Can the Social Epidemiological Concepts on Social Support and Social Networks be Used as an Example to Stimulate and Train Scientific Thinking in Medical Education?

S. Wilm, Institute for General Practice and Family Medicine, Frankfurt a.M. FRG

In 1984 the "Panel on the general professional education of the physician and college preparation for medicine" (GPEP) reported to the Association of the American Medical Colleges (AAMC) on "Physicians for the 21st century".

Among other things, it is recommended that medical faculties should offer educational experience that requires students to be active. independent learners and problem solvers, rather than passive recipients of information. Medical students must be encouraged to develop skills to learn independently because physicians must solve clinical problems that do not always fit classical patterns, as well as gather and apply new knowledge and technology to diagnose and treat classical clinical problems. Problem solving involves a high order of intellectual activity; it requires knowledge of basic concepts and principles and skills in obtaining and correlating information (7).

Medical students should be enabled not only to know how and to train to cooperate with other health and health related professions as stated in the Edinburgh Declaration of World Federation for Medical Education (9), but to **understand** the necessity and complex structure of cooperation.

Both problem solving and cooperation abilities are prerequisites for training scientific thinking in medical education. Analyzing, describing and working with the social epidemiological concepts of social support and social networks in a community can foster this process in medical students.

In the frame of the present change of paradigms in health (6) the opinion is growing that health and illness can be seen in a bio-psycho-social view (4) as multicausal and interactively dependent, dynamic, only systematical understandable phenomena. Social support has an important independent influence on the physical and emotional well-being of the individual in this net of factors (2, 3, 5, 8). An individual owning an adequate number of social relations of adequate intensity and quality seems to be better protected against illness, premature

death and negative consequences of life events than an individual without the adequate number of such social contacts. Social support is delivered in the individual social network including contacts to family members, relatives, friends, neighbours and colleagues in the communities. It covers trustful talks, friendly gatherings, appreciation in the family or practical help to cope with sorrow, fears, and loneliness. Together with personality factors and coping skills social networks and social support systems could be described as "psycho-social immune systems" (1) protecting the individual from emotional and physical harm or helping him to cope with the consequences.

These complex social epidemiological concepts are essential components in community oriented primary care (COCP). They can be used to train scientific thinking in community-based medical education through participation in a research project in cooperation with other health workers, e.g. by independently designing a programme for prevention and health promotion in a community using the existing social networks.

References

- Badura, B.: Sozialepidemiologie in Theorie und Praxis. In: Bundeszentrale für gesundheitliche Aufklärung (ed.): Europäische Monographien zur Forschung in Gesundheitserziehung 5. BzgA, Köln 1983.
- Berkman, L.F.; Breslow, L.: Health and ways of living. The Alameda County Study. Oxford University Press, New York-Oxford 1983.
- 3. Cohen, S.; Syme, S.L. (ed.): Social support and health. Academic Press, Orlando 1985.
- 4. Engel, G.L.: The need for a new medical model: a challenge for biomedicine. Science 196 (1977) 129-136.
- 5. House, J.S.; Laudis, K.R.; Umberson, D.: Social relationship and health. Science 241 (1988) 540-545.
- 6. Kuhn, T.S.: Die Struktur wissenschaftlicher Revolutionen. 2. Ed. Suhrkamp, Frankfurt 1976.
- 7. Panel on the general professional education of the physician and college preparation for medicine: Physicians for the Twenty-First Century The GPEP Report. Association of American Medical Colleges, Washington D.C. 1984.

 Schoenbach, V.J.; Kaplan, B.H.; Fredman, L.; Kleinbaum, D.G.: Social ties and mortality in Evans County, Georgia. American Journal of Epidemiology 123 (1986) 4, 577-591.

.

 World Federation for Medical Education: World Conference on Medical Education. Report. Edinburgh, 7-12 August 1988. WFME, Edinburgh 1988.