten kommen können?	☐	☐	☐	☐	☐	☐

	Stimme überhaupt nicht zu	**Stimme nicht zu**	**Neutral**	**Stimme zu**	**Stimme stark zu**	**Nicht zutreffend**
Ich habe alle Informationen erhalten, um meine Arbeit richtig zu erledigen.	☐	☐	☐	☐	☐	☐
Es sind ausreichend medizinische Geräte und PC vorhanden, um meine Arbeit zu erledigen *(z.B. Dokumentation, Infusionstherapie usw.)*.	☐	☐	☐	☐	☐	☐
Deadlines und Termine können eingehalten werden.	☐	☐	☐	☐	☐	☐
Ich denke, ich bin bezüglich der Risiken die in Zusammenhang mit meiner Arbeitssicherheit und meiner Gesundheit stehen gut informiert.	☐	☐	☐	☐	☐	☐
Die Arbeit ist gerecht verteilt.	☐	☐	☐	☐	☐	☐
Ich habe ausreichend Platz meine Arbeit zu erledigen.	☐	☐	☐	☐	☐	☐
Die gemeinschaftlichen Räume für das Personal sind sauber und schön gestaltet.	☐	☐	☐	☐	☐	☐

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Teil 3 –SCORE

Einschätzung Ihres Arbeitsumfeldes, bezüglich Sicherheit, Kommunikation, betrieblicher Zuverlässigkeit und des Engagements

*Diese Informationen werden genutzt, um Ihre Beobachtung bezüglich der Patientensicherheit in Ihrem Arbeitsbereich zu messen. Bitte denken Sie an die letzten **sechs Monate** und beantworten Sie die folgenden Fragen in Bezug auf Ihre Station oder Ihren klinischen Fachbereich.*

Wählen Sie Ihre Antworten anhand der untenstehenden Skala aus. Wenn Sie sich bei einer Frage nicht sicher sind, geben Sie die Antwort die Sie am geeignetsten finden oder überspringen Sie die Frage.

Verbesserungsbereitschaft (Lernumfeld)	**Stimme überhaupt nicht zu**	**Stimme nicht zu**	**Neutral**	**Stimme zu**	**Stimme stark zu**	**Nicht zutreffend**
Das Lernumfeld in diesem Arbeitsbereich verwendet Inputs/ Vorschläge von Mitarbeitern, die hier arbeiten.	☐	☐	☐	☐	☐	☐
Das Lernumfeld in diesem Arbeitsbereich integriert gewonnenen Erkenntnisse aus anderen Arbeitsbereichen.	☐	☐	☐	☐	☐	☐
Das Lernumfeld in diesem Arbeitsbereich behebt Fehler effektiv, um die Qualität unserer Arbeit zu verbessern.	☐	☐	☐	☐	☐	☐
Das Lernumfeld in diesem Arbeitsbereich ermöglicht es uns, Erkenntnisse darüber zu gewinnen, was wir gut können.	☐	☐	☐	☐	☐	☐
Das Lernumfeld in diesem Arbeitsbereich wird durch die Führungskräfte vor Ort geschützt.	☐	☐	☐	☐	☐	☐

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Teamzusammenarbeit	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
Meinungsverschiedenheiten in diesem Arbeitsbereich werden angemessen gelöst (*d.h. nicht wer Recht hat, sondern was das Beste für den Patienten ist*).	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich fällt es mir schwer, mich zu äußern, wenn ich ein Problem bei der Patientenversorgung sehe.	☐	☐	☐	☐	☐	☐
Es ist einfach für Mitarbeiter, Fragen zu stellen, wenn sie etwas nicht verstehen.	☐	☐	☐	☐	☐	☐
Mitarbeiter mit unterschiedlichen Disziplinen/Hintergründen arbeiten als gut koordiniertes Team zusammen.	☐	☐	☐	☐	☐	☐
Der Umgang mit schwierigen Kollegen ist immer wieder eine Herausforderung.	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich sind Kommunikationsprobleme häufig.	☐	☐	☐	☐	☐	☐
Wenn dieser Arbeitsbereich mit anderen Arbeitsbereichen zusammenarbeitet sind Kommunikationsprobleme häufig.	☐	☐	☐	☐	☐	☐

Führungskräfte vor Ort	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
In diesem Arbeitsbereich sind die Führungskräfte vor Ort zu vorhersehbaren Zeiten anzutreffen.	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich nehmen sich die Führungskräfte vor Ort regelmäßig Zeit, um mir **positive Rückmeldung** bezüglich dem was ich mache zu geben.	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich geben Führungskräfte vor Ort regelmäßig Feedback zu meiner Leistung.	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich geben mir die Führungskräfte vor Ort eine **nützliche Rückmeldung** bezüglich meiner Leistung.	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich teilen mir die Führungskräfte vor Ort ihre Erwartungen an mich mit.	☐	☐	☐	☐	☐	☐

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Burnout	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
Ereignisse in diesem Arbeitsbereich wirken sich auf emotional ungesunde Weise auf **das Leben der Mitarbeiter** aus.	☐	☐	☐	☐	☐	☐
Mitarbeiter dieses Arbeitsbereiches fühlen sich durch ihre Arbeit ausgebrannt.	☐	☐	☐	☐	☐	☐
Mitarbeiter dieses Arbeitsbereiches fühlen sich durch ihre Arbeit erschöpft.	☐	☐	☐	☐	☐	☐
Mitarbeiter dieses Arbeitsbereiches sind von ihrer Arbeit frustriert.	☐	☐	☐	☐	☐	☐
Mitarbeiter in diesem Arbeitsbereich arbeiten zu schwer in ihrem Job.	☐	☐	☐	☐	☐	☐

Ereignisse in diesem Arbeitsbereich wirken sich auf emotional ungesunde Weise auf **mein Leben** aus.	☐	☐	☐	☐	☐	☐
Ich fühle mich durch meine Arbeit ausgebrannt.	☐	☐	☐	☐	☐	☐
Ich fühle mich müde, wenn ich morgens aufstehe und mich einem weiteren Arbeitstag stellen muss.	☐	☐	☐	☐	☐	☐
Meine Arbeit frustriert mich.	☐	☐	☐	☐	☐	☐
Ich habe das Gefühl zu schwer in meinem Job zu arbeiten.	☐	☐	☐	☐	☐	☐
Meine Aktivitäten im letzten Monat waren durch Krankheit eingeschränkt.	☐	☐	☐	☐	☐	☐
Im letzten Monat war ich (*aus unterschiedlichen Gründen*) krankgeschrieben.	☐	☐	☐	☐	☐	☐

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Verständnis für Sicherheit	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
Meine Vorschläge bezüglich der Qualität würden umgesetzt werden, wenn ich diese dem Management vorlegen würde.	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich wird angemessen mit Fehlern umgegangen.	☐	☐	☐	☐	☐	☐
Ich erhalte angemessenes Feedback bezüglich meiner Leistung.	☐	☐	☐	☐	☐	☐
Die Kultur in diesem Arbeitsbereich macht es leicht, aus Fehlern anderer zu lernen.	☐	☐	☐	☐	☐	☐
Ich würde mich sicher fühlen, hier als Patient behandelt zu werden.	☐	☐	☐	☐	☐	☐
In diesem Arbeitsbereich ist es schwierig, Fehler zu besprechen.	☐	☐	☐	☐	☐	☐
Die Werte der Führungsebene sind dieselben Werte der Mitarbeiter in diesem Arbeitsbereich.	☐	☐	☐	☐	☐	☐

Bezüglich der Weiterentwicklung dieser Einrichtung.	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
Ich kann gut von meinem Gehalt leben.	☐	☐	☐	☐	☐	☐
Die Einrichtung zahlt ein gutes Gehalt.	☐	☐	☐	☐	☐	☐
Ich werde ausreichend für die Arbeit, die ich machen bezahlt.	☐	☐	☐	☐	☐	☐
Ich habe die Möglichkeit der finanziellen Weiterentwicklung.	☐	☐	☐	☐	☐	☐
Ich habe die Möglichkeit, mich durch Schulungen weiterzuentwickeln.	☐	☐	☐	☐	☐	☐
Ich habe die Möglichkeit, befördert zu werden.	☐	☐	☐	☐	☐	☐
Ich bin mit meinem gesamten Leistungspaket (*z.B. Krankenversicherung, betriebliche Rentenversicherung, Kinderbetreuung*) zufrieden.	☐	☐	☐	☐	☐	☐

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Bezüglich der meiner beruflichen Qualifikation in diesem Arbeitsbereich habe ich…	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
…diverse Möglichkeiten zur persönlichen Weiterentwicklung.	☐	☐	☐	☐	☐	☐
…das Gefühl, etwas erreichen zu können.	☐	☐	☐	☐	☐	☐
… die Möglichkeit eigenständig zu denken und zu handeln.	☐	☐	☐	☐	☐	☐
…Freiheiten bei der Ausübung von Arbeitstätigkeiten.	☐	☐	☐	☐	☐	☐
…Einfluss auf die Dienstplangestaltung.	☐	☐	☐	☐	☐	☐
…Einfluss auf die Pflegeplanung.	☐	☐	☐	☐	☐	☐

Bezüglich des Arbeitsaufwands in diesem Arbeitsbereich …	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
…habe ich zu viel Arbeit zu erledigen.	☐	☐	☐	☐	☐	☐
…muss ich unter Zeitdruck arbeiten.	☐	☐	☐	☐	☐	☐
… muss ich mich um zu viele Dinge gleichzeitig kümmern.	☐	☐	☐	☐	☐	☐
…muss ich der Arbeit kontinuierlich Aufmerksamkeit geben.	☐	☐	☐	☐	☐	☐
…muss ich mir viele Dinge merken.	☐	☐	☐	☐	☐	☐

Bezüglich der Teilnahme am Entscheidungsfindungsprozess, die ich hier erlebe.	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu	Nicht zutreffend
Der Entscheidungsprozess ist mir klar.	☐	☐	☐	☐	☐	☐
Es ist klar, an wen ich mich bei bestimmten Problemen wenden kann.	☐	☐	☐	☐	☐	☐
Ich kann Probleme bei der Arbeit mit meinem direkten Vorgesetzten besprechen.	☐	☐	☐	☐	☐	☐
Ich kann an Entscheidungen welche, die Art meiner Arbeit betreffen, teilnehmen.	☐	☐	☐	☐	☐	☐
Ich habe einen direkten Einfluss auf die Entscheidungen meiner Einrichtung.	☐	☐	☐	☐	☐	☐
Diese Einrichtung nutzt den Input der Mitarbeiter/innen bezüglich technischer Innovationen/ Initiativen.	☐	☐	☐	☐	☐	☐

Arbeitsbedingungen, Teamarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Wie oft ist Ihnen folgendes in der letzten Woche passiert?	Selten bis gar nicht (> 1 Tag)	Einige oder wenige Male in dieser Zeit (1 – 2 Tage)	Gelegentlich (3 – 4 Tage)	Die ganze Zeit (5 – 7 Tage)	Nicht zutreffend
Eine Mahlzeit ausgelassen.	☐	☐	☐	☐	☐
Eine schlecht ausgewogene Mahlzeit gegessen.	☐	☐		☐	
Einen Tag/Schicht ohne Pausen durchgearbeitet.	☐	☐	☐	☐	☐
Spät von der Arbeit nach Hause gekommen.	☐	☐	☐	☐	☐
Schlafproblem.	☐	☐	☐	☐	☐
In einer Nacht weniger als 5 Stunden geschlafen.	☐	☐	☐	☐	☐
Habe ich aufgrund der Arbeit persönliche/familiäre Pläne verschoben.	☐	☐	☐	☐	☐
Fühlte ich mich frustriert von der Technik.	☐	☐	☐	☐	☐

Vielen Dank für Ihre Zeit und das Ausfüllen des Fragebogens – Ihre Teilnahme schätzen wir sehr.

