

A RESEARCH PROTOCOL

THE ASSOCIATION BETWEEN SOCIAL CAPITAL AND CERVICAL CANCER PREVENTION IN A SAMPLE OF FEMALE UNIVERSITY STUDENTS

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Abstract

The proposed study design constitutes an attempt to associate social capital and its dimensions with cervical cancer prevention in a sample of female nursing and social work university students. **Aim:** To investigate the knowledge and adequate use of the cervical cancer prevention test (Pap test) in young female university students in relation to their social capital and its parameters. **Material and Method:** A cross-sectional quantitative research design will be used to investigate whether there is an association between total social capital or its dimensions and cervical cancer prevention. Female students who study at the School of Health and Social Sciences of Hellenic Mediterranean University will constitute the study population. The Greek version of the Social Capital Questionnaire will be used for data collection. Statistical analysis will be performed with SPSS. **Expected Results:** Findings of the proposed study will add to the existing theoretical knowledge regarding female cancer prevention among women of the post adolescence age and will further reinforce improvements in the health services on a primary and secondary basis.

Keywords: social capital, cervical cancer prevention, health promotion, education of health professionals

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ΕΡΕΥΝΗΤΙΚΟ ΠΡΩΤΟΚΟΛΛΟ

ΤΟ ΚΟΙΝΩΝΙΚΟ ΚΕΦΑΛΑΙΟ ΚΑΙ Η ΠΡΟΛΗΨΗ ΤΟΥ ΚΑΡΚΙΝΟΥ ΤΟΥ ΤΡΑΧΗΛΟΥ ΤΗΣ ΜΗΤΡΑΣ ΣΕ ΔΕΙΓΜΑ ΦΟΙΤΗΤΡΙΩΝ: ΕΡΕΥΝΗΤΙΚΟ ΠΡΩΤΟΚΟΛΛΟ

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Περίληψη

Ο σχεδιασμός της προτεινομένης μελέτης αποτελεί μια πρώτη προσπάθεια συσχέτισης του κοινωνικού κεφαλαίου και των διαστάσεων του με την πρόληψη του καρκίνου του τραχήλου της μήτρας σε φοιτήτριες Πανεπιστημιακών Τμημάτων Νοσηλευτικής και Κοινωνικής Εργασίας. **Σκοπός:** Να διερευνηθεί η γνώση και η κατάλληλη χρήση των προληπτικών εξετάσεων του καρκίνου του τραχήλου της μήτρας (τεστ Παπανικολάου) σε φοιτήτριες Πανεπιστημίου σε σχέση με το κοινωνικό κεφάλαιο και τις παραμέτρους του. **Υλικό και μέθοδος:** Θα χρησιμοποιηθεί συγχρονική ερευνητική μεθοδολογία για να διερευνηθεί εάν υπάρχει σχέση μεταξύ του συνολικού κοινωνικού κεφαλαίου ή των διαστάσεων του και της πρόληψης του καρκίνου του τραχήλου της μήτρας. Φοιτήτριες από τη Σχολή Επιστημών Υγείας και Πρόνοιας του Ελληνικού Μεσογειακού Πανεπιστημίου θα αποτελέσουν τον πληθυσμό της μελέτης. Η ελληνική έκδοση του ερωτηματολογίου Social Capital Questionnaire θα χρησιμοποιηθεί για τη συλλογή δεδομένων. Η στατιστική ανάλυση θα πραγματοποιηθεί με το SPSS. **Αναμενόμενα αποτελέσματα:** Τα ευρήματα της προτεινόμενης μελέτης θα συμβάλουν στην ανάπτυξη της γνώσης σχετικά με την πρόληψη του καρκίνου της μήτρας σε νέες γυναίκες και θα ενισχύσουν περαιτέρω βελτιώσεις στις υπηρεσίες υγείας σε πρωτοβάθμιο και δευτεροβάθμιο επίπεδο.

