Revista de Psihologie Aplicată
2009, Vol.11, Nr.2, 81-87

Health awareness and behaviour of the elderly: between needs and reality. A comparative study

Mona Vintilă,
West University of Timişoara

Ingela Marklinder şi Margaretha Nydahl
Uppsala University Sweden

Daliana Istrat şi Amalia Kuglis
West University of Timişoara

Social factors such as social cohesion, the role of the voluntary services and social engagement cannot be influenced by traditional preventive and health promotion initiatives. There is a need for innovative strategies in health promotion. Taking account of the variety of approaches observable in European countries, the idea has arisen of starting a multinational project to develop new solutions to the problem of implementing healthy lifestyles in the local communities of different countries. The project involves 10 partners from six countries: Germany, Great Britain, Sweden, Austria, Latvia and Romania. The following results present an analysis of some comparative data of the Swedish and Romanian communities. Attitudes about health and behavior in terms of maintaining health are very different in Romania and Sweden. These differences very likely reflect the level of information on health, nutrition, physical activity and sources of information. The study highlighted some differences in the eating habits of the two groups of subjects.

Keywords: community health, health promotion, eating behavior.

Address of correspondence: Mona Vintilă, Universitatea de Vest din Timişoara, Catedra de Psihologie, Bvd. Vasile Pârvan nr.4, cab.505, 300223 Timişoara, email: mona.vintila@socio.uvt.ro

Author Note: This research has been funded with the support from the European Commission, CHANCE project no. 134240-LLP-1-2007-1-DE-GRUNTVIGT-GM.

It is well known that most industrialised countries suffer from a burden of disease. In particular, the incidence of chronic diseases, e.g. diabetes type II, overweight, obesity and coronary heart disease (WHO 2003, WHO 2004), is increasing. Traditional prevention measures and health promotion campaigns have not succeeded in reversing this trend and it seems unlikely that they will do so in future.

When a country has reached that critical point in health care at which the supply of material resources such as safe and sufficient food, basic medicine, clean water and fuel is assured, social conditions come to play a much more important role in promoting health. Social factors such as social cohesion, the role of the voluntary services and social engagement cannot be influenced by traditional preventive and health promotion initiatives. There is a need for innovative strategies in health promotion. These strategies need to initiate social processes and promote an idea of health as something integrated in the normal course of life. People should be supported in developing a sense that they are competent to live healthy lives, to manage their problems, that they are able to establish a healthy environment and that they are responsible for their own welfare. This means that the active role in health promotion has to pass from the expert and the provider of intervention to the recipient.

We may assume that in EU countries the structure of each local community influences health information. Different countries may provide different resources within their communities, depending, for example, on their economic and ecological circumstances. So it may be taken for granted that you can find in different EU countries valuable resources and examples of best practice in the area of the perception of health information. The quality and quantity of health information influences consumer behaviour. Different outcomes are possible: the consumer can be confused by contradictory information, supported by helpful information or misled by inadequate information. Therefore the consumer needs basic skills and a good supportive network around him to help him to perceive the right information in the right way.

While other European countries take seriously the need for education regarding eating behaviour, ways of maintaining a diet and disease prevention, something which is reflected in the health of their populations and in their social programs, in many poorer European countries, such as Romania, the consumer health education domain needs a range of approaches which will have beneficial long-term effects for society. Despite the fact that we now have a better knowledge than ever before of what healthy behaviour and a healthy lifestyle mean, this knowledge – promoted as an official message – does not reach the

majority of the population. Romania is well known for its plentiful but unhealthy diet, for its sedentary lifestyle and for the lack of preventive behaviour regarding health. Unhealthy eating habits are maintained for many years and we can observe that these patterns are not changing. To back up these statements we can point to the high number of deaths caused by cardiovascular disease, aggravated by these unhealthy eating habits.

Taking into account the differences that exist between European countries with regard to levels of public health and health education, we considered that it would be useful to carry out a closer study of the reasons for these differences, the influences on them, and likely future trends.

Description of the project

Taking account of the variety of approaches observable in European countries, the idea has arisen of starting a multinational project to develop new solutions to the problem of implementing healthy lifestyles in the local communities of different countries.