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Teil 1 – Demographische Hintergründe

Diese Informationen werden zur demographischen Einstufung genutzt. Bitte beantworten Sie jede Frage indem Sie die Box vor der zutreffenden Antwort ankreuzen. Wenn Sie sich nicht sicher sind welche Antwort die richtige ist, kreuzen Sie bitte die Antwort an die am ehesten zutrifft.

1	Welcher Altersgruppe gehören Sie an?	☐ 18 bis 29 Jahre ☐ 30 bis 40 Jahre ☐ 40 bis 50 Jahre ☐ Über 50 Jahre ☐ Keine Antwort
2	Welchem Geschlecht fühlen Sie sich zugehörig?	☐ Weiblich ☐ Männlich ☐ Divers ☐ Keine Antwort
3	Welchem Familienstand gehören Sie an?	☐ Single ☐ Verwitwet/ Verwittert ☐ Getrennt lebend ☐ Geschieden ☐ Verheiratet /Partner/in (in Deutschland lebend) ☐ Verheiratet /Partner/in (lebt in meinem Heimatland) ☐ Verheiratet /Partner/in (getroffen in Deutschland) ☐ Keine Antwort ☐ Sonstige: _____
4	Haben Sie Kinder die noch unter 18 Jahre alt sind?	☐ Ja ☐ Nein ☐ Keine Antwort
4.1	Wenn ja, sind Ihre Kinder mit Ihnen nach Deutschland gekommen?	☐ Ja, sind sie ☐ Nein, sind sie nicht ☐ Keine Antwort ☐ Sonstige
5	Wo kommen Sie ursprünglich her?	☐ Philippinen ☐ Vietnam ☐ Korea ☐ Indien ☐ Serbien ☐ Bosnien-Herzegowina ☐ Polen ☐ Tunesien ☐ Italien ☐ Griechenland ☐ Keine Antwort ☐ Sonstige: _____

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

6	Wie lange leben Sie schon in Deutschland?	☐ Zwischen 0 und 6 Monaten ☐ Zwischen 6 und 12 Monaten (0.5 – 1 Jahr) ☐ Zwischen 12 und 18 Monaten (1 – 1.5 Jahren) ☐ Zwischen 18 und 24 Monaten (1.5 – 2 Jahren) ☐ Zwischen 24 und 30 Monaten (2 – 2.5 Jahren) ☐ Zwischen 30 und 36 Monaten (2.5 – 3 Jahren) ☐ Mehr als 36 Monaten (3 Jahre)	
7	Warum haben Sie sich entschieden nach Deutschland zu emigrieren/ auszuwandern?	☐ Berufliche Weiterbildung ☐ Karriere Chancen ☐ Höheres Einkommen ☐ Höhere Lebensstandard ☐ Möglichkeiten für Familienmitglieder ☐ Lernangeboten ☐ Bessere Arbeitsbedingungen ☐ Persönliche Sicherheit ☐ Keine Antwort ☐ Andere Gründe: _____	
8	Mit wem sind Sie nach Deutschland emigriert/ ausgewandert?	☐ Alleine ☐ Mit meiner Familie / mit einem Familienmitglied ☐ Mit ehemaligen Klassenkammeraden / Studenten / Kollegen / Freunden ☐ Keine Antwort ☐ Sonstige: _____	
9	Wie sind Sie nach Deutschland emigriert/ ausgewandert?	☐ Alleine / Eigeninitiative ☐ Triple-Win ☐ Andere Organisation: _____	
10	Wie schätzen Sie Ihr Sprachniveau basierend auf „Common European Framework of Reference of Languages (CEFR)" ein?	☐ A1 ☐ A2 ☐ B1 ☐ B2 ☐ C1 ☐ C2 ☐ Ich weiß es nicht	
12	Wie viele Jahre Berufserfahrung im Bereich Pflege (Nursing) ohne Ausbildung haben Sie?	☐ Keine Erfahrung ☐ Weniger als ein Jahr ☐ Zwischen einem und zwei Jahren ☐ Zwischen zwei und drei Jahren ☐ Zwischen drei und vier Jahren ☐ Zwischen vier und fünf Jahren ☐ Mehr als fünf Jahre	
13	Was ist Ihr höchster Bildungsabschluss?		
14	Wie viel Prozent arbeiten Sie derzeit?	☐ > 100% ☐ 100% ☐ 75% - 99%	☐ 50% - 74% ☐ < 50% ☐ Aushilfe

Annexe 3 SPSS Syntax for Calculating the Mean Scores for the SCORE

Below is a table of item labels, sources, verbatim content, and SPSS syntax for calculating scores.		
Item Label	Item Source	**Improvement Readiness (Learning Environment)** **COMPUTE SCORLE = ((MEAN(LEinput, LEleslearn, LEfixdefct, LEinsights LEprotected))-1)*25.** **VARIABLE LABELS SCORLE 'Improvement Readiness Scale Score'.**
LEinput	new	The learning environment in this work setting utilizes input/suggestions from the people who work here.
LEleslearn	new	The learning environment in this work setting integrates lessons learned from other work settings.
LEfixdefct	new	The learning environment in this work setting effectively fixes defects to improve the quality of what we do.
LEinsights	new	The learning environment in this work setting allows us to gain important insights into what we do well.
LEprotected	new	The learning environment in this work setting is protected by our local management.
		Local Leadership **COMPUTE SCORLOCLEAD = ((MEAN(PSYpredict, PSYposFB, PSYfreqFB PSYuseflFB, PSYexpect))-1)*25.** **VARIABLE LABELS SCORLOCLEAD 'Local Leadership (Psych Safe Clim Scale Score'.**
PSYpredict	new	In this work setting local management is available at predictable times.
PSYposFB	new	In this work setting local management regularly makes time to provide positive feedback to me about how I am doing.
PSYfreqFB	new	In this work setting local management provides frequent feedback about my performance.
PSYuseflFB	new	In this work setting local management provides useful feedback about my performance.
PSYexpect	new	In this work setting local management communicates their expectations to me about my performance.
		Burnout Climate **COMPUTE SCOREEClm = ((MEAN(EEClmevents, EEClmburn, EEClmexhausted, EEClmfrust, EEClmwork2hd))-1)*25.** **VARIABLE LABELS SCOREEClm 'Burnout Climate Scale Score'.**
EEClmevents	eeClim	Events in this work setting affect the lives of people here in an emotionally unhealthy way.
EEClmburn	eeClim	People in this work setting are burned out from their work.
EEClmexhausted	eeClim	People in this work setting are fatigued from their work.
EEClmfrust	eeClim	People in this work setting are frustrated by their jobs.
EEClmwork2hd	eeClim	People in this work setting are working too hard on their jobs.
		Burnout Me (Personal Burnout) **COMPUTE SCOREEME= ((MEAN(EEMEevents, EEMEburn, EEMEexhausted, EEMEfrust, EEMEwork2hd))-1)*25.** **VARIABLE LABELS SCOREEME 'My Burnout Scale Score'.**
EEMEevents	eeME	Events in this work setting affect my life in an emotionally unhealthy way.
EEMEburn	eeME	I feel burned out from my work.
EEMEexhausted	eeME	I feel fatigued when I get up in the morning and have to face another day on the job.
EEMEfrust	eeME	I feel frustrated by my job.
EEMEwork2hd	eeME	I feel I am working too hard on my job.
		(6-difcoll), (6-comdelay), (6-comdelayotherset)))-1)*25. **VARIABLE LABELS SCORtmclim 'SCORTeamwork Climate Scale Score'.**
resolve	SAQ	Disagreements in this work setting are appropriately resolved (i.e., not who is right but what is best for the patient).
spkupclt	SAQ	In this work setting, it is difficult to speak up if I perceive a problem with patient care.
easyask	SAQ	It is easy for personnel here to ask questions when there is something that they do not understand.
peopleteam	SAQ	The people here from different disciplines/backgrounds work together as a well-coordinated team.
diffcoll	new	Dealing with difficult colleagues is consistently a challenging part of my job.
comdelay	new	Communication breakdowns are common in this work setting.
comdelayotherset	new	Communication breakdowns are common when this work setting interacts with other work settings.

		Safety Climate **COMPUTE SCORsafclim = ((MEAN (safeacted, erhndlapp, feedback, cultlearn, feelsafe, (6-diffdiscuss), valueshared))-1)*25.** **VARIABLE LABELS SCORsafclim 'SCORSafety Climate Scale Score'.**
safeacted	New	My suggestions about quality would be acted upon if I expressed them to management.
erhndlapp	SAQ	Errors are handled appropriately in this work setting.
feedback	SAQ	I receive appropriate feedback about my performance.
cultlearn	SAQ	The culture in this work setting makes it easy to learn from the errors of others.
feelsafe	SAQ	I would feel safe being treated here as a patient.
diffdiscuss	SAQ	In this work setting, it is difficult to discuss errors.
valueshared	new	The values of facility leadership are the same values that people in this work setting think are important.

DURING THE PAST WEEK, HOW OFTEN DID THIS OCCUR?

A	*B*	*C*	*D*	*X*
Rarely or none of the time (less than 1 day)	**Some or a little of the time** (1-2 days)	**Occasionally or a moderate amount of time** (3-4 days)	**All of the time** (5-7 days)	***Not Applicable***

		Work Life Balance with new technology item **COMPUTE SCORWLB = ((MEAN(skipmeal, nobreaks, changplan, sleptlt5hours, late4home, poormeal, difsleeping, techfrust))).** **VARIABLE LABELS SCORWLB 'Worklife Balance Scale Score'.**
skipmeal	CABQ	Skipped a meal
poormeal	CABQ	Ate a poorly balanced meal
nobreaks	CABQ	Worked through a day/shift without any breaks
late4home	CABQ	Arrived home late from work
difsleeping	CABQ	Had difficulty sleeping
sleptlt5hours	CABQ	Slept less than 5 hours in a night
changplan	CABQ	Changed personal/family plans because of work
techfrust	CABQ	Felt frustrated by technology

End of Safety Culture and Well-being Assessment Tool

Start of the Engagement Tool using the Job Demands-Resources Model (JDR)

		With respect to the *growth opportunities* in this work setting I have **COMPUTE SCORGO = ((MEAN(GOgrowth, GOachieve, GOindepdt, GOfreedom, GOplanactivty, GOdecactivty))).** **VARIABLE LABELS SCORGO 'Growth Opportunities Scale Score'.**
GOgrowth	JDRS	opportunities for personal growth/development
GOachieve	JDRS	the feeling that I can achieve something
GOindepdt	JDRS	opportunities for independent thought and action
GOfreedom	JDRS	freedom in carrying out work activities
GOplanactivty	JDRS	influence in the planning of work activities
GOdecactivty	JDRS	influence in decisions about work activity timelines

		With respect to the participation in decision making that I experience here **COMPUTE SCORPtDM = ((MEAN(PtDMprocclear, PtDMtowhom, PtDMdiscsupvsr, PtDMmywork, PtDMinfldec, PtDMtech))).** **VARIABLE LABELS SCORPtDM 'Participation in Decision Making Scale Score'.**
PtDMprocclear	JDRS	the decision making process is clear to me
PtDMtowhom	JDRS	it is clear to whom I should address specific problems
PtDMdiscsupvsr	JDRS	I can discuss work problems with my direct supervisor
PtDMmywork	JDRS	I can participate in decisions about the nature of my work
PtDMinfldec	JDRS	I have a direct influence on my organization's decisions
PtDMtech	JDRS	this organization utilizes input from staff about technology initiatives

