Communication Resources to Improve Eating Patterns in Rural Areas

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Abstract. The authors describe a project aimed to improve health behaviour in the context of rural development by implementing a community network and using communication resources. The research has investigated the attitudes of inhabitants of a particular local area towards health and nutrition. The study included a sample of 200 participants whose responses were collected using a quantitative questionnaire, of which 20 were also investigated qualitatively by means of more in-depth interviews. The research was performed in a rural area near Timişoara.

Results show that social commitment is poor, and health and nutrition are not a typical lifestyle change priority for such people. The main sources of health information for these people include a doctor, television, and the family, while the sources neglected include the Internet, the pharmacy, and the education system. Only 16% of the people questioned considered that it would be easy to implement health information in their daily lives, possibly reflecting their ingrained habits and low incomes. As regards their reported eating behaviour, the results show that more than 50% of people daily eat white bread several times; rice and cake feature on the tables of 40% of the subjects several times a week; more than 50% of people eat margarine and drink coffee every day. They seldom or never eat whole grain bread, cereals, oil, vitamin supplements or organic products.

A local network was established to improve the level of health awareness and healthy behaviour in the community as a result of cooperation with stakeholders, the local council and the head teachers of the school and the kindergarten, by publishing articles on these topics in the local newspaper, improving meals the children receive in the kindergarten and the school, and organising local events on health issues.

Key words: eating behaviour, communication resources, community network.

Introduction
In recent years, the Eastern European countries have been experiencing a striking development of rural areas. Villages have begun to modernise and peripheral areas close to cities have become residential areas. Thus some rural areas now include both a part where people keep to the old customs and traditional methods of communication, and a new part which is modern, with a city-type lifestyle, with less involvement of residents in rural life but greater openness to outside opportunities.

Despite these changes in rural areas, some aspects of life there have remained underdeveloped and deficient. One of these aspects relates to health and everything connected to it: nutrition, healthy lifestyle, physical activity, hygiene etc. It is reflected in a high incidence of chronic diseases, e.g. type II diabetes, overweight, obesity and coronary heart disease (WHO 2003, WHO 2004). Romanian rural areas are proverbial for their plentiful food but unhealthy diet due to the sedentary lifestyle of residents and their lack of preventive health care behaviour. Unhealthy eating habits have been the rule here for many years and the authors have observed that these patterns are not changing there.

To back up these statements the authors can point to the high number of deaths caused by cardiovascular diseases, in which unhealthy eating habits represent an aggravating factor.
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. It means that the active role in health promotion has to pass from the expert and the provider of intervention to the recipient. Communication should not go from the outside to the inside but should rather be directed from the inside to the outside. It means that the given resources of communication of a local community have to be analysed, and the participation and involvement of the inhabitants guaranteed at the same time.

Both quality and quantity of health information influence 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 communication network around them to help them perceive the right information in the right way.

Food marketing forms part of health information. It is important to establish people’s competence to evaluate advertising messages as true or false by offering specific courses. People can be made resistant to deceptive food messages if their life skills are reinforced. The local network would be an appropriate structural environment within which to support good health competence.

Communication is an important basis for learning. People learn by communicating and reflecting on their lifestyle, their plans for the future and health knowledge. Hence the aim of this study is to improve health behaviour in the context of rural development by implementing a community network and using communication resources. The study is part of a European project financed by the European Community through a Grundtvig programme.

**Description of the project**

**Research aim:** Taking account of the variety of approaches observable in the 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, the United Kingdom, 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 is the idea that the local community to which a person belongs is able to influence his/her 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 programme 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 population, disadvantaged social groups such as the elderly and immigrants, which present an increased need for support. The idea behind choosing these groups is that they will become better integrated through the stimulation of participation and motivation.

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 as well as 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 intervention efficiency, a new, post-intervention, evaluation was made identifying 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. The intervention and the project may be considered a success if this level increases, and the local information network is maintained after the formal end of the project.

**Methods**

The project through quantitative and qualitative research has studied the attitudes of inhabitants towards health and nutrition. The study covered 200 households, which were investigated quantitatively, of which 20 households were also investigated qualitatively (by means of more in-depth interviews). The quantitative study involved 90 elderly (60-85 years) and 110 younger people aged between 18 and 60 years. The whole sample comprised 112 were female and 88 male, 96 pensioners and only 74 people working full time.

The study was carried out in the historically rural area of Dumbrăviţa, which 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, thus developing a suburb into a 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. The new area has also raised the socio-economic status of Dumbrăviţa.

