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Specific Aspects of the Health Profile in Ethnic German Migrants from the Former Soviet Union

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Since 1990 more than two million ethnic Germans migrated from countries of the Former Soviet Union (FSU) to Germany. High mortality rates in their countries of origin and physical as well as psychological stress caused by the migration process was thought to influence the health profile of the Aussiedler negatively. A previous study confirmed this hypothesis only for specific causes of death. In contrary, overall mortality and other cause of death groups showed a lower mortality of the Aussiedler in comparison to the German population.

To analyse specific aspects of the Aussiedler's health profile the previous cohort study settled in North Rhine-Westphalia (n=34,393) was extended and a second cohort was set up in the Saarland (NRW) (n=18,621). Both are retrospective cohort studies with an observation period of 1990 to 2005. Vital status in NRW was assessed through local registry offices and cause of death by record linkage with the Federal statistical office and by collecting anonymous copies of death certificates in local health offices. To assess validity of ICD coding procedures, agreement of cause of death was measured with descriptive techniques and simple kappa statistics where the corresponding ICD code was available from both sources.

In the contrast to the NRW cohort, where mortality is the main outcome the Saarland cohort is focussing on cancer incidence. Observed cancer incidence was directly assessed through the Saarland cancer registry and person-years were estimated with a newly developed method on basis of a partial follow up. For analysis mainly standardized mortality or standardized incidence ratios were calculated for all causes of death, for external causes, for deaths from cardiovascular diseases (CVD), for cancer mortality and incidence and for infectious diseases in comparison to the German population. In addition, regression models were used to describe effects of different time variables on external causes of death and on deaths from CVD.

There were 2,580 deaths in NRW. 146 due to external causes of death, 1,025 due to death from CVD, 708 from cancer and 43 from infectious diseases. The validity study of 372 deaths coded in ICD10 reveals limitations in the procedure, which however have only small effects on SMR estimation. In the Saarland 580 incidents of cancer cases were observed.

Aussiedler have a lower mortality from all causes of death, which is mainly determined by a lower mortality from CVD. Male Aussiedler have a higher risk to die from external causes and all death associated with this group e.g. drug abuse. More detailed analyses show a particularly elevated risk in those who frequently change residence and in the early years after migration or residential changes. Cancer incidence and mortality are overall equal to that of the German population, but differ strongly for different cancer sites. Cancer associated with tobacco smoking, mainly lung cancer, is as expected due to rates in the FSU, elevated among males and lower among females. Stomach cancer incidence and mortality is higher in the Aussiedler. In contrast prostate cancer and female breast cancer are significantly lower. Further. Aussiedler have an elevated risk to die from viral hepatitis whereas mortality from other infectious diseases is equal to the German population.

Overall lowered mortality might be due to selection factors from the migration process itself and/or by factors within this ethnic group. Finding and confirming explanations for specific causes of death such as e.g. CVD, cancers of the female breast and male reproductive organs will need further research with other study designs. The results from external causes of death directly indicate starting points for policy approaches.