		With respect to the ***workload*** in this work setting I have COMPUTE SCORWL = ((MEAN(WL2much, WLpressure, WL2many, WLattention, WLremember))). VARIABLE LABELS SCORWL 'Workload Scale Score'.
WL2much	JDRS	too much work to do
WLpressure	JDRS	to work under time pressure
WL2many	JDRS	to attend to many things at the same time
WLattention	JDRS	to give continuous attention to work
WLremember	JDRS	to remember many things

		With respect to ***advancement*** in this organization COMPUTE SCORADV = ((MEAN(ADVpaycomfy, ADVgoodsal, ADVpdenough, ADVfinprog, ADVtraining, ADVpromoted, ADVbenefits))). VARIABLE LABELS SCORADV 'Advancement Scale Score'.
ADVpaycomfy	JDRS	I can live comfortably on my pay
ADVgoodsal	JDRS	this organization pays good salaries
ADVpdenough	JDRS	I am paid enough for the work I do
ADVfinprog	JDRS	I have opportunities to progress financially
ADVtraining	JDRS	I have opportunities to advance through training courses
ADVpromoted	JDRS	I have opportunities to be promoted
ADVbenefits	JDRS	I am satisfied with my total benefits package

End of the Engagement Assessment Tool

Annexe 4 COREQ Checklist

COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	46
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	46
Occupation	3	What was their occupation at the time of the study?	46
Gender	4	Was the researcher male or female?	46
Experience and training	5	What experience or training did the researcher have?	46
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	46
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	46
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	53 - 54
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	48 - 51
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	41 - 44
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	42, 46
Sample size	12	How many participants were in the study?	66 - 67
Non-participation	13	How many people refused to participate or dropped out? Reasons?	66
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	46
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	46
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	67
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	45,46; 179,180
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	47
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	46, 47
Field notes	20	Were field notes made during and/or after the inter view or focus group?	47
Duration	21	What was the duration of the inter views or focus group?	66
Data saturation	22	Was data saturation discussed?	47
Transcripts returned	23	Were transcripts returned to participants for comment and/or	47

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	49
Description of the coding tree	25	Did authors provide a description of the coding tree?	69, 184 - 194
Derivation of themes	26	Were themes identified in advance or derived from the data?	67 - 68
Software	27	What software, if applicable, was used to manage the data?	47 - 48
Participant checking	28	Did participants provide feedback on the findings?	n/a
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	70 - 97
Data and findings consistent	30	Was there consistency between the data presented and the findings?	70 - 97
Clarity of major themes	31	Were major themes clearly presented in the findings?	69, 70 - 97, 98
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	69, 70 - 97, 98

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Annexe 5 Study Material Part B: Interview Study

A5.1 The Invitation to Participate in Part B: Interview Study

UNIVERSITÄTS
KLINIKUM
HEIDELBERG

Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Abteilung Allgemeinmedizin & Versorgungsforschung

Prof. Dr. Michel Wensing
Stellvertretender Abteilungsleiter

Catharina Roth GKP, B.Sc, MPH
Wissenschaftliche Mitarbeiterin

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Sehr geehrte Kolleginnen und Kollegen,

im Rahmen meiner Promotionsarbeit welche ich an der Abteilung Allgemeinmedizin und Versorgungsforschung" absolviere führe ich eine Studie zum Thema „Rekrutierung Pflegender aus dem Ausland" durch. **Hiermit möchten ich Sie bitten, an dieser Studie teilzunehmen.** Mein Ziel ist es in den nächsten 4 Monaten ca. 15 Pflegende aus dem Ausland und 15 Pflegende welche mit Pflegekräften aus dem Ausland zusammen arbeiten zu interviewen. Wenn Sie Interesse haben daran teilzunehmen bitten ich Sie sich mit mir:

Catharina Roth 06221 56-35736

Email: Catharina.roth@med.uni-heidelberg

in Verbindung zu setzen. Ich werden Sie dann genauer über die Teilnahme an einem Interview informieren und offene Fragen klären. Sollte dann weiterhin Interesse bestehen kann direkt ein Termin für das Interview vereinbart werden. Bei einem persönlichen Interview wird die Einverständniserklärung am Termin des Interviews von Ihnen und der Interviewerin unterzeichnet. Bei einem telefonischen Interview unterzeichnen Sie die Einverständniserklärung bitte im Anschluss an das Telefonat und schicken uns diese im vorfrankierten Rücksendeumschlag zu. Für Ihre Unterlagen erhalten Sie im Nachgang ein von beiden Seiten unterschriebenes Original per Post. Den Zeitpunkt und den Ort des Interviews können Sie frei wählen. Sämtliche Angaben werden vertraulich behandelt und nicht mit Ihrer Person in Verbindung gebracht. Ihre Teilnahme ist freiwillig und Ihre Angaben werden vor einer Veröffentlichung anonymisiert. Es entstehen Ihnen keine Nachteile, egal ob Sie sich für oder gegen eine Teilnahme entscheiden. **Für Ihre Teilnahme möchten wir uns jetzt schon herzlich bedanken.**

Mit freundlichen Grüßen,

C. Roth

Catharina Roth (geb. Eck) GKP, B.Sc., MPH

Wisschenschaftliche Mitarbeiterin
Gesundheits- und Krankenpflegerin

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www.allgemeinmedizin.uni-hd.de

A5.2 The Information Leaflet of Part B: Interview Study: DQNs

UNIVERSITÄTS
KLINIKUM
HEIDELBERG

Thoraxklinik
Universitätsklinikum
Heidelberg

Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Rekrutierung von Pflegenden aus dem Ausland

Rekrutierung von Pflegenden welche im Ausland ausgebildet wurden

Informationsschrift
Interview

Für Pflegende die an der unten genannten Studie teilnehmen:

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflusst

Finale Version

Sehr geehrte Kolleginnen und Kollegen,

mit diesem Schreiben laden wir Sie ein, an der oben genannten Studie teilzunehmen. Bitte lesen Sie sich die folgenden Informationen sorgfältig durch. Sie können dann entscheiden, ob Sie teilnehmen möchten oder nicht. Lassen Sie sich ausreichend Zeit und stellen Sie den Studienmitarbeiterinnen und Studienmitarbeitern alle Fragen, die für Sie wichtig sind. Diese Studie erhält keine finanzielle Unterstützung.

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Welches primäre Ziel verfolgt die Studie?

Die Studie „Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen – eine mixed-methods Fallstudie" hat sich zum primären Projektziel gesetzt herauszufinden, welche Ansichten Pflegende welche im Ausland ausgebildet wurden, bezüglich Teamarbeit und Patientensicherheit haben. Außerdem ist es Ziel, zu dokumentieren welche Meinungen und Ansichten Pflegende, welche ihre Ausbildung in Deutschland absolviert haben, bezüglich dieser Rekrutierung haben, wie sie die Einarbeitungsphase empfinden und welche Auswirkungen dies auf die Sicherheit der Patienten hat. Die Ergebnisse sollen dazu beitragen, die Arbeitszufrieden der Pflegenden zu steigern, Verbesserungspotenzial aufzudecken und die adäquate Versorgung der Patientinnen und Patienten zu gewährleisten. Zur Beantwortung der Forschungsfrage werden semi-strukturierte Interviews sowie eine schriftliche Befragung durchgeführt

Wer ist an der Studie beteiligt?

Die Studie wird durch die Abteilung Allgemeinmedizin und Versorgungsforschung des Universitätsklinikums Heidelberg durchgeführt. Weiter an der Studie beteiligt sind das Universitätsklinikum Heidelberg sowie die Thoraxklinik Heidelberg.

Wer kann an der Studie teilnehmen?

Personen aus folgender Personengruppe können an diesem Interview teilnehmen:

- Pflegekräfte die mit Pflegenden die im Ausland ausgebildet wurden zusammenarbeiten und einen Vertrag mit dem Universitätsklinikum Heidelberg oder der Thoraxklinik Heidelberg haben.

Zwingende Teilnahmevoraussetzungen sind, dass Sie entweder Deutsch oder Englisch sprechen und älter als 18 Jahre sind. Außerdem muss eine unterzeichnete Einwilligungserklärung vorliegen.

Wie sieht die Teilnahme an diesem Forschungsprojekt aus?

Sollten Sie Interesse daran haben an einem Interview teilzunehmen bitten wir Sie sich mit uns in Verbindung zu setzen. Unsere Kontaktdaten finden Sie am Ende dieses Schreibens (Projektkoordinatorin). Wir werden Sie dann genauer über die Teilnahme am Interview informieren und ggf. offene Fragen klären. Sollte dann weiterhin Interesse an der Teilnahme bestehen kann direkt ein Termin für das Interview vereinbart werden. Bei einem persönlichen Interview wird die Einwilligungserklärung am Termin des Interviews von Ihnen und der Interviewerin /dem Interviewer unterzeichnet. Bei einem telefonischen Interview unterzeichnen Sie bei Wunsch zur Teilnahme die Einwilligungserklärung bitte im Anschluss an die

Terminvereinbarung und schicken uns diese zu. Für Ihre Unterlagen erhalten Sie im Nachgang ein von beiden Seiten unterschriebenes Original per Post.

Wie sieht die Teilnahme an einem Interview konkret aus?

Das Interview, zu dem wir Sie einladen möchten, wird **ca. 30 Minuten** dauern. Es ist geplant, die Interviews persönlich durchzuführen. Sollte dies nicht möglich sein, können im Einzelfall auch Telefoninterviews vereinbart werden. Sollten Sie sich entschließen an diesem Forschungsprojekt teilzunehmen, wird Frau Roth das Interview mit Ihnen an einem für Sie angenehmen Ort führen. Die Interviews werden von August 2019 bis Februar 2020 stattfinden und mit einem Tonbandgerät aufgezeichnet werden. Während des Interviews werden wir Ihnen einige Fragen zu Ihren Erfahrungen im Zusammenhang mit der Einarbeitung und der Orientierungsphase stellen.

Habe ich einen persönlichen Nutzen?

Es ist nicht zu erwarten, dass Sie aus der Teilnahme an diesem Interview einen direkten Nutzen für sich oder die Versorgung Ihrer Patientinnen und Patienten haben werden. Das, was Sie uns durch die Teilnahme an einem Interview mitteilen trägt jedoch möglicherweise dazu bei die Arbeitszufriedenheit zu steigern, Verbesserungspotenzial des Integrationsprozesses sowie der Orientierungsphase aufzudecken und dadurch die adäquate Versorgung der Patientinnen und Patienten zu gewährleisten.

Welche Risiken sind mit der Teilnahme verbunden?

Die Teilnahme an dieser Studie ist grundsätzlich mit **keinen** Risiken verbunden. Wenn Sie sich jedoch durch das Interview in irgendeiner Form unwohl oder belastet fühlen, können Sie sich an den Studienleiter wenden, die Kontaktdaten finden Sie unter „Informationen zum Datenschutz". Die Teilnahme ist **freiwillig**. Es steht Ihnen frei, das Interview zu jeder Zeit abzubrechen und Ihre Einwilligung zur Teilnahme zurückzuziehen.