The project involves 10 partners from six countries: Germany, Great Britain, Sweden, Austria, Latvia and Romania. It is financed by the European Union and covers a period of two years (2007-2009). The starting point of this project was the idea that the local community to which a person belongs is able to influence their level of knowledge regarding a healthy lifestyle and its implementation in everyday life.

The long-term objective of this project is the promotion of social cohesion and the stimulation of civic spirit, which it does by addressing not just isolated groups but the community as a whole. The inhabitants will be involved in a health management program and their specific health education needs will be analysed, a process that leads to self-analysis regarding one's lifestyle.

The project focuses especially on at-risk populations, disadvantaged social groups such as the elderly and immigrants, which present an increased need for support. The idea behind choosing these groups is that through the stimulation of participation and motivation, they will become better integrated.

The activities programmed during this project are subordinated to a general objective and to work objectives. The priorities are to capture the specific needs of each community (these depending on the socio-economic and cultural background) and identify suitable means of intervention, and also to promote communication between partners and the need to learn from one another within a broad multinational and multicultural context.

This qualitative and quantitative analysis serves as support for the elaboration of an intervention plan adapted to the needs of each specific community and thus different in each of the six partner countries. In order to evaluate the effectiveness of the intervention, a new, post-intervention, evaluation was made targeting changes that had occurred in the population's perception of health education messages and their knowledge concerning a healthy lifestyle. Another criterion for the evaluation of the intervention, and, simultaneously, of the success of the project, is the level of community participation in the social information network. If this level increases, and the local information network is maintained after the formal end of the project, the intervention and the project may be considered a success.

Health in Romania and Sweden

In Romania, health care is generally poor by European standards, and access is limited in certain rural areas. A Brussels-published EU report (March 2009) - *Empowerment of the European Patient, Options and Implications* - places Romania 30th in terms of health information. The report concludes that Romania offers its citizens very poor information and knowledge concerning health, even poorer than in other East European countries. The areas evaluated were: patients' rights, health information, technologies in the health system and financial remuneration. Their conclusion: Romania needs to invest more in its health system and in health education.

The National Health System is a public system guaranteed by law. Every employee contributes to a public health fund which ensures emergency health care, primary care, hospitalization costs and a part of the cost of medication. There is also a private health sector which is relatively new, is growing and offers mainly outpatient medical care. There are very few private hospitals, but there are a number of private practices which are well-equipped and offer a higher level of health care. Private health insurance has developed slowly. Because of low public funding, about 36 percent of the population's health care spending is out-of-pocket (Library of Congress/Federal Research Division, 2006, p.10). The health system suffers from practical problems and a negative mentality impacts the quality of its service.

At national level, 87% of people between 15 and 60 years old express themselves interested in health information. This information is found by 38% on the Internet (specialised sites), while 31% find this information from TV, magazines and newspapers. Only 4% seek health information from specialised sources (general practitioners or specialised journals). Well-educated women between 45 and 60 years old in top jobs are the most interested in obtaining health information. Their resources are specialised journals, specialised columns in newspapers and their physician. Unfortunately, most of the people interested in health information prefer to find this information from TV shows and Internet sites, which they access for this purpose 1-4 times a month.

The most important national campaigning concerned with health education is carried out via the Romanian TV channels. There are a number of TV Spots which highlight and raise awareness of various health issues: "The excessive consumption of salt, sugar and fat is bad for health".

Sweden (9,182,927 inhabitants) has 290 municipalities and 21 county councils. Most public health work is undertaken at the local level by the county councils, the municipalities and by non-governmental organizations. Preventive and population-oriented health care have been integrated into primary health care. There are today three main authorities responsible for public health information.

The Swedish National Institute of Public Health (SNIPH) works to promote health and prevent ill health and injury, especially for those population groups most vulnerable to health risks. Because most public health activity in Sweden takes place at the local and regional level, the majority of the Institute's work is directed towards staff, managers and decision-makers within municipalities, county councils, larger regions and other organizations. The National Food Administration (NFA), the central supervisory authority for matters related to food, has the task of protecting the interests of the consumer by working for

safe food of good quality, fair trade practices, and healthy eating, i.e. dietary recommendations. The National Board of Health and Welfare, a government agency under the Ministry of Health and Social Affairs, has a wide range of activities and duties within the fields of social services, health and medical services, environmental health, communicable disease prevention and epidemiology. One of their latest publications is their seventh environmental health report, issued in 2009 (Ministry of Health and Social Affairs 2009).

