Patrik Tabatabai Dr. med.

Operational Mapping of the Public and Private Health Sector in Southern Tanzania under Special Consideration of Hospital Maternal Health Services and Internal Health Worker Migration: Findings from a Cross-Sectional, Retrospective and Multicenter Study

Promotionsfach: Public Health Doktorvater: Priv.-.Doz. Dr. med. M. Marx

Strategies to improve health outcomes in low-income countries are increasingly embracing partnership approaches between public and private stakeholders in health. In Tanzania, such partnerships are a declared policy goal. However, implementation remains challenging as unfamiliarity between partners and insufficient recognition of private health providers prevail. This hinders cooperation and reflects the need to improve the evidence base of private sector contribution. In collaboration with TGPSH's PPP component and members of the National PPP Steering Committee, this study was designed to respond to key areas of concern and knowledge gaps relevant to the PPP dialogue. The aim of this study was to analyse the contributions of the public and private health sector to health service infrastructure, HRH as well as service capacity in southern Tanzania and to map the population reached with these services. The study combined a district (n=10) and hospital (n=16) survey with a catchment area mapping for hospital maternal health service recipients. In addition, the study addressed a particularity of Tanzania's HRH crisis, namely the internal HRH migration from FBOs to the public health sector. Although frequently cited to severely burden public private relations, the problem has not been previously quantified. To understand its dynamic and possible reasons, quantitative assessment methodology was combined with qualitative staff interviews (n=62) at the hospital sites.

The study area included the administrative boundaries of Lindi and Mtwara Regions as well as Tunduru District in Ruvuma Region. It is populated by approximately 2.5 million people, which by majority (75.5%) reside in rural areas. FBO contribution to health service infrastructure and capacity is substantial, particularly on the hospital level (37.5% of hospitals). This occurs in a setting of overall poor health services infrastructure (mean *Health Services Infrastructure Index* was 63% of WHO target), as well as low HRH densities, but a comparably high percentage of hospital births (approximately every 2<sup>nd</sup> facility birth overall). FBO hospitals are primarily located in rural areas and accordingly place a clear emphasis on serving rural populations. This common assumption has now both been both quantified and compared to the situation in public hospitals. Mapping of patient flows of maternal health service recipients identified areas where public and FBO hospitals serve the same population and were coordination of activities would hence be particularly fruitful. Service capacity regarding the overall number of health services was comparable between sectors but was more favourable in FBO hospitals regarding maternal health services. FBOs also had a higher

share of qualified core medical professionals compared to auxiliary staff, which included their superior access to expatriate medical specialists.

The emphasis of FBOs on serving rural populations in combination with their dependency on provider-fees on the one hand and the declared policy goal of providing maternal health services free of charge on the other, may favor an extension of public fee exemption policies to include FBOs. This could be achieved by a more widespread implementation of existing subsidiary contracts between private health facilities and local government authorities.

Regarding the priority area of HRH, severe data inconsistencies between the district and facility level were detected, primarily caused by underreporting of FBOs. These deficits appeared to be influenced by the considerable migration of HRH from the FBO to the public health sector. Compared to their current workforce, FBO hospitals lost 90.6% of registered nurses to the public sector during the 3.5 years prior to the assessment, whereby public hospitals reported 24.4% of registered nurses being former FBO employees. Qualitative interviews revealed significantly inferior staff perspectives among FBO respondents compared to their public colleagues, particularly in the areas of *career development and training, management support, employee engagement* and *workload*, whereas no significant salary differentials were detected. Whilst harmonizing of key employment conditions between sectors is paramount, FBOs will also require organizational changes to fully utilize non-financial retention strategies, whereas public authorities should develop recruitment policies that do not drain assets from FBOs.

The described profile of FBOs makes them promising partners for PPP in health. However, the establishment of stronger and institutionalized partnerships will require transparent dialogue and improved information sharing between sectors, better recognition of FBO services, increased representation of FBOs in health programming and planning as well as continued advocacy for PPP at all levels.