Dumbrăviţa has an area of 18.99 km² of which 112,497 m² is a residential area. It also has a lake
Results and discussion

The research provides important information on health behaviour in Dumbrăvița. Some notable patterns emerge from the analysis of the provided responses.

Results show that despite the fact that people are pleased with the development of their village; their level of social commitment is poor. The general impression of their locality is very positive; they appreciate that the school, kindergarten, parks, local council offices and churches have been renovated and that they now have all the necessary utilities (gas, water etc.), and they feel safe living in Dumbrăvița. People in Dumbrăvița consider three areas of their locality to be very important. The public green area is important for 86% of people, health services for 85.5% and churches for 81% of people out of the whole sample. On the contrary, social and sports clubs are considered "not at all important". Although respondents generally have a very good impression of the area they live in, only 18% of those questioned considered it important to take shared decisions in the community. It is both symptomatic of and contributory to poor levels of civic communication. Despite the significant development of this rural area, social and communication networks have remained underdeveloped.

The interest and involvement of the local administration in community health is very low; the community cohesion is also limited, and people do not consider that the administration should be taking initiatives to improve the community health. A very small share of people is involved in clubs or organisations, and hardly anyone turns to the local administration for health information or help.

Health is a “very important” consideration for 67% of people questioned, although only 47.5% of them evaluate their health as "good". They also think that someone's health is very much related to their destiny; most of them are also very fatalistic about health and believe that there are people who are sick and others who are healthy. At the same time health is associated with youth, and one cannot expect to be healthy after the age of 50. An interesting idea about health is that the elderly think it is easier for those who are young to keep themselves healthy, since life is not as difficult nowadays as it was when they themselves were young.

For most of the people interviewed “to be sick” means the need to go to the doctor or to keep to one’s bed. A healthy person, by contrast, is someone able to work, and who does not have to take any pills. For most respondents taking care of their health it means avoiding anything that makes them sick,
especially bad food, keeping in shape by working and being careful about hygiene.

When evaluating their health status, most often respondents gave themselves 8 points out of a maximum of 10, where 10 signified “perfect health”. The score was not always related to the number of health conditions people reported. Surprisingly, some of the people questioned who had been diagnosed as suffering from specific conditions evaluated their health status at an even higher level. It shows that they are not really aware of what good health means. As an example, high blood pressure is such a common condition in Romania that nobody mentioned it as a health problem. The people questioned did not know the difference between high and low blood pressure and were not consistent in taking prescribed medication (they either do not take it at all or discontinue the course). Their reasons for not following the treatment are that they think it is very expensive or that they are not even convinced they are sick, because different doctors give different diagnoses or treatments to the same patient.

Although the results convey a general impression across the whole sample that respondents feel themselves to be very well informed about health and health behaviour, there is much evidence in other responses to the questionnaires that the opposite is true. More than 50% of the studied group think that they are well informed about healthy behaviour concerning physical activity, nutrition, mental and social wellbeing, however almost 80% of them do not know what the phrase “5 a day” means, while about 20% think that they can keep uncooked minced meat in the fridge for as long as seven days. 95.5% of people questioned consider that in order to be healthy it is important to wash one’s hands after using the toilet and to keep the fridge at the correct temperature.

The low interest in communication networks in the community is also shown by the fact that people look for health information from internal sources (family, relatives, TV, and doctor) more than from external ones (neighbours, friends, courses, associations and clubs, local administration). About 66.5% of the whole group say that they get health information from the doctor, 63% from TV, and 50% from family members, with only 14% of people getting information about health from the pharmacy, 9.5% from their neighbours and 12% from friends. It is striking that not even one person mentioned the local administration as a provider of health information. Most people (about 80%) in the study group say that they ask for help if they have a problem concerning health: about 40% of a doctor or their family and only 1-2% through attending a meeting or a lecture.

The results regarding the sources of health information can be explained in terms of the structure of households in this area. In Dumbrăvita, most of the houses contain members of two or three generations and the maximum ratio between the number of

![Figure 3. Share of respondents placing health in offered categories](image1)

![Figure 4. Share of respondents considering themselves to be well-informed about different factors conducive to health](image2)
people living in a house and its number of rooms is 2:1. The extended family is therefore naturally the main network of support and information. Wider 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.

Only 16% of people claim that it is easy to implement health information in their daily life; a part of the explanation could be the fact that almost 40% of them think they would need to spend more money in order to buy healthy food.