All county councils have websites where information (publicly and privately provided) about health care services can be found. Special health education programmes related to tobacco, diet and alcohol awareness are all functions typically carried out by general practitioners. The municipalities are responsible for the major part of local environmental policy, including disease prevention and assessment of food quality. Health journalism plays an important role in public health. Daily papers are the most common source of information for Swedish people on issues like diet and health. In addition, communicating via the Internet and a variety of websites is common practice for national authorities, at both regional and local level. Leaflets are directed to specific target groups and address health problems that are relevant to these groups. Campaigns are another opportunity to communicate, but during recent years this method has not been used so frequently, since evaluations have shown the relatively poor results of such efforts. And, of course, warnings (on food, alcohol and tobacco products) also exist.

The findings of a recent master's thesis (Garpe, 2009) show that those responsible for information on healthy diet believe that there are difficulties in reaching out with such information because of the current information environment. However, they all agree that the responsibility for an individual's health rests ultimately with the individual. The main results from the present study show that younger and older participants perceive and receive health information in slightly different ways. Younger respondents receive health information via the media and their family, while older respondents receive their health information from their doctor, including information concerning specific issues, e.g. how to maintain a healthy diet.

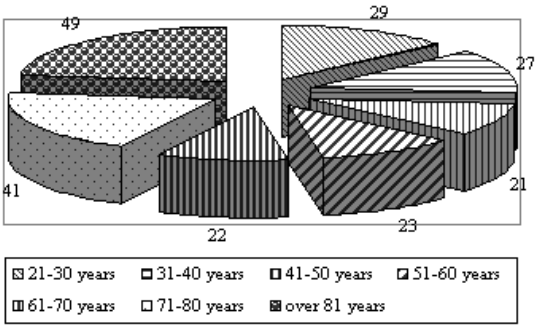

Figure 1. Romanian sample: age structure

Method

To implement the project each partner country has chosen an urban area, taking into account certain criteria of similarity.

Romania has chosen Dumbrăviţa as the community to investigate. Dumbrăviţa is a local community in Timiş, a western county of Romania. It is located just north of Timişoara. As result of the city's development, many people from Timişoara have built homes in Dumbrăviţa, which is well on the way to becoming a suburb of the city. This development has divided Dumbrăviţa into two different areas: the old part of the community, which functions as a village, and the new very much more prosperous residential area. This new area has raised the socio-economic status of Dumbrăviţa.

Dumbrăviţa has an area of 18.99 km^2 of which 112,497 m^2 is residential. It also has a lake and a forest. Socio-demographic data show a total of 2,915 inhabitants living in 1,417 households, with a density of 153.5 inhabitants/km^2.

The urban area chosen by Sweden is Eriksberg, situated on a hill in the central part of West Uppsala and located about three to four kilometres from the city centre. The urban area is surrounded by green spaces and a city forest with several walking trails. The busiest place is *Västertorg* Square, where most of the economic infrastructure is concentrated. The majority of its inhabitants like living in Eriksberg and have no desire to move.

The population of Eriksberg is 6,703 (46 percent male and 54 percent female, cf. Uppsala as a whole with 49% and 51% respectively). Nineteen percent are older than 65 (Uppsala 14%; Sweden 16%). In the urban area, 21 percent of inhabitants have a non-Swedish background (Uppsala 19%; Sweden 17%).

The investigation of the population involved both qualitative and quantitative research. In every country involved in the project, 200 households were investigated quantitatively and 20 qualitatively. For this purpose, quantitative and qualitative instruments were developed, taking account of local particularities so that they could be applied in different cultures.

In Romania, the quantitative research was carried out on 90 elderly people (60-85 years) and 110 people aged beetwen18 and 60. Of the whole sample 112 are female and 87 are male, 96 are pensioners and only 73 work fulltime.

