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HEALTH-RELATED QUALITY OF LIFE AND SOCIAL CAPITAL AT A COMMUNITY LEVEL – A REVIEW AND RESEARCH

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ABSTRACT

Health is a social phenomenon. The objective of this paper is to explore the concepts of Health-related Quality of Life and Social Capital and to present preliminary results from a study at a small area level, a part of which analyses the influence of social capital on health-related quality of life in the community. After reviewing definitions and the rise of interest in the links between health-related quality of life and social capital, data from a quantitative research on health-related quality of life, using EQ-5D questionnaire, is presented and a brief analysis of the influence of some health determinants. Our key message is that implementing strategies and initiatives which facilitate social capital may foster health and health-related quality of life.

Key words: Health-related quality of life, social capital, community, EQ-5D – questionnaire

INTRODUCTION

Health is a positive concept. There is a growing interest on how the individual perceives her/his own health and what can be done to improve it from a health promotion perspective. Moreover, social hypotheses are being reborn in health (1).

The objective of this paper is to explore the concepts of Health-related Quality of Life and Social Capital and to present preliminary results from a study at a small area level, a part of which analyses the influence of social capital on health-related quality of life in the community.

CONCEPTUAL REVIEW

HEALTH-RELATED QUALITY OF LIFE (HRQOL)

Quality of life has proven to be a resolute and expanding concept. Quality of life has been receiving significant attention in public health and other health-related services over the past years. This attention is part of a strong general interest in (a) the quality of a wide variety of services, (b) the quality of outcomes that result from those services, and (c) optimizing quality within the lives of individuals at a personal level. Taken together, these amount to what Schalock has termed the "quality revolution" (2).

In public health research the "quality of life" concept is often analyzed in the frame of "health-related quality of life". The concept of HrQoL and its determinants have evolved since the 1980s to encompass those aspects of overall quality of life that can be clearly shown to affect health—either physical or mental (3). In research the terms HrQoL, health, functional status and health status are used interchangeably (4).

HrQoL is rapidly gaining acceptance as a measurable outcome. HrQoL questions about perceived physical and mental health and functioning have become an important component of health surveillance and are generally considered valid indicators of service needs and intervention outcomes. Self-assessed health status has proved to be a more powerful predictor of mortality and morbidity than many objective measures of health (5).

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The HrQoL field has achieved some level of **consensus on the definition of HrQoL. It is generally agreed that HrQoL encompasses functioning and well-being in physical, mental, and social dimensions of life. Functioning refers to the ability to perform as well as the performance of daily activities ranging from the most basic self-care activities to very advanced activities such as running a mile. Well-being refers to perceptions such as pain and energy and how one feels about life in terms of happiness, anger, anxiety, depression, and global perceptions of quality of life (6).**

There is a growing interest in the social determinants of health and HrQoL (7-8).

Social support and good social relations make an important contribution to health. Social support helps give people the emotional and practical resources they need. Belonging to a social network of communication and mutual obligation makes people feel cared for, loved, esteemed and valued. This has a powerful protective effect on health. Supportive relationships may also encourage healthier behavior patterns (9).

All the facts above give an impetus to our research interest in SC.

SOCIAL CAPITAL (SC)

SC has to be an assertively evolving concept. There are more and more proves to the thesis that SC is the "missing link" as well as the "potential cure" while overcoming constrains in the sustainable development of a country (10-12). On the other hand, there are a lot of fields and academic disciplines which contribute in measuring and assessing SC (13). SC is viewed as a determinant of human health (14-15).

SC is about development of the local community, enabling people to experience the support, care and friendships that come from relationships with others. Also providing opportunities to engage and involve people to become full members of a community, where they can have a voice and influence decisions that affect their life. A number of definitions of SC have been revised, and we have chosen to use the OECD and the World Bank ones: **"networks, together with shared norms, values and understandings which facilitate cooperation within or among groups" (16). SC is the social wealth comprising of mutual trust, social networks and the participation of these networks. There are plenty of theories and classifications of SC. A consensus has been reached that SC is multi-dimensional in its nature** (17).

As a concept SC originated at the end of the 20th century in the works of Bourdieu (18) and Coleman (19-20). Coleman creates the idea of the *vertical* social relationships among individuals which are characterized with hierarchical relations and difference in power distribution. Later to the vertical social relationships and norms are added the civil rights, political system relations and other official organizations (21-22).

Putnam in his studies further developed the concept of SC (23). The conclusion he made from his first research in Italy was that the functioning of the governmental and social institutions is highly dependent on the civic participation in a community. Putnam (24) classifies SC as a term incorporating *horizontal* social relations among people. SC is either participation in different informal networks or a membership in formal civic organizations. SC comprises from the neighborhood initiatives, through leisure activities, to participation in ecological activities or membership in a political party.