Regarding nutritional patterns there are no specific rules such as having a programme for meals. Most respondents eat two or three meals a day, with irregular snacks between them that are more mood (appetite) driven than “real snacks”. Even people who declare that they follow a diet do not follow rules drawn up by a specialist; they simply give up certain sorts of food that they think are not good for them.

Coffee and cigarettes form part of the daily pattern for most respondents. Bad nutrition habits are supported by a variety of popular ideas that are treated as axioms: “You can’t fight your appetite!” and “It’s not the meal which makes you fat, but the crunching!”

As regards their eating behaviour, more than 50% of the studied group report eating bread several times a day; rice and cake appear “several times per week” on the tables of about 40% of respondents. Fifty per
cent of the whole sample report eating potatoes with a similar frequency. More than 50% of those questioned eat fresh fruit, vegetables, and margarine daily, while they consume whole grain bread, packet breakfast cereal, oil, butter, organic products, and mineral and vitamin supplements or wine seldom or never. About 20% of respondents seldom or never eat milk or cheese. The high share of people who reported consuming fruit and vegetables daily can be explained by the fact that the evaluation was made during a summer, when such produce was available from their own gardens. The authors assume that this tendency is not maintained during the seasons when respondents would have to buy such items.

Physical activity is an important aspect of health and the level of involvement in it gives the authors important information on how people take care of their health. People questioned in Dumbrăviţa claimed that they were engaged in activities such as walking or cycling for a few hours a week, but these activities were 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. People tend to perform physical activities in their personal spaces such as garden or yard; 30% of the group disagreed with the statement that they were interested in active sports. There are no sports clubs or fitness centres in Dumbrăviţa, and so people do not report this kind of physical activity.

The research results provide very important information about the need for health education in Dumbrăviţa. The authors consider it a priority to develop and implement a health education programme, which takes account of the existing low level of social cohesion and which can encourage personal involvement in self-health care.

Conclusions: Improving health through communication resources

The authors have developed an intervention programme which aims to create social networks that will improve health behaviour through communication.

In order to create a complex communicational network, the authors involved people from various levels of the local administration. The authors obtained the participation of different local institutions and companies as sponsors and partners. The authors also obtained the support of the local mayor and the local administrative council for the study initiatives; these also provided rooms for meetings and expressed willingness to support the development of a local community network for promoting healthy living. Local churches and schools also helped with publicity. The teachers were involved in the organisation of a special meeting aimed at improving knowledge of healthy eating habits of children. Information letters sent to all inhabitants were used to publicise the programme of meetings.

The intervention programme consisted of five meetings with the community members. The authors’ purpose was to offer information about healthy eating behaviour and to stimulate the interest and participation of all members of the community in developing a local communication network to ensure the success of the intervention.

The first meeting:
- presentation of the project: outlining the purposes of the study initiative and short and long term intentions in the community;
- presentation of the results of the initial quantitative and qualitative studies regarding households’ resources, limitations and needs for information;
- general information on healthy food: advice and rules for a healthy diet, presentation of the most healthy kinds of food (with examples); the enemies of a healthy diet.

The second meeting:
- presentation of the risks of unhealthy eating habits – discussion of the most significant conditions due to an unhealthy diet: diabetes mellitus, coronary heart disease and hypertension, ulcers, colitis;
- practical activities: measurements for the establishment of arterial pressure and body mass index, with practical advice for dealing with any health problems.

The third meeting:
- a healthy diet can often be more expensive. The authors therefore tried to demonstrate “how we can eat more healthily for the same money” and to present options for healthy eating behaviour.

The fourth meeting:
- discussion of the healthiest diet for children: the risks for child development of an unhealthy diet;
- advice to parents about how to create healthy eating habits in their children;
- practical activities with children: games to try to convince children of the benefits of a healthy diet.

The fifth meeting:
- final analysis of the intervention programme;
- discussion of the possibility of initiating local projects and a network for promoting health information;

Almost 50% of the participants considered that the intervention programme had influenced their health behaviour significantly. The programme was successful and had a great impact on the community. As a result of the intervention programme some teachers from the local school introduced a number of topics on healthy behaviour and nutrition into their teaching programme. In addition, the kindergarten menu was modified to take account of the information given during the programme. The success of this intervention programme underlines its importance and also suggests how relevant such programmes are for Romanian communities. The social and communication networks developed during the intervention give it a high medium- and long-term sustainability in promoting and developing health behaviour.
Bibliography