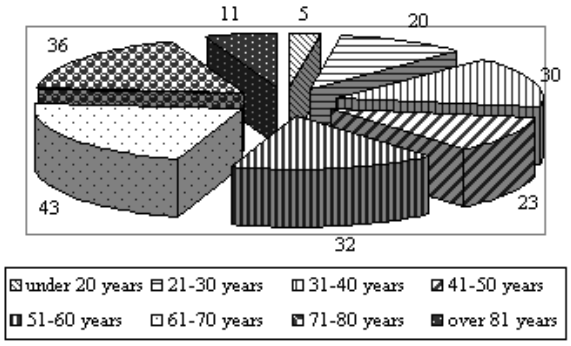

Figure 2. Swedish sample: age structure

In Sweden, 212 participants aged between 21 and 81+ were investigated, with an age distribution of 21-60 years (48%) and 61-81+ (52%), 34 percent men and 66 percent women. More than half of the informants (55%) had completed high school, whereas about one fourth (26%) had had limited education.

Romania and Sweden focused on the elderly as the disadvantaged social group. The current study offers a comparison between Romanian and Swedish elderly folk in terms of their attitude towards health.

Results and discussion

The results highlighted a number of similarities but also significant differences between the Romanian and the Swedish groups.

Concerning the importance of health in their lives, the Swedish group think to a greater extent than the Romanian group that health is very important ($\chi^2(2)=6.746$, $p< .01$). And at the same time a higher proportion of Swedish respondents evaluate their health as "good" compared with people in Romania ($\chi^2(4)=16.024$, $p< .01$).

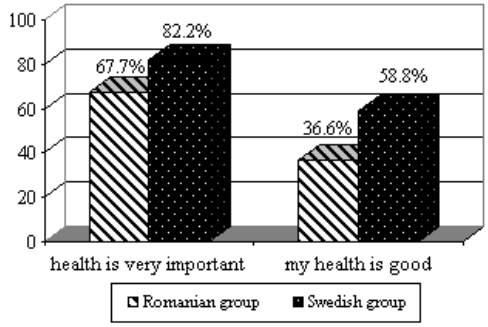

Figure 3. Health status and the importance of health

Surprisingly, some of the Romanians who had been diagnosed as suffering from diseases evaluated their health status at a higher level. This shows that they are not aware of what good health means. As an example, high blood pressure is such a common disease in Romania that nobody mentioned it as a health problem. Romanian people do not know the difference between high and low blood pressure and are not consistent in taking prescribed medication (they either do not take it at all or discontinue the course).

A point that reinforces these results is the fact that people in Sweden have a higher life expectancy than Romanians, who think that health is related to youth and you that you cannot be healthy after the age of 50 ("it's pointless for the elderly to go to the doctor because he can't give them back their health/youth").

A similarity between the Romanian and Swedish groups of elderly people was noted in their levels of health information. Both groups said that they were well-informed about health.

In a separate questionnaire regarding hygiene issues (n=127) among the elderly in Sweden (70+) 20 percent reported that they normally check raw minced meat by tasting it. It should be emphasized; this is not recommended by the National Food Administration (2009) due to the risk from pathogenic bacteria.

The qualitative interviews from Sweden showed that the elderly often feel they have enough knowledge about handling food and that they do not see the need for additional information. The elderly were not aware of the temperatures in their refrigerators, nor did they know about temperature differences on different shelves, although they did consider themselves to have a sound knowledge of how to handle and store foods (Lundmark, 2008). Such attitudes might be an obstacle to accessing further information. In general, Swedish people are not very aware of good practice for cold food storage (Marklinder et al, 2004). In Romania, the elderly claimed that they knew the rules for a healthy life, but that they did not follow them because they could not afford a healthy life and their habits were stronger than these rules.

Referring particularly to the level of information on healthy nutrition, statistical data do not indicate significant differences between the two groups ($\chi^2(2)=0.798$, $p> .05$).

These results are unexpected considering the fact that a significantly higher number of information and education campaigns about healthy nutrition are organised in Sweden. The elderly in Romania have a false impression of their level of knowledge about healthy nutrition, illustrating the principle "the more you know, the more you realise how little you know".

