

SUMMARY

The presence of socio-economic health differences (SEHD) has been confirmed in almost all European countries. During early childhood SEHD are deep; they persist during childhood and with the onset of adolescence they diminish, only to emerge again in early adulthood. After this period SEHD deepen during adulthood and then diminish again towards the end of life. Central European countries are more vulnerable to the deepening of SEHD because of the ongoing transformation in these countries. This process, connected with income inequality, has an undesirable impact on the health of the population.

The first chapter of this thesis focuses on the main hypothetical questions concerning findings related to SEHD. Namely, are SEHD an artefact, are they due to health selection, or to social causation? Three main theoretical streams in the framework of the social causation hypothesis are described: life conditions (materialistic hypothesis), life style (behavioural hypothesis) and the hypothesis on knowledge, attitudes, and values are discussed more in detail. Particular attention is focused on the hypothesis of varying exposure and the hypothesis of varying vulnerability as explaining the presence of SEHD, as well as to the buffer hypothesis and the hypothesis of latent differences as explaining the absence of SEHD in adolescence.

The aim of the study is to explore the relationship between the position in the socio-economic stratification and health among Slovak adolescents. By monitoring self-reported health problems and through the examination of the presence of SEHD, an attempt is made to explain the presence of SEHD through mediating factors like health risk behaviour and social support. Particular attention is focused on parents' and peers' influences on health risk behaviour.

Data were collected in September and October 1998. The sample consists of 1370 boys and 1246 girls, students of the first grade in 31 secondary schools located in Kosice (a city in the eastern part of Slovakia; 240 000 inhabitants) in the age group between 14 and 17 years (average age 15 years). Data related to the following six fields were collected: demographic and socio-economic characteristics (occupation and education of parents, adolescent's type of school), health (psychological health, vitality, mental health, health complaints, chronic disease, self-reported health, self-reported vulnerability to illness, use of medical services), health risk behaviour (smoking, alcohol consumption, drug use, lack of physical

exercise) and attitudes towards health risk behaviour, parents' and peers' influences on health risk behaviour, social network, social support and personality (self-esteem, decision making style).

The health of adolescents was explored using self-reported health indicators, which have so far been used very rarely in Slovakia, despite the fact that these indicators are very important in the period of life when the more classic health indicators like mortality and morbidity are not able to describe the health situation of respondents adequately. Chapter 3 shows that Slovak adolescents, both boys and girls, suffer from a considerable amount of self-reported health problems. Slovak adolescents do not differ with this respect from West European adolescents. Girls report health problems more frequently than boys. The attention should be focused on psychological health, a high prevalence of tiredness, headache, backache, skin diseases and respiratory diseases. The character of health problems among adolescents indicates possible undesirable health processes which can later lead to serious chronic diseases (respiratory disease, musculo-skeletal diseases), but which at this age are still preventable, reversible or at least susceptible to change in a desirable direction.

In Chapter 4, the relationship between SES and health is the central issue. Adolescents from lower socio-economic groups (occupation and education of parents, adolescent's type of school) suffer from more health complaints, evaluate their health less favourably, and report easily falling ill more frequently than the others. They also more frequently use prescribed medicines, less frequently use non-prescribed medicines, and are characterised by lower vitality. These characteristics are not related to parents' education, or the adolescents' type of school or mental health, nor are they related to parents' education in comparison to those of adolescents from higher SES groups. Socio-economic differences were not confirmed in psychological health and the occurrence of chronic diseases. Gender differences in SEHD are not present.

SEHD unfavourable for lower SES groups were confirmed among Slovak adolescents, but not in Dutch or Scottish adolescents. The differences in findings can be explained by differences in the influence of protective mechanisms and depth of class inequalities in health in countries with different socio-economic situations. The influence of protective factors is either absent or is not enough strong to diminish class inequalities, which can be deeper in Central Europe in comparison with Western Europe.

The behavioural hypothesis of SEHD stresses the role of smoking, alcohol consumption, drug use and lack of physical exercise on the presence and depth of health inequalities. According to this hypothesis people of lower SES groups behave more riskily and as a consequence their health is worse in comparison with people of high SES. Chapter 5 of this study confirms the association between SES (occupation and education of parents, adolescent's type of school) with health risk behaviour, although there are some exceptions mostly with regard to parents' education as an SES indicator, and alcohol consumption or drug use. The prevalence of health risk behaviour is higher in lower socio-economic groups of adolescents. An exception exists in alcohol consumption among girls when SES was based on parents' education: daughters of parents with higher education consume alcohol more frequently. Socio-economic differences in the prevalence of health risk behaviour among adolescents were not confirmed in the related Dutch study. The literature related to this issue is characterised by inconsistency in the findings. The reason for this could be differences in the sample or the methods, but also socio-cultural differences.