Informationen zum Datenschutz

Sie haben das Recht, vom Verantwortlichen (s.u.) Auskunft über die von Ihnen gespeicherten personenbezogenen Daten zu verlangen. Ebenfalls können Sie die Berichtigung unzutreffender Daten sowie die Löschung der Daten oder Einschränkung deren Verarbeitung verlangen. Der Verantwortliche für die studienbedingte Erhebung personenbezogener Daten ist:

Herr Prof. Dr. Michel Wensing
Abteilung Allgemeinmedizin und Versorgungsforschung
Universitätsklinikum Heidelberg, Marsilius-Arkaden, Turm West,
Im Neuenheimer Feld 130.3, 69120 Heidelberg
E-Mail: michel.wensing@med.uni-heidelberg.de

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Bei Anliegen zur Datenverarbeitung und zur Einhaltung der datenschutzrechtlichen Anforderungen können Sie sich an folgenden Datenschutzbeauftragten der Einrichtung wenden:

Datenschutzbeauftragter des Universitätsklinikum Heidelberg
Im Neuenheimer Feld 672, 69120 Heidelberg
Email: Datenschutz@med.uni-heidelberg.de

Im Falle einer rechtswidrigen Datenverarbeitung haben Sie das Recht, sich bei folgender Aufsichtsbehörde zu beschweren:

Der **Landesbeauftragte für den Datenschutz** und die Informationsfreiheit
Baden- Württemberg
Postfach 10 29 32, 70025 Stuttgart
Königstraße 10a, 70173 Stuttgart
Tel.: 0711/61 55 41 – 0
Fax: 0711/61 55 41 – 15
E-Mail: poststelle@lfdi.bwl.de
Internet: http://www.baden-wuerttemberg.datenschutz.de

Welche Daten werden über Sie erhoben und gespeichert?

Es werden personenbezogene sowie Name und Kontaktdaten erhoben. Diese werden für die Terminvereinbarung benötigt. Die Zuordnung der Interviews zu Ihren personenbezogenen Daten ist lediglich über einen Pseudonymisierungsschlüssel möglich. Pseudonymisierung ist die Verarbeitung personenbezogener Daten in einer Weise, dass die personenbezogenen Daten ohne Hinzuziehung zusätzlicher Informationen („Schlüssel") nicht mehr einer spezifischen betroffenen Person zugeordnet werden können. Diese zusätzlichen Informationen werden dabei gesondert aufbewahrt und unterliegen technischen und organisatorischen Maßnahmen, die gewährleisten, dass die personenbezogenen Daten nicht einer identifizierten oder identifizierbaren natürlichen Person zugewiesen werden können. Audioaufnahmen können jedoch weder vollständig pseudonymisiert noch anonymisiert werden, da bei Audioaufnahmen ein Rückschluss auf bestimmte Personen niemals ganz ausgeschlossen werden kann. Die Aufnahmen werden jedoch sofort nach der Transkription (d.h. das in Schriftformbringen von Tonaufnahmen) unwiderruflich vernichtet. Die Interview-Transkripte werden ausschließlich in pseudonymisierter Form aufbewahrt. Die Pseudonymisierung wird nur in seltene Fälle, z.B. im Fall des Rücktrittes zum Zweck der Löschung der Daten aufgehoben. Personenbezogene Daten werden, sobald diese nach dem Forschungszweck möglich ist (Art. 89 Abs. 1 DSGVO, Grundsatz der Datenminimierung), anonymisiert. Anonymisierung ist das Verändern personenbezogener Daten in der Weise,

dass die betroffene Person nicht mehr oder nur mit einem unverhältnismäßigen Kosten- oder Zweitaufwand identifiziert werden kann. Alle Daten, die im Rahmen dieser Studie gespeichert werden, dienen allein der Beantwortung der wissenschaftlichen Fragestellungen dieses Projektes. Alle erhobenen Daten werden ein Jahr nach Beendigung des Projektes durch den Studienleiter unwiderruflich gelöscht / vernichtet.

Freiwilligkeit / Rücktritt

Die Teilnahme an der Studie erfolgt **freiwillig.** Falls Sie teilnehmen möchten, bitten wir Sie, die beiliegende Einwilligungserklärung zu unterschreiben. Sie können diese Einwilligung jederzeit schriftlich oder mündlich ohne Angabe von Gründen widerrufen, ohne dass Ihnen dadurch Nachteile entstehen. Wenn Sie Ihre Einwilligung widerrufen möchten, wenden Sie sich bitte an die Projektkoordinatorin (Kontaktdaten finden Sie am Ende des Schreibens). Bei einem Widerruf können Sie entscheiden, ob die von Ihnen studienbedingt erhobenen Daten gelöscht werden sollen oder weiterhin für die Zwecke der Studie verwendet werden dürfen. Auch wenn Sie einer weiteren Verwendung zunächst zustimmen, können Sie nachträglich Ihre Meinung noch ändern und die Löschung der Daten verlangen; wenden Sie sich dafür bitte ebenfalls an die Studienleitung. Beachten Sie, dass Daten, die bereits in wissenschaftliche Auswertungen eingeflossen sind oder Daten, die bereits anonymisiert wurden, nicht mehr auf Ihren Wunsch gelöscht werden können.

Entstehen mir durch die Teilnahme Kosten? / Erhalte ich eine Bezahlung bzw. Aufwandsentschädigung?

Die Studienteilnahme ist für Sie kostenlos. Sie erhalten allerdings auch keine Bezahlung oder Aufwandsentschädigung, dennoch leisten Sie einen bedeutenden Beitrag zur Wissenschaft.

Veröffentlichung

Die Ergebnisse der Studie werden ausschließlich in anonymisierter Form ohne jede Bezugsmöglichkeit auf Ihre Person in wissenschaftlichen Fachzeitschriften veröffentlicht. Die Beachtung der datenschutzrechtlichen Bestimmungen ist in vollem Umfang sichergestellt.

Finanzierung

Diese Studie erhält keine Finanzierung.

Weitere Informationen

Für weitere Informationen sowie für Auskünfte über allgemeine Ergebnisse und den Ausgang der Studie steht Ihnen als

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Interne Projektkoordinatorin:
Frau Catharina Roth GKP, B.Sc, MPH
Abt. Allgemeinmedizin und Versorgungsforschung
Universitätsklinikum Heidelberg
69120 Heidelberg
Telefonnummer: +49 6221 56-35736
Email: catharina.roth@med.uni-heidelberg.de

zur Verfügung.

Mit freundlichen Grüßen,

Prof. Dr. Michel Wensing
(Leiter der Studie)

Frau Catharina Roth
(Projektkoordinatorin)

Danke für Ihre Teilnahme!

A5.3 The Information Leaflet of Part B: Interview Study: IQNs

UNIVERSITÄTS
KLINIKUM
HEIDELBERG

Thoraxklinik
Universitätsklinikum
Heidelberg

Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Rekrutierung von Pflegenden aus dem Ausland

Rekrutierung von Pflegenden welche im Ausland ausgebildet wurden.

Informationsschrift
Interview

Für Pflegende die an der unten genannten Studie teilnehmen:

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Finale Version

Sehr geehrte Kolleginnen und Kollegen,

mit diesem Schreiben laden wir Sie ein, an der oben genannten Studie teilzunehmen. Bitte lesen Sie sich die folgenden Informationen sorgfältig durch. Sie können dann entscheiden, ob Sie teilnehmen möchten oder nicht. Lassen Sie sich ausreichend Zeit und stellen Sie den Studienmitarbeiterinnen und Studienmitarbeitern alle Fragen, die für Sie wichtig sind. Diese Studie erhält keine finanzielle Unterstützung.

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Welches primäre Ziel verfolgt die Studie?

Die Studie „Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen – eine mixed-methods Fallstudie" hat sich zum primären Projektziel gesetzt herauszufinden, welche Ansichten Pflegende, welche im Ausland ausgebildet wurden, bezüglich Teamarbeit und Patientensicherheit haben. Außerdem ist es Ziel zu dokumentieren welche Meinungen und Ansichten Pflegende, welche ihre Ausbildung in Deutschland absolviert haben, bezüglich dieser Rekrutierung haben, wie sie die Einarbeitungsphase empfinden und welche Auswirkungen dies auf die Sicherheit der Patienten hat. Die Ergebnisse sollen dazu beitragen, die Arbeitszufrieden der Pflegenden zu steigern, Verbesserungspotenzial aufzudecken und die adäquate Versorgung der Patientinnen und Patienten zu gewährleisten. Zur Beantwortung der Forschungsfrage werden semi-strukturierte Interviews sowie eine schriftliche Befragung durchgeführt

Wer ist an der Studie beteiligt?

Die Studie wird durch die Abteilung Allgemeinmedizin und Versorgungsforschung des Universitätsklinikums Heidelberg durchgeführt. Weiter an der Studie beteiligt sind das Universitätsklinikum Heidelberg sowie die Thoraxklinik Heidelberg.

Wer kann an der Studie teilnehmen?

Personen aus folgender Personengruppe können an diesem Interview teilnehmen:

- Pflegende welche im Ausland ausgebildet wurden, nach dem 01.01.2017 rekrutiert wurden und einen Vertrag mit dem Universitätsklinikum Heidelberg oder der Thoraxklinik Heidelberg haben.

Zwingende Teilnahmevoraussetzungen sind, dass Sie entweder Deutsch oder Englisch sprechen und älter als 18 Jahre sind. Außerdem muss eine unterzeichnete Einwilligungserklärung vorliegen.

Wie sieht die Teilnahme an diesem Forschungsprojekt aus?

Sollten Sie Interesse daran haben an einem Interview teilzunehmen bitten wir Sie sich mit uns in Verbindung zu setzen. Unsere Kontaktdaten finden Sie am Ende dieses Schreibens (Projektkoordinatorin). Wir werden Sie dann genauer über die Teilnahme am Interview informieren und ggf. offene Fragen klären. Sollte dann weiterhin Interesse an der Teilnahme bestehen kann direkt ein Termin für das Interview vereinbart werden. Bei einem persönlichen Interview wird die Einwilligungserklärung am Termin des Interviews von Ihnen und der Interviewerin /dem Interviewer unterzeichnet. Bei einem telefonischen Interview unterzeichnen Sie bei Wunsch zur Teilnahme die Einwilligungserklärung bitte im Anschluss an die

Terminvereinbarung und schicken uns diese zu. Für Ihre Unterlagen erhalten Sie im Nachgang ein von beiden Seiten unterschriebenes Original per Post.

Wie sieht die Teilnahme an einem Interview konkret aus?

Das Interview, zu dem wir Sie einladen möchten, wird **ca. 30 Minuten** dauern. Es ist geplant, die Interviews persönlich durchzuführen. Sollte dies nicht möglich sein, können im Einzelfall auch Telefoninterviews vereinbart werden. Sollten Sie sich entschließen an diesem Forschungsprojekt teilzunehmen, wird Frau Roth das Interview mit Ihnen an einem für Sie angenehmen Ort führen. Die Interviews werden von August 2019 bis Februar 2020 stattfinden und mit einem Tonbandgerät aufgezeichnet werden. Während des Interviews werden wir Ihnen einige Fragen zu Ihren Erfahrungen im Zusammenhang mit der Einarbeitung und der Orientierungsphase stellen.

Habe ich einen persönlichen Nutzen?

Es ist nicht zu erwarten, dass Sie aus der Teilnahme an diesem Interview einen direkten Nutzen für sich oder die Versorgung Ihrer Patientinnen und Patienten haben werden. Das, was Sie uns durch die Teilnahme an einem Interview mitteilen trägt jedoch möglicherweise dazu bei die Arbeitszufriedenheit zu steigern, Verbesserungspotenzial des Integrationsprozesses sowie der Orientierungsphase aufzudecken und dadurch die adäquate Versorgung der Patientinnen und Patienten zu gewährleisten.