The results of the study reveal significant differences between the two groups in terms of sources of information about health. When seeking information related to health, the Swedish group ask their friends ($\chi^2(1)=5.994$, $p< .05$), look in newspapers ($\chi^2(1)=12.577$, $p< .01$) and get information from institutions, associations and clubs ($\chi^2(1)=4.091$, $p< .05$) more than the Romanian group do. By contrast, the Romanian group get their health information from family ($\chi^2(1)=9.109$, $p< .01$), doctor ($\chi^2(1)=4.900$, $p< .05$) and TV ($\chi^2(1)=16.218$, $p< .01$) more than the Swedish group do.

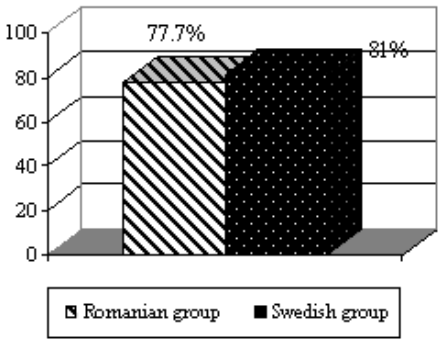

Figure 4. The level of information on health regarding nutrition

The differences regarding friends and family as a source of health information are due to the structure of the households in these two neighbourhoods. In Romania, 2 or 3 generations live in most of the houses and the maximum ratio between the number of people living in a house and its number of rooms is 2:1. Therefore the extended family is the main network of support and information and there are few social networks in the community. In Sweden, almost half of the informants lived alone (47%) and a further third (32%) lived with one other person. The largest household type in this study consisted of five people (2%). In this context, it can be seen as natural that Swedish people look for health information in sources external to their households, such as friends, newspapers and associations. In Romania, social networks are underdeveloped and there are no clubs or associations where people can interact and share their problems. Thus they are not used to seeking help from outside their households.

The qualitative study showed that the elderly associated health information with doctors and diseases, not with preventive care, physical exercise or diet. In Romania, being ill is associated with a number of prejudices such as the idea that to be ill is something that has to be hidden from others, with the result that such problems are regarded as only to be discussed with family members.