Only one third of the adolescents in the sample did not behave riskily, or in other words did not smoke, did not consume alcohol, had no experience with drug use and practised sport at optimal frequency. The occurrence of smoking, alcohol consumption and experience with drug use are related. Apart from the lack of physical exercise, boys behave more riskily in comparison with girls. The undesirable influence of health risk behaviour on adolescents' health, namely psychological health, vitality, mental health, self-reported health, self-perceived vulnerability to illness, health complaints, chronic disease and the use of medical services, was confirmed. There is only one exception: sporting, which is related to a higher prevalence of injuries.

Health risk behaviour significantly contributes to the presence of SEHD. A mechanism explaining SEHD can be as follows: higher occurrence of risk behaviour in lower SES groups (different exposure), but also varying influence of risk behaviour on health among socio-economic groups (different vulnerability). The validity of these hypotheses is explored in Chapter 6. The effect of SES (occupation and education of mother) and the effect of risky behaviour (smoking, alcohol consumption) on health significantly interact: SEHD occurred among smokers and alcohol consumers, but not among non-smokers and non-drinkers. The influence of health risk behaviour was weaker in higher socio-economic groups and stronger in lower socio-economic groups of adolescents. The character

of the confirmed interactions supports both hypotheses (different exposure, different vulnerability), but the hypothesis of different exposure is more strongly supported.

The occurrence of risky behaviour among parents (smoking, alcohol consumption, lack of physical exercise), but also the occurrence of risky behaviour among friends (smoking, alcohol consumption, drug use, lack of physical exercise) increases the probability of corresponding behaviour among adolescents. Smoking is one of the most frequently explored health determinants; it has a strong relationship with serious civilisation diseases, a high prevalence and early onset. Peer influence, parental influence and the influence of SES on adolescent smoking are usually explored separately. The model explaining the combined influence of these factors on adolescent smoking is explored in Chapter 7. The influence of friends' smoking on adolescents' smoking was the strongest. Adolescents reporting more smokers among their friends smoke more frequently. Parents' smoking behaviour increases the probability of smoking among adolescents both directly and indirectly through the influence of friends' smoking behaviour. SES was related to adolescent smoking only indirectly through its influence on parents' and peers' smoking behaviour. Lower SES was related to a higher prevalence of smokers in both groups, parents and peers.

Parents, particularly the mother, are the most important source of social support, as is depicted in Chapter 8. The importance of peers is increasing, particularly among girls. Most frequent peer contacts were friendship, intimate friendship and group activities. Girls more frequently report intimate friendship; boys more frequently report group activities, mostly sport- oriented. Boys more frequently than girls report low social support, namely having nobody to talk to about their problems. Low social support occurred more frequently in low SES groups of adolescents and was related to worse health. Adolescents reporting that they had nobody to talk to about problems also featured worse self-reported health, more health complaints, worse psychological health, vitality and mental health. These findings support the hypothesis of differing exposure, but not the hypothesis of differing vulnerability. Despite the fact that the majority of studies use SES indicators based on fathers' characteristics, our findings related to socio-economic differences in health and health risk behaviour indicated that mothers' socio-economic characteristics are of the same or higher importance in comparison with those of the fathers.

The last chapter (Chapter 9) discusses the most important findings, and recommendations are made regarding research and policy implications for education,

health care and government. An attempt is made to answer the questions about the extent to which adolescence is a healthy period of life; and why SEHD are not absent among Slovak adolescents, as might be expected. Further questions discussed focus on the aspects of health which are related to SES, and the differences in SEHD which can be expected in the comparison of males and females. Next, the prevalence of health risk behaviour among Slovak adolescents and the influence of health risk behaviour on health in adolescence itself are discussed, as well as the possible determinants of health risk behaviour. Finally, the mechanism governing the way health risk behaviour and social support contribute to the presence of SEHD is dealt with.

Several recommendations are made for further research: to continue this research and at the same time to include both cross-sectional and longitudinal data; and also to take care to set up a wider sample with regard to age, region and minorities; and finally, to extend the model by adding new variables and also including the socio-environmental context.

The influence of socio-economic characteristics on health and quality of life, but also the mechanism of reduction of SEHD, should not be absent in the education of people who can be of great help in the reduction of SEHD in their professional life, such as teachers. More attention should be focused on prevention, in terms of increasing people's readiness to take personal responsibility for their own health and quality of life. Monitoring of health and SEHD can provide important information for preparing appropriate health promotion programs. The most efficient seem to be community-based programs which require the co-operation of all sectors in society: the health care sector, the education system, and the municipality.