Moreover, SC fosters a dynamic process where the community and its members are always increasing their capacity to produce favorable outcomes. It creates *bonding* and *bridging.* There is, however, a distinction as one refers to affective SC (bonding) and the other to indirect SC (bridging). The former concerns the relationships and norms that strengthen the links among groups, and the latter establishes bridges between them (25).

Later on two types of social networks are being defined- Putnamesque and Olsonian (26). Olsonian type are the political parties, trade unions, professional organizations, they can influence positively or negatively the community. Putnamesque groups, are educational, sport, religious and hospitality organizations. They always create a positive impact on the society. The creation of communities and civic networks like neighborhood organizations, choirs, and sport clubs intensify horizontal interactions in the society. The members of such organizations are with comparatively equal rights. The more they are the higher are the opportunities of the

citizens to work for the good of the society. Why is that? (23): (1) Networks constitute an obstacle for opportunists; (2) They foster robust norms of reciprocity; (3) The networks facilitate communication and thus contribute to growth; (4) They promote the survival of the historical heritage.

There are myriads of publications investigating SC (27-28). To sum up, we can classify SC in two main groups: (A) Horizontal SC (bonding & bridging) – social relationships among people who could be from different social groups but on a similar social level. (B) Vertical SC (linking) – social networks among people with different social status.

There is an international consensus according to which the numerous indicators for measuring SC could be classified in three major groups (29, 28, 30): (1) Social networks – relationships between families, friends and people with common interests; (2) Social norms – mutual values, norms and habits; (3) Social trust- trust in institutions and among people.

With the start of the New Millennium the World Bank increasingly focuses on SC as a prerequisite for sustainable development. SC refers to the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions. Increasing evidence shows that social cohesion is critical for societies to prosper economically and for development to be sustainable. **SC is not just the sum of the institutions which underpin a society – it is the glue that holds them together** (31).

Today SC is perceived as a determinant for successful education, academic performance, intellectual development of children, and productivity at work etc. (32).

The network-based approaches to SC have long theoretical and empirical traditions in social, policy and economic sciences. This approach is crucial for analysis of the social determinants of health (33-34). The relationship between SC and health has been documented since 1901 when a study identified a relationship between suicide rates and the level of social integration (35). Since then research has continued to demonstrate that higher SC and social cohesion leads to improvements in health conditions. For instance, research shows that the lower the trust among citizens, the higher the average mortality rate (36).

Most of the studies on the theory of SC and its influence on health and quality of life are carried out in North America, Western Europe, Japan, Australia (37-42 and many others). In Central and Eastern Europe, and Russia there is a growing interest in the relation between social networks and cohesion among the members of a community and their health status (43-50).

Globally, in health promotion over the last 20-30 years, social health interventions have been somewhat marginalized in an era dominated by interest in traditional cardiovascular disease risk factors (1). Similar trends have been followed in Bulgaria. Nowadays there is a renaissance of the holistic approach towards health and its determinants. Health is not only a medical concept.

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (51).

HRQOL & SC – RESEARCH AND PRELIMINARY RESULTS

The measurement of HrQoL and the links between SC and HrQoL could be a proactive force in public health policy and health promotion initiatives. Therefore, they are becoming an important focus for research especially at a small area level e.g. at a community level, where effectiveness and efficiency of interventions are proven to be higher.

The overall objective of our study **(Note 1)** is to measure and analyze the HrQoL in a community – the town of Burgas and further to assess the influence of demographic, socio-economic and behavioral factors on HrQoL. A special emphasis is made to do analyze the relations between HrQoL and SC through network-based approach. The research did not identify any study in Bulgaria which investigates HrQoL and its relation with SC of the general population, moreover at a community level.

METHODS

A cross-sectional study was conducted in 2011 using a representative sample of the community of the town of Burgas (n=1050, 18 + years old). The survey sample was drawn using the method of two-stage random

selection – first selecting the living area and then randomly selecting respondents from a particular neighborhood- based on age/gender characteristics. The number of the respondents was determined by the official regional statistics for age, gender and number of people living in each neighborhood. The project is under the supervision of the NGO "PublicHealth-99".

Data collected for each interview includes, observations of EQ-5D (the 3 level version), plus an additional questionnaire on age, gender, marital status, religion, ethnicity, educational level, occupation, sports, hobbies, smoking behavior and membership in 2 types of organizations. The collected information allows to measure HrQoL and to analyze the relationship between SC as an essential social determinant and HrQoL.

The **EQ-5D** is a standardized self-administered questionnaire **(Note 2)** which consists of two components. One is a self-rating of health on a 20 cm visual analog scale - VAS ('Thermometer' type) anchored by "best imaginable health state" and "worst imaginable health state." The other component is a descriptive system with five dimensions: mobility, self-care, usual activity, pain/discomfort, and anxiety/depression. Each dimension has three levels designated simply as no problem, some problem, and extreme problem. Respondents rating their health are asked to check the level of each dimension most descriptive of "your health today."