Welche Risiken sind mit der Teilnahme verbunden?

Die Teilnahme an dieser Studie ist grundsätzlich mit **keinen** Risiken verbunden. Wenn Sie sich jedoch durch das Interview in irgendeiner Form unwohl oder belastet fühlen, können Sie sich an den Studienleiter wenden, die Kontaktdaten finden Sie unter „Informationen zum Datenschutz". Die Teilnahme ist **freiwillig**. Es steht Ihnen frei, das Interview zu jeder Zeit abzubrechen und Ihre Einwilligung zur Teilnahme zurückzuziehen.

Informationen zum Datenschutz

Sie haben das Recht, vom Verantwortlichen (s.u.) Auskunft über die von Ihnen gespeicherten personenbezogenen Daten zu verlangen. Ebenfalls können Sie die Berichtigung unzutreffender Daten sowie die Löschung der Daten oder Einschränkung deren Verarbeitung verlangen. Der Verantwortliche für die studienbedingte Erhebung personenbezogener Daten ist:

Herr Prof. Dr. Michel Wensing
Abteilung Allgemeinmedizin und Versorgungsforschung
Universitätsklinikum Heidelberg, Marsilius-Arkaden, Turm West,
Im Neuenheimer Feld 130.3, 69120 Heidelberg
E-Mail: michel.wensing@med.uni-heidelberg.de

Bei Anliegen zur Datenverarbeitung und zur Einhaltung der datenschutzrechtlichen Anforderungen können Sie sich an folgenden Datenschutzbeauftragten der Einrichtung wenden:

Datenschutzbeauftragter des Universitätsklinikum Heidelberg
Im Neuenheimer Feld 672, 69120 Heidelberg
Email: Datenschutz@med.uni-heidelberg.de

Im Falle einer rechtswidrigen Datenverarbeitung haben Sie das Recht, sich bei folgender Aufsichtsbehörde zu beschweren:

Der **Landesbeauftragte für den Datenschutz** und die Informationsfreiheit
Baden- Württemberg
Postfach 10 29 32, 70025 Stuttgart
Königstraße 10a, 70173 Stuttgart
Tel.: 0711/61 55 41 – 0
Fax: 0711/61 55 41 – 15
E-Mail: poststelle@lfdi.bwl.de
Internet: http://www.baden-wuerttemberg.datenschutz.de

Welche Daten werden über Sie erhoben und gespeichert?

Es werden personenbezogene sowie Name und Kontaktdaten erhoben. Diese werden für die Terminvereinbarung benötigt. Die Zuordnung der Interviews zu Ihren personenbezogenen Daten ist lediglich über einen Pseudonymisierungsschlüssel möglich. Pseudonymisierung ist die Verarbeitung personenbezogener Daten in einer Weise, dass die personenbezogenen Daten ohne Hinzuziehung zusätzlicher Informationen („Schlüssel") nicht mehr einer spezifischen betroffenen Person zugeordnet werden können. Diese zusätzlichen Informationen werden dabei gesondert aufbewahrt und unterliegen technischen und organisatorischen Maßnahmen, die gewährleisten, dass die personenbezogenen Daten nicht einer identifizierten oder identifizierbaren natürlichen Person zugewiesen werden können. Audioaufnahmen können jedoch weder vollständig pseudonymisiert noch anonymisiert werden, da bei Audioaufnahmen ein Rückschluss auf bestimmte Personen niemals ganz ausgeschlossen werden kann. Die Aufnahmen werden jedoch sofort nach der Transkription (d.h. das in Schriftformbringen von Tonaufnahmen) unwiderruflich vernichtet. Die Interview-Transkripte werden ausschließlich in pseudonymisierter Form aufbewahrt. Die Pseudonymisierung wird nur in seltene Fälle, z.B. im Fall des Rücktrittes zum Zweck der Löschung der Daten aufgehoben. Personenbezogene Daten werden, sobald diese nach dem Forschungszweck möglich ist (Art. 89 Abs. 1 DSGVO, Grundsatz der Datenminimierung), anonymisiert. Anonymisierung ist das Verändern personenbezogener Daten in der Weise,

dass die betroffene Person nicht mehr oder nur mit einem unverhältnismäßigen Kosten- oder Zweitaufwand identifiziert werden kann. Alle Daten, die im Rahmen dieser Studie gespeichert werden, dienen allein der Beantwortung der wissenschaftlichen Fragestellungen dieses Projektes. Alle erhobenen Daten werden ein Jahr nach Beendigung des Projektes durch den Studienleiter unwiderruflich gelöscht / vernichtet.

Freiwilligkeit / Rücktritt

Die Teilnahme an der Studie erfolgt **freiwillig.** Falls Sie teilnehmen möchten, bitten wir Sie, die beiliegende Einwilligungserklärung zu unterschreiben. Sie können diese Einwilligung jederzeit schriftlich oder mündlich ohne Angabe von Gründen widerrufen, ohne dass Ihnen dadurch Nachteile entstehen. Wenn Sie Ihre Einwilligung widerrufen möchten, wenden Sie sich bitte an die Projektkoordinatorin (Kontaktdaten finden Sie am Ende des Schreibens). Bei einem Widerruf können Sie entscheiden, ob die von Ihnen studienbedingt erhobenen Daten gelöscht werden sollen oder weiterhin für die Zwecke der Studie verwendet werden dürfen. Auch wenn Sie einer weiteren Verwendung zunächst zustimmen, können Sie nachträglich Ihre Meinung noch ändern und die Löschung der Daten verlangen; wenden Sie sich dafür bitte an die Studienleitung. Beachten Sie, dass Daten, die bereits in wissenschaftliche Auswertungen eingeflossen sind oder Daten, die bereits anonymisiert wurden, nicht mehr auf Ihren Wunsch gelöscht werden können.

Entstehen mir durch die Teilnahme Kosten? / Erhalte ich eine Bezahlung bzw. Aufwandsentschädigung?

Die Studienteilnahme ist für Sie kostenlos. Sie erhalten allerdings auch keine Bezahlung oder Aufwandsentschädigung, dennoch leisten Sie einen bedeutenden Beitrag zur Wissenschaft.

Veröffentlichung

Die Ergebnisse der Studie werden ausschließlich in anonymisierter Form ohne jede Bezugsmöglichkeit auf Ihre Person in wissenschaftlichen Fachzeitschriften veröffentlicht. Die Beachtung der datenschutzrechtlichen Bestimmungen ist in vollem Umfang sichergestellt.

Finanzierung

Diese Studie erhält keine Finanzierung.

Weitere Informationen

Für weitere Informationen sowie für Auskünfte über allgemeine Ergebnisse und den Ausgang der Studie steht Ihnen als

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Interne Projektkoordinatorin:
Frau Catharina Roth GKP, B.Sc, MPH
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Telefonnummer: +49 6221 56-35736
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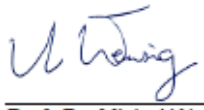
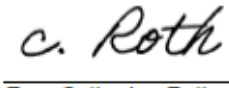
zur Verfügung.

Mit freundlichen Grüßen,



Prof. Dr. Michel Wensing
(Leiter der Studie)



Frau Catharina Roth
(Projektkoordinatorin)

Danke für Ihre Teilnahme!

A5.4 Informed Consent Part B: Interview Study

UNIVERSITÄTS
KLINIKUM
HEIDELBERG

Thoraxklinik
Universitätsklinikum
Heidelberg

Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Rekrutierung von Pflegenden aus dem Ausland

Rekrutierung von Pflegenden welche im Ausland ausgebildet

Einwilligungserklärung
Interview

Für Pflegende die an der unten genannten Studie teilnehmen:

Titel der Studie

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften

Finale Version

Ich habe die Informationsschrift gelesen und wurde zudem mündlich durch Herrn/Frau _____ über das Ziel und den Ablauf der Studie sowie über die Risiken ausführlich und verständlich aufgeklärt.

Im Rahmen des Aufklärungsgesprächs hatte ich die Gelegenheit, Fragen zu stellen. Alle meine Fragen wurden zu meiner Zufriedenheit beantwortet. Ich stimme der Teilnahme an der Studie freiwillig zu. Für meine Entscheidung hatte ich ausreichend Zeit. Ein Exemplar der Informationsschrift und der Einwilligungserklärung habe ich erhalten.

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Datenschutz

Mir ist bekannt, dass bei dieser Studie personenbezogene Daten verarbeitet werden sollen. Die Verarbeitung der Daten erfolgt nach gesetzlichen Bestimmungen und setzt gemäß Art. 6 Abs. 1 lit. (a) der Datenschutz-Grundverordnung folgende Einwilligungserklärung voraus:

Ich wurde darüber aufgeklärt und stimme freiwillig zu, dass meine in der Studie erhobenen Daten, zu den in der Informationsschrift beschriebenen Zwecken in pseudonymisierter Form aufgezeichnet und ausgewertet werden (Art. 7 Abs. 2 DSGVO).

Dritte erhalten keinen Einblick in personenbezogene Unterlagen. Bei der Veröffentlichung von Ergebnissen der Studie wird mein Name ebenfalls nicht genannt. Die personenbezogenen Daten werden anonymisiert, sobald dies nach dem Forschungszweck möglich ist. Die Daten werden nach Studienabschluss ein Jahr gespeichert und anschließend unwiderruflich vernichtet. Mir ist bekannt, dass diese Einwilligung jederzeit schriftlich oder mündlich ohne Angabe von Gründen widerrufen werden kann, ohne dass mir dadurch Nachteile entstehen. Die Rechtmäßigkeit der bis zum Widerruf erfolgten Datenverarbeitung wird davon nicht berührt. In diesem Fall kann ich entscheiden, ob die von mir erhobenen Daten gelöscht werden sollen oder weiterhin für die Zwecke der Studie verwendet werden dürfen. Mir wurde außerdem erklärt, dass meine Interviewaussagen im genannten Forschungsprojekt mit einem Aufnahmegerät aufgezeichnet und von den Mitarbeiterinnen und Mitarbeitern des Studienprojektes in Schriftform gebracht werden. Für die weiter wissenschaftliche Auswertung des Interviewtextes werden alle Angaben, die zu meiner Identifizierung führen könnten, verändert oder aus dem Text entfernt.

Ich bin einverstanden, im besprochen Forschungsprojekt ein Interview zu geben, ich habe ein Exemplar der Informationsschrift und der Einwilligungserklärung erhalten:

Ort, Datum _____ Name, Vorname der Studienteilnehmerin/teilnehmer (Druckbuchstaben) _____

Unterschrift der/des Studienteilnehmerin/teilnehmer _____

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit als Faktoren, welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflussen

Aufklärende Person

Die Studienteilnehmerin / der Studienteilnehmer wurde von mir im Rahmen eines Gesprächs über das Ziel und den Ablauf der Studie sowie über die Risiken aufgeklärt. Ein Exemplar der Informationsschrift und der Einwilligungserklärung habe ich dem Patienten/Probanden ausgehändigt.

_____ _____

Ort, Datum Name, Vorname der aufklärenden Person

_____

Unterschrift der aufklärenden Person

Annexe 6 Interview Guide DQNs

UNIVERSITÄTS KLINIKUM HEIDELBERG
Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Thoraxklinik Universitätsklinikum Heidelberg

„Bitte beantworten Sie folgende Fragen mit den Gedanken an die Kolleginnen und Kollegen, welche im Ausland ausgebildet wurden und jetzt zu Ihrem Team gehören."