Λέξεις κλειδιά: κοινωνικό κεφάλαιο, πρόληψη γυναικείου καρκίνου, αγωγή υγείας, εκπαίδευση επαγγελματιών υγείας

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Introduction

The social capital is an important concept in the fields of social and health sciences, as it summarizes the most important features of social organization that can improve the efficiency of society by facilitating cohesion.¹

Due to the fact that social capital involves many different components, there are multiple definitions of the term, often contradictory.² Initially, a question of whether social capital was an individual or a social characteristic emerged. Indeed, the concept, as first determined, referred to the sum of characteristics that help a person evolve, and which are met in family relations or other social interactions. Therefore it was used mainly to describe the existence or lack of individual, but not social skills.³

Afterwards, many social researchers supported that social capital had simultaneously an individual and an ecological characteristic.^{1,2} Putman, who is considered one of the most eminent theorists on the subject, described social capital as those features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions. According to him, this concept refers to community networks, people's participation in common action (civic engagement), the existence of a strong local identity (civic identity), reciprocity, and finally confidence.⁴

From the above definition it was assumed that social capital is a collective societal feature and not a personal trait. Putnam transformed social capital from a resource possessed by individuals to an attribute of collectivities, focusing on norms and trust as producers of social capital.¹

Moreover, the concept was divided into intra-community and inter-community bonds⁵, which led to an additional distinction between bonding, bridging and linking social capital.⁶

Bonding social capital refers to the strong, close relationships (e.g. family connections) that exist between people of similar backgrounds and is directed inwards. Bridging social capital links people that find themselves in greater distances, people who experience dissimilar circumstances or belong to different social groups. It is inclusive and community oriented. Linking social capital refers to the relationships of groups or individuals, mostly different from each other, and in which there is some hierarchical structure or underlying power relationships.⁷

The measurement of social capital is in accordance with its definition. An analytical method that has been proposed is based on qualitative data and uses the concept of 'capital' from social capital as defined in Marxist terms.⁸ Contrary to Marx's theory, in this model it is not the money, but the social interactions and social benefits that come from it.² Social capital can be measured either in its community dimension or in its individual dimension.^{9, 1,10} The interest in studying the association between social capital and health emerged after the book «Make democracy work»¹¹ was released. Shortly the first publication which linked social capital to economic inequality and mortality followed.^{2,12}

There are quite a few studies that depict the positive association between social capital and health. Research studies on cardiovascular diseases, mortality rates, life satisfaction and subjective health status have shown that there is such association.^{1,13} Both human and social capital are positively correlated with self-proclaimed physical and mental health. A British study for example, found that young mothers, living in low social and economic environments, had more mental health problems and less social capital.¹⁴

According to another study conducted in Russia, social capital positively impacts population health. Specifically, it was found that human capital (measured in relation to age, educational, income and socio-economic status) as well as social capital (which

includes the notion of trust, participation, social network involvement and social inclusion) are positively correlated with self-proclaimed physical and mental health.¹⁵ However, there are studies that show negative or neutral association between social capital and health. These studies point out that the impact of social capital on people's health depends on the type of social environment in which health behaviours are developed. For instance, it was found that social capital may also negatively influence mental health.^{1,16} Strong social relationships, in addition to providing support, can be a cause of pressure on people and impede their development.¹⁷ Neighbourhood factors can negatively impact children's mental health. High levels of social capital developed in criminal or extremist groups can prove detrimental to society.^{1,18,19}

In a US study, the impact of social capital on homeless people was examined, but no strong correlation was found.²⁰ A systematic review and meta-analysis of the relevant literature on the association between social capital and mental health revealed that studies measuring the individual social capital indicated a negative correlation with mental disorders. However, when the community dimension of social capital was examined, there was no association with people's mental health.^{1, 21}

In the proposed study an attempt is made to associate social capital and its parameters with cervical cancer prevention in nursing and social work female university students. The prevention of cervical cancer aims at the early detection of the disease before clinical symptoms make their appearance. At a European level, cervical cancer is the second most common type of cancer among women. In Greece, it is estimated that an average of 307 women are diagnosed with cervical cancer every year with 159 people dying from it.²²

Molecular biology developments and epidemiology studies during the 1990s showed a correlation between types of the HPV virus and certain chronic cervi-

cal infections as well as cervical cancer.²³ It is bibliographically well documented that early prevention contributes to lower mortality rates from cervical cancer.²⁴

In the case of cervical cancer, there is primary and secondary prevention. According to the World Health Organization (WHO),²⁴ primary cervical cancer prevention includes the following intervention recommendations:

- Training to reduce exposure to recognized risk factors and high-risk behaviors through health education and counseling programmes.
- Implementation of global strategies for cancer interventions and change of health behaviors.
- HPV vaccination.
- Tobacco control efforts.