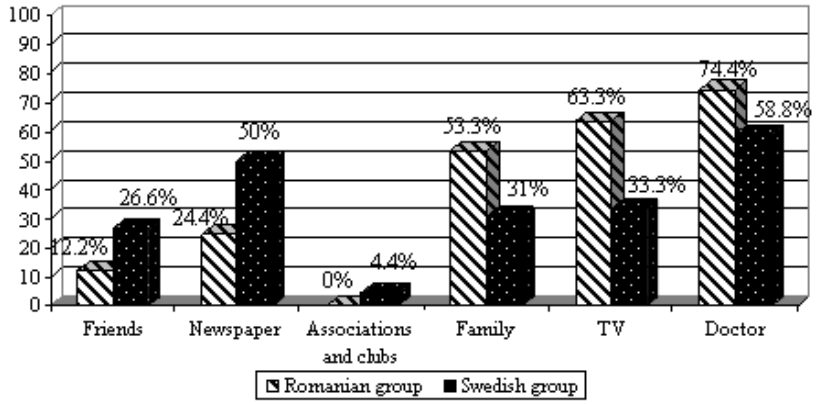

Figure 5. Sources of health information

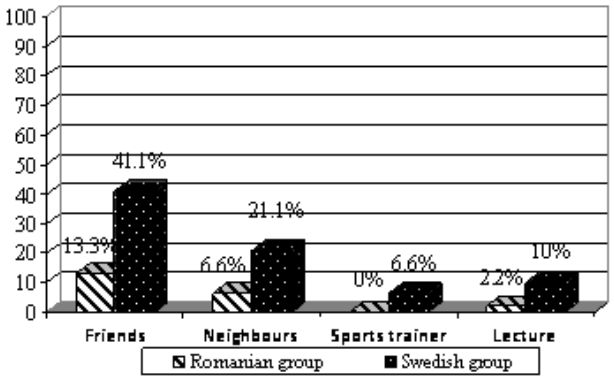

Figure 6. Sources of help in health problems

Physical activity is an important aspect of health and the level of involvement in it gives us important information on how people take care of their health. In Sweden there is a high level of interest in sports activities. The Swedish group would like to have increased opportunities to engage in physical exercise, e.g. for there to be a health centre with a swimming pool or a gym for elderly people in their area. Of the entire Swedish sample, 48 percent agreed/agreed strongly that they were interested in active sports. People living in Eriksberg often go to the city centre for their activities, such as sport clubs or various courses. By contrast, in Romania people questioned claimed that they were engaged in activities such as walking or cycling for a few hours a week, but these activities are not carried out with the explicit goal of improving or maintaining health. These are rather daily activities they need to do in their house or garden, or at their work. Romanian elderly people tend to perform physical activities in their personal spaces to a greater extent than the Swedish elderly ($\chi^2(1) = 15.497$, $p < .01$), who carry out physical activities in fitness studios. This idea is also supported by the fact that 30% of the Romanian group disagreed with the statement that they were interested in active sports. In Dumbrăviţa there are no sports clubs or fitness centres and people did not report this kind of physical activity. This is a reason for the fact that only in Sweden is the trainer seen as a source of support in times of health problems.

Concerning their level of information about physical activity, the Swedish group considered that it was well-informed, to a greater extent that the Romanian group ($\chi^2 (2) = 8.514$, $p < .05$). The same trend is seen when they responded to an item about the importance of daily physical exercises for health, with the Swedish group expressing greater agreement with the statement ($\chi^2 (2) = 22.047$, $p < .01$).

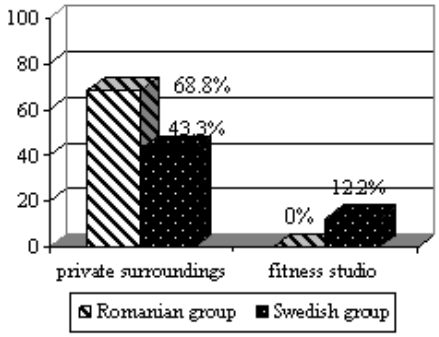

Figure 7. Spaces to perform physical activities

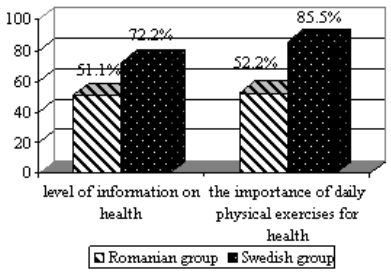

Figure 8. Physical activity and health

The study also highlighted some differences in the eating habits of the two groups of subjects. In the Swedish sample more than a third of subjects consumed whole grain bread several times a day (34%). About half of the sample (48%) reported eating oily fish once a week, while a fifth (20%) reported eating oily fish several times a week. According to recommendations, these intake figures are too low. Regarding the fat quality of their diet, 37% of respondents reported an almost daily intake of oil, while only seven percent reported consuming this food item daily. A significant minority (30%) of the sample reported consuming margarine several times a day.

In comparison, in the Romanian sample more than 50% of the people questioned seldom or never eat whole grain bread, cereals, oil, butter, organic products, or mineral or vitamin supplements. Only 19% of the Romanian elderly people reported eating oily fish several times per week, while most of them (39%) seldom or never eat this kind of fish. A large proportion of the Romanian sample (more than 50%) reported consuming unhealthy products such as margarine and cakes every day.

Regarding the consumption of fruit and vegetables, over 50% of both groups said that they consumed these kinds of products daily. In Romania, the high number of people who reported consuming fruit and vegetables daily can be explained by the fact that the evaluation was made during the summer when these products were available from their own gardens. We assume that this tendency is not maintained during the seasons when they have to buy such products.

An interesting aspect of the consumption of fruit and vegetables is that although Romania has not had "5-A-Day" campaigns, more of the Swedish elderly people than the Romanian elderly people said that they did not know what this phrase meant ($\chi^2(4)=13.113$, $p< .01$). However, we can see that although they think they are more informed on this subject, the Romanian elderly gave more wrong answers than the Swedish elderly. In the Romanian sample a discrepancy can be observed between their general impression of being informed concerning health and the real level of knowledge.