Zeitangabe: Circa 50 Minuten

Themenblock	Leitfragen	Aufrechterhaltungsfragen
I: Einstiegsfrage	Wie denken Sie ganz allgemein über die Rekrutierung von im Ausland ausgebildeten Pflegekräften?	• Wie wirkt sich das auf die Versorgung der Patient*innen aus?
II: Einarbeitung	Worauf sollte man Ihrer Meinung nach bei der Einarbeitung besonders Wert legen?	• Was würden Sie bei der Einarbeitung anders machen?
	Inwieweit sind die Leitungen (PDL, Stationsleitung) auf Ihrer Station in die Einarbeitung von im Ausland ausgebildeten Pflegekräften eingebunden?	• Wie könnten die Leitungen dazu noch weiter beitragen?
	Wie kann Ihrer Ansicht nach Integration der hinzukommenden Pflegenden in die Arbeitsabläufe gut gelingen?	• Beispiele… • Welche Verbesserungsvorschläge fallen Ihnen dazu noch ein?

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit also Faktoren welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflusst

III: Herausforderungen	Sehen Sie bei der Versorgung von Patient*innen Herausforderungen für Pflegekräfte, die nicht in D ausgebildet wurden?	• Welche Herausforderungen sehen Sie für sich selbst?
IV: Zusammenarbeit	Wie würden Sie die Zusammenarbeit mit Kolleg*innen aus anderen Ländern beschreiben? Woran machen Sie das fest?	• Wie würden Sie die Zusammenarbeit mit anderen Berufsgruppen beschreiben? • Welche Beispiele fallen Ihnen dazu ein?
V: Qualifikation	Wie unterscheidet sich Ihrer Ansicht nach eine in D erworbene Qualifikationen mit der von Kolleg*innen aus anderen Ländern?	Was könnten wir in D von anderen Ländern hinsichtlich der Pflegeausbildung lernen? Wie sollten Ihrer Meinung nach Pflegekräfte aus anderen Ländern auf eine Tätigkeit in D vorbereitet werden (abgesehen von Sprache)?
	Stationsinterne Standards und Tätigkeiten können vielfältig und sehr unterschiedlich sein. Wie werden diese den Kolleg*innen vermittelt?	• Welche Schulungen halten Sie dabei für hilfreich?
VI: Fachkräftemangel	In D haben wir ja schon lange das Problem des Fachkräftemangels. Was denken Sie kann die Pflege selbst tun um dem Fachkräftemangel entgegen zu wirken?	• Geld ist ein großes Thema aber was gibt es noch um die Pflege zu stärken?
Abschlussfrage	Wenn Sie nun ein deutschlandweites Programm zur Integration von … entwerfen würden – worauf würden sie hier besonders achten, damit die Integration gelingt? Geld spielt keine Rolle.	

Annexe 7 Interview Guide IQNs

UNIVERSITÄTS KLINIKUM HEIDELBERG
Universitätsklinikum Heidelberg | Abteilung Allgemeinmedizin & Versorgungsforschung
Im Neuenheimer Feld 130.3 | 69120 Heidelberg

Thoraxklinik Universitätsklinikum Heidelberg

„Bitte beantworten Sie folgenden Fragen mit den Gedanken an die Kolleginnen und Kollegen, welche im Ausland ausgebildet wurden und jetzt zu Ihrem Team gehören."

Zeitangabe: Circa 50 Minuten

Themenblock	Leitfragen	Aufrechterhaltungsfragen
I: Einstiegsfrage	Was denken Sie allgemein über die Migration von Pflegenden?	
	Wie würden Sie die Arbeitsbedingungen/ das Arbeitsumfeld in Ihrer Heimat beschreiben	• Gibt es Unterschiede die Sie besonders hervorheben würden?
II: Einarbeitung	Welche Erfahrungen haben Sie im Zusammenhang mit der Einarbeitung gesammelt?	• Was würden Sie anders machen?
	Haben Sie den Eindruck, dass die Einarbeitung von den Leitungen (PDL, Stationsleitung) unterschützt wird?	• Was würden Sie sich von den Leitungen wünschen?
	Haben Sie den Eindruck, dass die Integration von den Leitungen unterschützt wird?	• Was würden Sie sich von den Leitungen wünschen? • Fallen Ihne Dinge ein die man verbessern könnte um die Integration zu erleichtern?
	Was könnte das Klinikum tun um Sie bei der Integration in das Team zu unterstützen?	
III: Herausforderungen	Was war/ist für Sie die größte Herausforderung?	

Arbeitsbedingungen, Teamzusammenarbeit und Patientensicherheit also Faktoren welche die Integration von im Ausland ausgebildeten Pflegekräften beeinflusst

	Welche pflegerischen Herausforderungen sehen Sie im Bereich der Versorgung der Patient*innen?	• Fühlen Sie sich den Herausforderungen gewachsen? • Haben Sie den Eindruck Sie werden fair behandelt? • Wie würden Sie die Arbeit mit den Patienten beschreiben?
IV: Zusammenarbeit	Wie würden Sie die Zusammenarbeit mit Kolleg*innen beschreiben?	• Wie würden Sie die Zusammenarbeit mit anderen Berufsgruppen beschreiben? • Fallen Ihnen Beispiel ein?
V: Qualifikation	Wie erleben Sie die Unterschiede der Qualifikationen?	
	Gibt es besondere Schulungen die Sie gerne machen würden um den Stationsalltag zu meistern?	• Welche Schulungen halten Sie für hilfreich?
VI: Fachkräftemangel	Was kann die Pflege selbst tun um dem Fachkräftemangel entgegen zu wirken?	• Geld ist ein großes Thema aber was gibt es noch um die Pflege zu stärken?
Abschlussfrage	Fällt Ihnen noch etwas ein, was Sie gerne erwähnen möchten, dass heute nicht angesprochen wurde?	

Annexe 8 Overview of the transcripts of the interviews with IQNs and DQNs

Table 12: Overview of the transcripts of the interviews with IQNs and DQNs

Pseudonym	Study Group*	Study Centre	Duration of Interview**	Pages (DIN A4)
ZD646	DQN	University Hospital Heidelberg	09:50	4
UK922	DQN	University Hospital Heidelberg	08:14	3
OL490	DQN	University Hospital Heidelberg	15:34	6
AP340	DQN	University Hospital Heidelberg	25:33	6
CP531	DQN	University Hospital Heidelberg	20:07	7
P67HJ	DQN	University Hospital Heidelberg	19:49	6
ZQA91	DQN	University Hospital Heidelberg	10:49	4
ZUA4L	IQN	University Hospital Heidelberg	18:31	5
RRVL4	IQN	University Hospital Heidelberg	28:49	8
KLP15	DQN	University Hospital Heidelberg	17:22	6
LPU18	IQN	University Hospital Heidelberg	11:53	5
BNH7L	DQN	University Hospital Heidelberg	22:13	9
LKV39	DQN	University Hospital Heidelberg	31:13	13
KLÖ81	IQN	University Hospital Heidelberg	29:18	9
PUL94	DQN	University Hospital Heidelberg	19:38	7
PÖÄ98	IQN	University Hospital Heidelberg	19:29	10
JH6K9	DQN	University Hospital Heidelberg	19:12	9
OS277	DQN	University Hospital Heidelberg	19:04	8
KS0308	DQN	University Hospital Heidelberg	18:27	10
ULK9P	IQN	Thorax Clinic Heidelberg	17:17	4
CKR18	IQN	Thorax Clinic Heidelberg	24:11	6
UKL23	DQN	Thorax Clinic Heidelberg	34:39	11
2CRMA	DQN	Thorax Clinic Heidelberg	22:57	11
CKO89	IQN	Thorax Clinic Heidelberg	41:23	13
5PMKR	DQN	Hospital Salem Heidelberg	23:41	7
MDP03	IQN	St. Josefshospital	12:25	7
JV038	DQN	St. Josefshospital	14:50	12
SK038	DQN	St. Josefshospital	20:43	8
SK054	DQN	St. Josefshospital	16:25	8
CL038	DQN	St. Josefshospital	16:00	8
BJ078	IQN	St. Josefshospital	19:44	7
LAA07	IQN	St. Josefshospital	15:17	8
EM078	IQN	St. Josefshospital	41:23	11
RS078	IQN	St. Josefshospital	21:59	9
LAG08	IQN	St. Josefshospital	19:08	5

Annexe 9 Results of the Bivariate Regression Analysis

Table 13: Results of the Bivariate Regression Analysis

Dependent	IQNs		DQNs	
Predictor	**b**	**p-value**	**b**	**p-value**
Learning Environment				
Work experience (0 – 1 year)	-10.07	**0.011***		
Work experience (1 – 3 years)	1.83	0.662		
Work experience (3 – 5 years)	4.90	0.416		
Reference Work experience (more than 5 years)				
Age (18 – 29 years)			-12.63	**0.012***
Age (30 – 40 years)			-2.55	**0.039***
Age (40 – 50 years)			-5.00	0.365
Reference Age (over 50 years)				
Teamwork Climate			n/a	
Local Leadership				
Work experience (0 – 1 year)	-7.55	0.126		
Work experience (1 – 3 years)	-0.48	0.928		
Work experience (3 – 5 years)	-15.90	**0.041***		
Reference Work experience (more than 5 years)				
Age (18 – 29 years)			-14.61	**0.016***
Age (30 – 40 years)			-3.09	**0.038***
Age (40 – 50 years)			-4.55	0.494
Reference Age (over 50 years)				
Safety Climate				
Age (18 – 29 years)			-11.28	**0.017***
Age (30 – 40 years)			-2.77	**0.017***
Age (40 – 50 years)			-5.06	0.329
Reference Age (over 50 years)				
Migration alone	-9.953	**0.019***		n/a
Burnout Climate				
CEFR Level B1	-17.720	**0.006***		n/a
Work experience (0 – 1 year)	8.824	0.196	7.44	0.295
Work experience (1 – 3 years)	6.731	0.364	13.54	**0.039***
Work experience (3 – 5 years)	24.000	**0.027***	7.32	0.287
Reference Work experience (more than 5 years)				
Personal Burnout				
Work experience (0 – 1 year)	12.99	0.062	12.29	0.122
Work experience (1 – 3 years)	-2.31	0.758	20.04	**0.006***
Work experience (3 – 5 years)	20.69	**0.058***	14.247	0.065
Reference Work experience (more than 5 years)				
Work-Life-Balance				
Age (18 – 29 years)	-0.037	0.928	0.333	**0.057***
Age (30 – 40 years)	-0.168	0.123	-0.011	0.790
Age (40 – 50 years)	-1.124	**0.029***	-0.355	0.071
Reference Age (over 50 years)				
Work experience (0 – 1 year)	0.703	**0.006***	-0.026	0.196
Work experience (1 – 3 years)	0.781	**0.005***	0.518	**0.005***
Work experience (3 – 5 years)	0.643	0.102	0.334	0.092
Reference Work experience (more than 5 years)				
Not having children under the Age of 18	0.558	**0.018***	0.410	**0.004***
CEFR Level B1	-0.618	**0.014***		n/a

*Statistical significance was defined as p<0.05; n/a (not applicable) indicates that either no significant effects were found or that the independent variable is for a certain study group not applicable

Table 13b: Results of the Bivariate Regression Analysis

Dependent	IQNs		DQNs	
Predictor	**b**	**p-value**	**b**	**p-value**
Growth Opportunities				
Age (18 – 29 years)			-0.405	**0.040***
Age (30 – 40 years)			-0.067	0.167
Age (40 – 50 years)			0.002	0.992
Reference Age (over 50 years)				
Work experience (0 – 1 year)			-0.129	0.555
Work experience (1 – 3 years)			-0.417	**0.040***
Work experience (3 – 5 years)			-0.438	**0.041***
Reference Work experience (more than 5 years)				
Migration without family/friends	-0.539	**0.023***	n/a	
Workload				
CEFR Level B1	-0.894	**>0.001***		
Period lived in Germany (0 – 1 year)	-0.785	0.013		
Period lived in Germany (1 – 2 year)	-0.134	0.679		
Reference Period lived in Germany (2 years or longer)				
Gender Female	n/a		-0.353	**0.028***
Participation in Decision making	n/a			
Advancement	n/a			

* Statistical significance was defined as p<0.05; n/a (not applicable) indicates that either no significant effects were found or that the independent variable is for a certain study group not applicable

Annexe 10 Codebook DQNs

Codes were identified inductively based on the qualitative content analysis of the interview transcripts of DQNs (Steps 1 – 5, Figure 11). The codebook of DQNs consists of five main themes and ten subthemes.