The analysis was performed with SPSS v.12 and was conducted in two parts. Hypotheses were tested using χ^2 -criteria and Student's t-test. The basic results of the survey are shown in the **Table 1.**

Table 1. *Frequency of reported problems.*

Level of problem	Mobility		Self-care		Usual activity		Pain/ Discomfort		Anxiety/ Depression	
	FRQ	%	FRQ	%	FRQ	%	FRQ	%	FRQ	%
No problems	690	65.7	802	76.4	748	71.3	448	42.7	454	43.2
Some problems	348	33.1	230	21.9	283	27.0	560	53.5	489	46.6
Extreme problems	12	1.1	13	1.7	18	1.7	42	4.0	147	10.2

Without any problem in all 5 dimensions are 26.5% (n=278) of the respondents, whereas 52.2% (n=548) reported a moderate problem in at least one dimension; and any extreme problem reported 11.6% of the respondents. The mean state of health recorded on the VAS was 70 (SD±23).

The rate of reported problems is increasing with age ($p< 0,001$); Men reported more problems than women ($p<0,001$); Higher monthly income does not predict better HrQoL. Non-smokers do not declare higher HrQoL than smokers. People who declare membership in club of interest have higher HrQoL. In quantitative phase as a key components of SC were analyzed the relations between HrQoL and membership in the following – Putnamesque groups – (a) club of interest, (b) retirement club and (c) voluntary non-governmental organization-NGO; or Olsonian group – (d) professional organization, (e) political party or (f) students organization. Significantly higher rates of problems were reported by respondents who are not members of a club of interest or retirement club. Membership in NGO is not a sufficiently protective factor while membership in any of Olsonian type organizations is not a health-protective factor at all. More concretely: There is no statistically significant relation between membership in a political party and HrQoL, members do not perceive themselves healthier than non-members - mobility($\chi^2=0,48$, $p=0,79$), self-care ($\chi^2=1,22$, $p=0,54$), usual activities($\chi^2=1,73$ $p=0,42$), pain/discomfort ($\chi^2=5,01$, $p=0,08$), anxiety/depression($\chi^2=2,57$,

p=0,28). The same was registered on the VAS (t= 0,58; p=0,562).

On the other hand, respondents who declared a membership in a club of interest reported significantly lower rates of problems with mobility (χ^2=11,2, p=0,004), self-care (χ^2=11,84, p=0,003), usual activities (χ^2=112,82 p<0,002), pain/discomfort (χ^2=6,8, p=0,034), anxiety/depression (χ^2=8,41, p=0,015) than did those who are not members of such club. A similar pattern was seen on the VAS (t= 4,935; p=0,0001), with significantly higher scores reported from those who are members of a club of interest.

Significantly higher rates of problems were reported by older people who are not members in a retirement club than those who are members: mobility (χ^2=87,83, p=0,001), self-care (χ^2=39,23, p<0,001), usual activities (χ^2=53,95 p<0,001), pain/discomfort (χ^2=67,99, p<0,001), anxiety/depression (χ^2=25,3, p<0,001). Scores of the VAS for the group of non-members were also significantly lower than for respondents who are members of such a club (t= -9,16; p=0,001).

CONCLUSION

Both fields, of HrQoL and SC, continue to develop and enrich their theory and practice. The focus here is on a quantitative analysis in order to measure HrQoL and to test for significant associations between HrQoL and the three groups of determinants, including SC. As Bullen and Onyx (52) state: "In an economic rationalist world where ideology says "if you can't measure you can't manage it", some form of quantitative indicator of social capital is essential. Quantitative methods need to be fleshed out with other more qualitative methods such as the use of case studies and thick descriptions." The authors recognize the importance of using qualitative methods for exploring HrQoL and the links between SC and HrQoL which will be important within the community context. Further, qualitative research is needed and will be performed. Our key message is that implementing strategies and initiatives which facilitate SC-components may foster health and HrQoL.

Note 1. The presented research is a part of a PhD-study, which employs mixed-methods approach, sequential-explanatory mixed-methods design- consists of two phases – quantitative and qualitative. During the first phase is used EQ-5D instrument- Bulgarian version.

Note 2. EQ-5D Questionnaire, Bulgarian version is provided especially for this project by EuroQol Foundation, Rotterdam, The Netherlands (All translation/adaptations of EQ-5D are produced using a standardized translation protocol that conforms to internationally recognized guidelines. These guidelines aim to ensure equivalence to the English 'source' version and involve a forward/backward translation process and cognitive debriefing.)

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