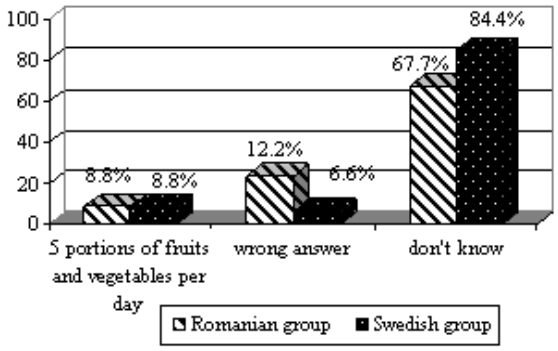

Figure 9. The meaning of "5 a day

In Sweden, only a minority (8,8%) knew what "5-A-Day" meant. According to the recommendations of the NFA (National Food Administration), some people living in Eriksberg should increase their consumption of fruit and vegetables to 500g a day. These results are in line with earlier studies carried out in Sweden (Nydahl et al, 2003; Nydahl et al, 2009). However, many eat fruit and vegetables regularly, and a majority of the sample (82%) agreed with the statement "to keep healthy I eat fruit and vegetables every day". Furthermore, it was shown that those who were familiar with the "5-A-Day" message also reported more frequent consumption of fruit and vegetables.

Cigarettes form part of daily life for most of the people interviewed. The difference between the two groups is that the elderly people in Romania considered, to a greater extent than the elderly in Sweden, that in order to be healthy it is important not to smoke ($\chi^2(2) = 16.107$, $p < .01$).

Conclusions

Attitudes about health and our behavior in terms of maintaining health are very different in Romania and Sweden. These differences very likely reflect the level of information on health, nutrition, physical activity and sources of information. In Romania the level of information on health and interest in health and how to maintain it are all at a lower level than in Sweden. This may be due to the lower standard of living, the lower socio-economic level, but also because of lack of education and of health information programs. The lower interest in health among the elderly in Romania reflects the problems of the national health system. Household structure and the level of social network development in the neighborhoods studied also have an impact on how people get health information.

The most obvious differences between the two groups of subjects relate to the fact that in Romania the elderly are not aware of their low level of health information and are resistant to changing their unhealthy habits.

The results of the study provide very important information about the need for health education in Romania. We consider it a priority to develop and implement a health education program which can encourage personal involvement in self health care in a way that takes realistic account of the low level of social cohesion.

References

Garpe, J. (2009). *The publicly found information and communication about healthy diets*. Unpublished master thesis, Uppsala University Sweden.

Health Consumer Powerhouse. (2009). The Empowerment of the European Patient 2009-options and implications. Report. (Health Consumer Powerhouse AB), Brussels.

Library of Congress/Federal Research Division 2006, Country profile: Romania. Retrieved 04.09.2009 from http://memory.loc.gov/frd/cs/profiles/Romania.pdf

Lundmark, L. (2008). *Cold storage of risky foods – habits and need of information.* Unpublished master thesis. Uppsala University Sweden.

Marklinder,I., Lindblad, M., Eriksson, L.M., Finnson, A.M. and Lindqvist, R. (2004). *Home storage temperatures and Consumer Handling of Refrigerated Foods in Sweden.* Journal of Food Protection, 67-11, 2570-2577.

Muller, M. (2005). *Gesundheit und Ernährung - Public Health Nutrition*, Stuttgart: Eugen Ulmer.

National Board of Health and Welfare, Nordic council of Ministers. (2004). Nordic Nutrition Recommendations. Integrating nutrition and physical activity, Fourth edition, Copenhagen, Denmark.

National Food Administration. (2005). Swedish Nutrition recommendations. Fourth edition.

Nydahl, M., Andersson, J., Sidenvall, B., Gustafsson, K..,Fjellström, C., (2003). *Food and nutrient intake in a group of self –managing elderly Swedish women.* The Journal of Nutrition, health and Aging, 7-2, 67-74.

Nydahl, M., Gustafsson, I-B., Mohsen, R., Becker, W. (2009). *Food and Nutrition Research*, 1, 1-8.

Wilkinson, R.G. (2001). *Kranke Gesellschaften. Soziales Gleichgewicht und Gesundheit*, Wien, New York: Springer Verlag.

World Health Organization, (2003) Technical Report Series, *Diet, Nutrition and the Prevention of Chronic Diseases,* Geneva: WHO.

World Health Organization, International Centre for Health and Society (2004), *Social Determinants of Health: the Solid Facts*, Geneva: WHO