Codebook: Domestically Qualified Nurses		
I Nursing Scope and Standard of Practice	**This theme describes the services that a qualified nurses is deemed competent to perform and permitted to undertake – in keeping with the terms of their professional license.**	
Subtheme	**Definition**	**Codes**
Impact on Patient Care	This subtheme describes DQNs perceptions of the impact of IQNs on the delivery of healthcare/patient care.	Diversity Roaster Gaps Language Proficiency Patient Experiences
Quotation	"So there are also patients who say that maybe they did not feel so well looked after in the morning, but many also say that the nurse was great […].” (DQN 16, Age 22, Female)	
Nursing Standards	This subtheme describes DQNs perception of potential differences regarding practice standards, professional experience, and nursing training.	Professional Experience Nursing Training Practice Standards
Quotation	"Or they have to get used to it first, because they don't even learn it concretely. They don't have any lessons on supporting patients with personal hygiene during the nursing training, because at least in Serbia, I know for sure that they strictly expect relatives to do it and if relatives are not there then it doesn't happen. (DQN 5, Age 58, Male)	
Impact on Nursing Team	This subtheme describes DQNs perception of challenges or benefits of IQNs related to teamwork.	Power Structures Material and Resources Language Proficiency Collaborative Teamwork Cultural Learning Additional Responsibilities
Quotation	"In the beginning, I noticed that during rounds, which are interprofessional with doctors and nurses, there can be problems when certain things were discussed and determined by the doctor, and the IQNs did not understood those things sufficiently due to language barriers.” (DQN 10, Age 29, Female)	

II Workplace Integration	**This theme describes perceived barriers and enablers in the context of workplace integration of IQNs from the perspective of DQNs.**	
Subtheme	**Definition**	**Codes**
Barriers	This subtheme includes factors which act as barrier or impede the integration of IQNs from the perspective of DQNs.	Lack of Language Proficiency Cultural Differences Discrimination/Racism Othering
Quotation	"Yes, what we discussed, but of course also on the ward there is always potential for improvement, somehow also to make the staff who already work on the ward more open to it. Well, I once had a colleague, so I think it is hard to change something like that, but she also made racist comments about the internationally qualified stuff, and everyone knew that [...]. (DQN 16, Age 22, Female)	
Enabling Factors	This subtheme includes factors which facilitate or enable the integration of IQNs from the perspective of DQNs.	Additional Support Nursing Team Practical Training Language Training Orientation Program Mentoring
Quotation	“Yes, how can it work well? On my ward it is actually optimal if I really manage to have the nursing staff with one person and in one area for a whole week and then really the same thing every day and the same procedures every day and if I always have the same specialist in the area, then nothing changes. Yes, it is simply routine, I would say.” (DQN 31, Age 36, Female)	

III International Recruitment	**This theme describes professional and personal attributes of IQNs that impact workplace integration of IQNs from the perspective of DQNs.**	
Professional Attributes	This subtheme includes professional attributes factors that may have an impact on the success of workplace integration of IQNs from the perspective of DQNs.	Philosophy of Nursing Nursing Skills/Competencies
Quotation	“[...] the biggest problem is certainly that IQNs don't question anything. The doctor says: "Pull out the indwelling urinary catheter", for example, and then the indwelling urinary catheter is pulled out here at 11 o'clock at night, where we now perhaps think to ourselves what we may have learned, I would not do that now. [...] They do not question it, they just do whatever they're told. On the one hand, of course, it's good to do what you are told, but on the other hand, I personally think it's important, especially in our profession, to question things [...]". (DQN 20, Age n/a, Male)	
Personal Attributes	This subtheme includes personal attributes factors that may have an impact on the success of workplace integration of IQNs from the perspective of DQNs.	Facilitator Personal Challenges and Expectations Individual Characteristics
Quotation	"Regardless of the country of origin, it has been shown that it depends on the personal attitude how quickly colleagues can be integrated; it depends on how ambitious they are.” (DQN 9, Age 45, Female)	
IV Organisational Role	**This theme describes the impact of the hospital/ward management on workplace integration of IQNs from the perspective of DQNs.**	
Hospital/Ward Management	This theme includes facilitators or barriers related to the management that may impact the workplace integration.	Leadership Support Appropriate Placement Nursing Staff Shortage Recruitment Process
Quotation	"Yes, and then there is also the difficulty that sometimes arises when there are few staff, IQNs may have to take on a lot of responsibility early on […], or do I have to check now when I am working on the ward and doing my area whether he or she is doing everything right in that area. […] that can be stressful for everyone." (DQN 8, Age 56, Female)	

V Workforce Shortage	**This theme describes push and pull factors that impact intention to leave of DQNs.**	
Subtheme	**Definition**	**Codes**
Pull Factors	This subtheme includes factors that could keep nurses in the profession or factors that nurses wished for in order to stay as motivators from the perspective of DQNs.	Marketing Professional Pride Improved Remuneration Recognition of Nursing Professionalisation
Quotation	“In order to address the shortage of skilled workers in nursing, I see above all an attractive salary that expresses a certain appreciation for nursing staff and that should definitely become apparent, which will perhaps be a factor for many to return to the nursing profession.” (DQN 10, Age 29, Female)	
Push Factors	This subtheme includes factors that may push nurses to consider leaving the profession as demotivators from the perspective of DQNs.	Workplace Demands Poor Public Image Generational Barriers Limited Career Prospects
Quotation	“I think it would be more lucrative. Because then people would also come and say: "Well, I studied” […] and maybe I can develop a bit more diversely […] to study nursing science or nursing management would perhaps be a bit better, I hope, if you do it for a year longer. (DQN 10, Age 29, Female)	

Annexe 11 Codebook IQNs

Codes were identified inductively based on the qualitative content analysis of the interview transcripts of IQNs (Steps 1 – 5, Figure 11). The codebook of IQNs consists of three main themes and seven subthemes.

Internationally Qualified Nurses		
Nursing Scope and Standard of Practice	**This theme describes the services that a qualified nurses is deemed competent to perform and permitted to undertake – in keeping with the terms of their professional license.**	
Subtheme	**Definition**	**Codes**
Impact on Patient Care	This subtheme describes IQNs perceptions of their impact on the delivery of healthcare/ patient care.	Staff Shortage & Lack of Time Workplace Pressure Experiences with Patients
Quotation	"[...] sometimes there are patients who are aggressive or not nice ... but most of them are nice […].". (IQN 13, Age 29, Female	
Nursing Standards	This subtheme describes IQNs perception of potential differences regarding practice standards, professional experience, and nursing training.	Nursing Training Professional Experiences Practice Standard Model of Nursing Care
Quotation	“For example, in Italy, we do the blood transfusion; here, it's mostly done by the doctors. That is the big difference for me, and yes there are other differences, but this is a big difference for me.” (IQN 17, Age 35, Male)	

Workplace Context	**This theme describes perceived context factors (including enablers and barriers) that impact workplace integration of IQNs from the perspective of IQNs.**	
Subtheme	**Definition**	**Codes**
Enabling Factors to Workplace Integration	This subtheme describes IQNs perception of enabling factors during workplace integration.	Language Training Professional Development Collegial Support
Quotation	"Yes, (...) at the moment, I started in November 2018. And at the beginning it was difficult for me because of the medical terminology language, I came here with B1 level. And I also had school and work at the same time and for me that was a difficulty, (...) because I was full time at work and full time at school." (IQN 12, Age 32, Male)	
Barriers to Workplace Integration	This subtheme describes IQNs perception of factors that may act as barrier during workplace integration.	Racism & Discrimination Lack of German Language Proficiency (Patient Care or Teamwork)
Quotation	"Sometimes, some patients are not so warm and welcoming because I have a different face and do not speak German correctly. Sometimes these patients get annoyed with me because I cannot understand them well, and they do not understand me [...]. They are looking for, "There are German nurses?" That is not… I do not feel good about it, but some patients are friendly, and they are good. They... and yeah, when I have these patients, I'm happy [...]." (IQN 36, Age 30, Female)	
Cultural Differences	This subtheme describes cultural differences that IQNs experience during workplace integration.	Structural Differences Power Structures
Quotation	"When I started here, I also did it like at home: "Good morning, NAME." And he said, "You can sit and say that." I think that's a bit of a different culture here, I think that's good. We also have our own respect or something for our profession and everybody is very grateful also from us. […]." (IQN 32, Age 26, Female)	
Organisational Context	This subtheme describes IQNs perception of organisational context factors that may impact workplace integration.	Appropriate Placement Earning Capacity Medical Supplies and Resources Orientation Period Peer Support Leadership Support
Quotation	"[…] I have the fear, I have the fear when I work on outpatient care unit or at the OR. I think that's my weakness, yeah. The intensive care unit is still ok, but I like to work on a normal ward." (IQN 35, Age 29, Female)	

Personal Attributes of IQNs	**This theme describes personal attributes of IQNs that impact workplace integration from the perspective of IQNs.**	
Subtheme	**Definition**	**Codes**
Personal Attributes	This theme describes personal attributes that may impact workplace integration perceived by IQNs.	Advantages of Nurse Migration Personal Characteristics Challenges Reasons for Migration
Quotation	“And that has to come from each other, so you have to be a bit extroverted, good or try to be, well, I mean, at that time, I did not meet with someone every day, mainly in the ward and I had this ambition. And I repeat myself unfortunately, it always depends on what you want, do you want, why did you leave your home country, what reasons do you have and half of it depends at least on the person. Whether you want to be integrated.” (IQN 15, Age 50, Female)	

Annexe 12 Common Codebook

Codes, subthemes and themes were identified deductively (Steps 6 – 9, Figure 11) by scanning and analysing the codebooks of DQNs and IQNs developed during the first part of the qualitative content analysis (Steps 1 – 5, Figure 11). The common codebook consists of six main themes and 21 subthemes.