Secondary prevention is related to pre-symptomatic screening that includes the Papanicolaou test, known as PAP (smear) test. The Pap test has been proven to be a successful method of an organized pre-symptomatic screening. The advantages of the standard Pap test as a screening method are its vast acceptance, its reliability, its validity and the mechanisms by which the test is assessed audited and administered by educated staff, its low cost and high specialization. Some of its drawbacks include the delay in reaching a result, the necessity of quality controls in the laboratory and the test's medium sensitivity.²⁵

The prevention policies against cervical cancer in Greece are fragmentary due to the fact that there is no organized national plan for it.¹ Screening for cervical cancer have shown that, although women are aware of the Pap test's positive contribution to health, they do not comply with its administration.¹ This can partly be caused by wider beliefs and views on health matters, as attitudes towards health and illness influence preventive behavior.

Regarding prohealth care, according to the medical model, people adopt a positive attitude towards health when there is an increased risk in developing an

illness or when there is a benefit from medical interventions. The reasons of compliance may be associated to individual characteristics. For instance married women are more prone to follow a prevention routine than single women.^{1, 26}

However the reasons that motivate some women to follow the prevention guidelines are not only related to their personal traits, but are also influenced by the wider social and cultural environment in which they live and interact. A predisposing factor for the proper follow-up of screening is the high level of education, which creates the conditions for women to have access to knowledge for the prevention of female cancer.¹

Research findings yield that in women aged 35 to 75, social capital and its individual parameters are associated with knowledge and adequate use of breast and cervical cancer screening tests.¹ There are no studies however examining the relationship between total social capital and/or its parameters with the knowledge and adequate use of female cancer prevention tests in women of younger ages, such as university students. Therefore, the proposed study aims to promote scientific knowledge on a topic that has not been thoroughly researched in Greece and concerns the prevention of female cancer and its relation to social capital.

Aim

The aim of the study is to investigate the knowledge and adequate use of the cervical cancer prevention test (Pap test) in young female university students in relation to their social capital and its parameters.

More specifically, it is intended to examine whether knowledge and compliance with the adequate use of the test pap is influenced by social capital and its parameters.

Research questions

The research questions can be summarized as following:

1. The knowledge of the sample about cervical cancer prevention guidelines will be examined, e.g. whether the students are aware of the prevention guidelines and the prerequisites for the adequate use of the Pap test.
2. The compliance of the young students with the suggested cervical cancer prevention test follow-up will be investigated, e.g., whether female cancer prevention guidelines are correctly followed.
3. The association between individual social capital - on its whole and its specific dimensions - and the adequate use of Pap test is going to be explored.
4. Finally, it is going to be examined whether there are differences regarding the information and adequate use of the Pap test amongst female students according to their subject of studies.

Research Material and Method

A cross-sectional quantitative research design will be used to investigate whether there is an association between total social capital or its dimensions and cervical cancer prevention.

Female students of the first to fourth semester of their studies in the Social Work and Nursing Departments of the Hellenic Mediterranean University (HMU) will constitute the study population. A simple random sampling strategy will be applied as this method is quite common in both quantitative and qualitative nursing studies.²⁷

In simple random sampling, each subject is included in the research or is chosen because they happen to be at the right place, at the right time. Subjects that are available, participate in the study until the desirable sample size is reached.²⁷

As far as the sample size is concerned, a 20 % of the female students who study at the School of Health and Social Sciences of HMU will be included. Participant students should meet the following criteria:

- They should be students of the Nursing and Social Work departments of the HMU.
- They should be studying on the first to fourth semester of their studies.
- They should have visited their gynecologist at least once.

The collection of data will be performed through the use of an anonymous questionnaire. Specifically, the study questionnaire consists of two parts. The first part refers to the collection of socio-demographic characteristics of the participants. The second part comprises the Greek translation of the Social Capital Questionnaire (SCQ).²⁸ The Greek version has been translated, psychometrically standardized and licensed accordingly.²⁹

Concerning the cervical cancer prevention test adherence, a questionnaire from a relevant doctoral study will be used.¹ In the proposed questionnaire all current changes in relation to the information and adequate use of female cancer prevention tests in women of a post adolescence age will be made.