I Nursing Training and Professional Experiences	**This theme describes perceived differences in nursing training and the philosophy of nursing and the impact of professional experiences of IQNs on the success of workplace integration.**		
Subtheme	**Definition**	**Themes/Subtheme/Code**	
		DQNs	**IQNs**
Recognition of Professional Experiences	This subtheme describes the (lack of) recognition of previous professional experiences of IQNs and the impact on workplace integration from the perspective of DQNs and IQNs.	• Nursing Scope and Standard of Practice / Nursing Standards/ Professional Experience • International Recruitment/ Professional Attributes/ Nursing Skills & Competences	• Nursing Scope and Standard of Practice / Nursing Standards/ Professional Experience
Differences in Nursing Training	This subtheme describes perceived differences in the nursing training of DQNs and IQNs and its impact on workplace integration from the perspective of DQNs and IQNs.	• Nursing Scope and Standard of Practice / Nursing Standards/Nursing Training • Workplace Integration/Enabling Factors to Workplace Integration/ Practical Training	• Nursing Scope and Standard of Practice / Nursing Standards/ Nursing Training
Philosophy of Nursing and Model of Nursing Care	This subtheme describes perceived difference regarding values, ethics, beliefs, and motivation for being part of the nursing profession and the impact on workplace integration from the perspective of DQNs and IQNs.	• International Recruitment/Professional Attributes/Philosophy of Nursing • International Recruitment/Professional Attributes/Nursing Skills & Competences	• Nursing Scope and Standard of Practice / Nursing Standards/ Model of Nursing Care • Nursing Scope and Standard of Practice / Nursing Standards/ Practice Standards

II Nursing Scope and Standard of Practice	**This theme describes perceived differences related to services that a qualified nurses is deemed competent to perform in keeping with the terms of their professional license and related context factors such as working as nursing team or available working material and resources.**		
Subtheme	**Definition**	**Themes/Subtheme/Code**	
		DQNs	**IQNs**
Collaborative Teamwork	This subtheme describes aspects related to multicultural teamwork and its impact on workplace integration from the perspective of DQNs and IQNs.	• Nursing Scope and Standard of Practice/ Impact on Nursing Team/ Collaborative Teamwork • Workplace Integration/ Enabling Factors/ Nursing Team	• Workplace Context/ Cultural Differences/ Power Structures • Workplace Context /Enabling Factors to Integration/ Collegial Support
Experiences with Patients	This subtheme describes positive or negative experiences with patients related to workplace integration from the perspective DQNs and IQNs.	• Nursing Scope and Standard of Practice / Impact on Patient care/ Patient Experiences	• Nursing Scope and Standard of Practice / Impact on Patient Care/ Experiences with patients
Delivery of Patient Care	This subtheme describes aspects related to delivery of patient care in the context of workplace integration of IQNs from the perspective DQNs and IQNs.	• Nursing Scope and Standard of Practice / Nursing Standards/ Practice Standards • International Recruitment/Professional Attributes/Philosophy of Nursing	• Nursing Scope and Standard of Practice/ Nursing Standards/ Model of Nursing Care • Nursing Scope and Standard of Practice / Nursing Standards/ Practice Standards
Material and Resources	This subtheme includes perceived differences in material and resources available for patient care from the perspective DQNs and IQNs.	• Nursing Scope and Standard of Practice/ Impact on Nursing Team/ Material and Resources • Nursing Scope and Standard of Practice / Nursing Standards/ Practice Standards	• Workplace Context/ Organisational Context/ Medical Supplies and Resources

III Social and Cultural Aspects	**This theme describes social and cultural aspects related to workplace integration.**		
Subtheme	**Definition**	**Themes/Subtheme/Code**	
		DQNs	**IQNS**
Racism, Discrimination and Othering	This subtheme describes racist and/or discriminatory behaviour towards IQNs and aspects related to othering and its impact on workplace integration from the perspective DQNs and IQNs.	• Workplace Integration/ Barriers to Workplace Integration/ Racism and Discrimination • Workplace Integration/ Barriers to Workplace Integration/ Othering	• Workplace Context/ Barriers to Workplace Integration/ Racism and Discrimination
Cultural Differences	This subtheme describes perceived negative and positive aspects related to cultural differences its impact on workplace integration from the perspective DQNs and IQNs.	• Workplace Integration/ Barriers to Workplace Integration/ Cultural Differences • Nursing Scope and Standard of Practice/ Impact on Nursing Team/ Cultural Learning	• Workplace Context/Cultural Differences/ Structural Differences

IV Lack of German Language Proficiency	**This theme describes the impact of the lack of German language proficiency of IQNs on workplace integration from the perspective of IQNs and DQNs.**		
Subtheme	**Definition**	**Themes/Subtheme/Code**	
		DQNs	**IQNS**
Impact on Delivery of Patient Care	This subtheme includes factors related to the lack of German language proficiency of IQNs and its impact on healthcare delivery from the perspective DQNs and IQNs.	• Nursing Scope and Standard of Practice/ Impact on Patient Care/ Language Barrier • Workplace Integration/ Barriers/ Lack of Language Proficiency	• Workplace Context/ Barriers to Workplace Integration/ Lack of German Language Proficiency
Impact on Teamwork	This subtheme includes factors related to the lack of German language proficiency of IQNs and its impact on healthcare teamwork from the perspective DQNs and IQNs.	• Nursing Scope and Standard of Practice/ Impact on Nursing Team/ Language Proficiency • Nursing Scope and Standard of Practice/ Impact on Patient Care/ Language Barrier • Workplace Integration/ Barriers/ Lack of Language Proficiency	• Workplace Context/ Barriers to Workplace Integration/ Lack of Language Proficiency • Workplace Context/ Enabling Factors to Integration/ Collegial Support
Language Lessons	This subtheme describes the benefits of additional German language lessons to facilitate workplace integration from the perspective DQNs and IQNs.	• Workplace Integration/ Enabling Factors to Workplace Integration/ Language Training	• Workplace Context/ Enabling Factors to Workplace Integration/ Language Training

V **Organisational Role**	**This theme describes the role of the management of hospitals in workplace integration of IQNs from the perspective of IQNs and DQNs.**		
Subtheme	**Definition**	**Subtheme/Code**	
		DQNs	**IQNS**
Appropriate Placement	This subtheme describes the impact of the (in)appropriate placement of IQNs and its impact on workplace integration from the perspective DQNs and IQNs.	• Organisational Role/ Hospital or Ward Management/ Appropriate Placement	• Workplace Context/ Organisational Context/ Appropriate Placement
Recruitment Process	This subtheme includes factors related to the recruitment process of IQNs and the impact on the integration workplace from the perspective of DQNs and IQNs.	• Organisational Role/ Hospital or Ward Management/ Recruitment Process	• Internationally Qualified Nurses/ Personal Attributes/ Advantages of Nurse Migration • Internationally Qualified Nurses/ Personal Attributes/ Reasons for Migration • Workplace Context/ Organisational Context/ Earning Capacity • Workplace Context/ Organisational Context/ Peer Support
Orientation Phase	This subtheme includes factors that may enhance the orientation phase of IQNs from the perspective of DQNs and IQNs.	• Workplace Integration/ Enabling Factors to Workplace Integration/ Orientation Program • Workplace Integration/ Enabling Factors to Workplace Integration/ Practical Training • Workplace Integration/ Enabling Factors to Workplace Integration/ Additional Support	• Workplace Context/ Organisational Context/ Orientation Period • Workplace Context/ Enabling Factors to Integration/ Professional Development

Appendix

Subtheme	Definition	Subtheme/Code	
		DQNs	DQNs
Leadership Support	This subtheme describes the impact of (the lack of) supportive leaders on workplace integration from the perspective of DQNs and IQNs.	• Organisational Role/ Hospital or Ward Management/ Leadership Support	• Workplace Context/ Organisational Context/ Leadership Support
Support by Preceptors/ Mentor	This subtheme describes the perceived benefits of individual support by a preceptor or a mentor for IQNs and the impact on workplace integration from the perspective of DQNs and IQNs.	• Workplace Integration/Enabling Factors to Workplace Integration/ Mentoring	• Workplace Context/ Organisational Context/ Orientation Period/ Mentoring
Nursing Workforce Management	This subtheme describes the impact of nursing workforce management on workplace integration of IQNs from the perspective of DQNs and IQNs.	• Organisational Role/ Hospital or Ward Management/ Staff Shortage • Nursing Scope and Standard of Practice/ Impact on Patient Care/ Roaster Gaps • Nursing Scope and Standard of Practice/ Impact on Patient Care/ Diversity	• Nursing Scope and Standard of Practice/ Impact on Patient Care/ Staff Shortage/ Lack of Time
Additional Responsibilities/ Increased Workload	This subtheme describes perceived additional workload of DQNs due to workplace integration of IQNs as well as perceived workplace pressure of IQNs.	• Nursing Scope and Standard of Practice/ Impact on Nursing Team/ Additional Responsibility	• Nursing Scope and Standard of Practice/ Impact on Patient Care/ Workplace Pressure

VI The Role of Internationally Qualified Nurses	**This theme describes the role of internationally qualified nurses have in their workplace integration proves of IQNs from the perspective of IQNs and DQNs.**		
Subtheme	**Definition**	**Themes/Subtheme/Code**	
		DQNs	**IQNs**
Personal or Professional Challenges of IQNs	This subtheme describes the impact of personal or professional challenges of IQNs on workplace integration of IQNs from the perspective of DQNs and IQNs.	• International Recruitment/ Personal Attributes/ Personal Challenges and Expectations • International Recruitment/ Personal Attributes/ Facilitator	• Internationally Qualified Nurses/ Personal Attributes/ Challenges
Personal Attributes of IQNs	This subtheme describes the impact of personal attributes of IQNs on workplace integration of IQNs from the perspective of DQNs and IQNs.	• International Recruitment/ Personal Attributes/ Individual Characteristics	• Internationally Qualified Nurses/ Personal Attributes / Personal Characteristics

CURRICULUM VITAE

PERSONAL DETAILS

First Name	Catharina
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Date of Birth	04. January 1991
Place of Birth	Heidelberg
Nationality	German
Marital Status	Married, one daughter

EDUCATIONAL BACKGROUND

July 2008	Secondary School
May 2011	High School (A-Level, Abitur)
October 2011 – September 2014	Nursing Training at the Heidelberg Academy for Healthcare Professionals
July 2021 – May 2022	Maternity and parental Leave

UNIVERSITY CAREER

Winter term 2012/13	Start of Bachelor Programme “Interprofessional Healthcare” at the Medical Faculty of the Heidelberg University, Germany
September 2016	**Bachelor’s Degree**
Winter term 2016/17	Start of Master Programme “Master of Public Health” at University of Dundee, Scotland
June 2018	**Master’s Degree**
August 2019 – to date	Doctoral Student at the Department of General Practice and Health Services Research at the University Hospital Heidelberg (including maternity and parental leave)

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September 2018 – to date	Part-Time Nurse at Thorax Clinic at the University Hospital Heidelberg (including maternity and parental leave)
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“I attribute my success to this: I never gave or took any excuse.”

- Florence Nightingale

DECLARATION

1. Bei der eingereichten Dissertation zu dem Thema „*Experiences of Domestically Qualified Nurses and Internationally Qualified Nurses of Workplace Integration into the German Nursing Workforce in the Context of Nursing Workforce Shortage*“ handelt es sich um meine eigenständig erbrachte Leistung.

2. Ich habe nur die angegebenen Quellen und Hilfsmittel benutzt und mich keiner unzulässigen Hilfe Dritter bedient. Insbesondere habe ich wörtlich oder sinngemäß aus anderen Werken übernommene Inhalte als solche kenntlich gemacht.

3. Die Arbeit oder Teile davon habe ich bislang nicht an einer Hochschule des In- oder Auslands als Bestandteil einer Prüfungs- oder Qualifikationsleistung vorgelegt.

4. Die Richtigkeit der vorstehenden Erklärungen bestätige ich.

5. Die Bedeutung der eidesstattlichen Versicherung und die strafrechtlichen Folgen einer unrichtigen oder unvollständigen eidesstattlichen Versicherung sind mir bekannt. Ich versichere an Eides statt, dass ich nach bestem Wissen die reine Wahrheit erklärt und nichts verschwiegen habe.

Heidelberg den,

(Catharina Roth geb. Eck)