The questionnaires will include questions regarding the students' knowledge and information of their (individual) social capital, questions regarding the follow-up of cervical cancer prevention tests as well as questions on the association between individual social capital and female cancer prevention.

Structured questionnaires, as data-collecting tools in quantitative research, contribute to the valid, uncomplicated and fast way of data collection on medical issues such as therapy, medical test follow-up and the depiction of knowledge regarding the therapeutic interventions and experiences that the person in question has been involved in.³⁰

For the best possible results before the commencement of the study and because the aforementioned questionnaires may possibly include some difficult concepts, a series of pilot interviews will be conducted with female students of the Social Work and Nursing departments so as to determine whether the questionnaires are comprehensible to everyone.

Having taken the written, informed consent of the students of both departments, data collection will follow before or after the end of their courses, so as for the educational process not to be obstructed. Questionnaires will be completed in an area where privacy and confidentiality can be preserved. Statistical analysis will be performed with SPSS.

Ethics and Code of Conduct

An extensive legislative and ethical framework underlies the individual participation in scientific research. Its aim is to protect the rights of the individuals who participate in the study. Specifically, the ethical framework of research protects the life, physical integrity and dignity of people. It also protects the research process as a necessary tool for development, social welfare and innovation in contemporary society as well as a public good that materializes under the condition of transparency from the scientist-researcher.³¹

An ethical issue that emerges in the proposed study relates to the nature of data as the researchers will deal with sensitive medical and personal information and beliefs that a student may be unwilling to disclose. For this reason, participants will be informed in detail about the aim and nature of the study and there will be a confidentiality letter of consent at the end of the questionnaire for them to sign. Moreover, it will be pointed out that participation in the study will run on a volunteer basis and anonymity will be preserved. Data will exclusively be used for research purposes and only the researchers will have access to them. Prior to the commencement of the study, an Ethical Approval permission will be gained from the Ethics and Deontology Committee of the HMU.

Discussion and Conclusion

Preventing female cancer and enhancing the knowledge about the adequate use of gynecological tests and checkups (Pap test and mammography) are matters of utmost importance in the clinical field, in

Greece and abroad.

Early cervical cancer prevention is multifactorial. It depends on various factors such as the knowledge of prevention issues, the health professionals' approach to the matter, the socio-economic environment and the respective qualities of women coming from different environments and, finally, the social capital, either as a whole or in its different dimensions.¹

The suggested onset of gynecological testing for women is the 21st year of age, irrespective of their sexual activity.³² Taking into consideration that both proper orientation and health education contribute to the adoption of future health prevention behaviors among young women, it is important to explore their views and information about female cancer prevention guidelines.

Furthermore, the role of health professionals in matters of female cancer prevention is important.^{1,10,33} Exploring the views of students and future professionals of the fields of Social Work and Nursing in prevention issues will contribute to the improvement and growth of their educational impact and to the further development of their profession.

As previously referred, there is lack of studies on the association of social capital with the prevention of cervical cancer in young women, in Greece. The study of the relationship of social and economic characteristics of the participants with the prevention of female cancer is extremely important as in addition to the improvement of health behaviors of the students for their own benefit, it lays also the ground for the enhancement of their awareness on the subject as future health professionals. At the same time, the added value of the study involves improvement of the curriculum of the two departments that participate in the study resulting at better-quality educational interventions.

The added value of the proposed study will be found in the following:

- The study will contribute to the understanding of the adequate use of gynecological tests as well as of the factors that favor or hinder prevention of female cancer from a holistic approach.
- The results of the study will contribute to the development of the social dimension of female cancer prevention (social capital and its parameters).
- The results of the study can be used in the systematic and continuous education of health sciences' students (social workers and nurses) on matters of prevention. They will also be used to improve the undergraduate academic programmes of the health sciences in matters of prevention.
- The results of the study can be used as a basis for the development of guidelines on the information and adequate use of cervical cancer prevention tests in young women.

Implications for clinical practice

The study will add to the existing theoretical knowledge regarding female cancer prevention among women of the post adolescence age and will further reinforce improvements in the health services on a primary and secondary basis.

The results of the study will contribute to better educational prospects for students of health and social sciences with respect to prevention.

The study will also assist health professionals, such as social workers and nurses, in the design of social and educational intervention programmes for the prevention of female cancer among women of the post adolescence age.

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