

MEDICAL LITERACY DEVELOPMENT OF ADULT POPULATION IN SLOVAKIA AND UKRAINE

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Summary

Introduction. The diagnosis results of medical literacy levels among different groups of adult population in Slovakia are given in this article. This research was done by the scientists of Pedagogy Department, Philosophy Faculty, Comenius University in Bratislava, together with Ukrainian colleagues.

The aim of research. The objective of the article was aimed at studying the specifics of medical literacy development in European countries and making a comparative research analysis for determining the levels of medical literacy among adult population in Slovakia and Ukraine and making up the recommendations.

Materials and methods. The diagnostic surveying of adults was made according to the modification of European Health Literacy Survey Questionnaire (HLS_EU_Q47), which was offered to the respondents to fill out in the format of a Google form. The methodological approaches used in the study are as follows: andragogical, competency-based, cultural, person-centered, and systems-based.

Results. The majority of the respondents in the European countries were found to have the insufficient level of medical literacy. In Slovakia, the youth aged 18-24 turned out to be more active and conscious of health issues. It was specified that the comprehensive study of medical literacy issues among adults was not carried out in Ukraine at all. Positively estimating the research experience of medical literacy levels among adult population in Slovakia, it is worthwhile to single out the progressive ideas of its implementation in an area of support, maintenance and restoration of health for adults in Ukraine. The recommendations were made up for increasing medical literacy of different groups of adult population at the national and regional levels as well as at the level of healthcare and educational institutions and universities.

Conclusions. The research results of medical literacy among adult population can be recommended to the representatives of governmental institutions, universities, healthcare institutions so as to update legislation, prepare teaching and methodological materials for universities and postgraduate education.

Keywords: adult population, public health, health literacy, competency, preparation

INTRODUCTION

A topic of healthy lifestyle support and restoration of adults is essential amid COVID-19 pandemic and its consequences. The global community is interested in an issue of physical and psychological health development and support. Adult population are becoming more conscious of strengthening their own health. The mankind is becoming a witness of appearance of new health culture which is getting into our mentality. From society's viewpoint, a role of a conscientious citizen is currently increasing and his/her active participation in

maintaining their own health state. The demographic changes, population growth and aging people of many European countries are a challenge which has social, political and psychological aspects. How to achieve and maintain the sufficient level of public health, especially, due to the spread of many infectious diseases and their prevention, is also a challenge for educational sciences, particularly, for sanitary education of adult population.

Public medical literacy is a key factor which affects the improvement and ongoing of the whole country's life. Strong health and welfare cannot be imagined without

achieving the highest level of medical literacy among adult population, which makes research so important. As the pandemic COVID-19 is declining, but not disappearing, it is important to inform adult population about risk factors, identify them and correct at all levels of the healthcare system.

The study of the medical literacy level of different groups among adult population was carried out in 8 European countries (Austria, Bulgaria, Greece, Ireland, Spain, the Netherlands, Germany, Poland) in 2011 [8]. Totally, sampling amounted to 8000 people with 1000 people per each country. K. Sorensen together with a group of international researchers proved that the restricted medical literacy is an important issue for politics and practice of healthcare in Europe, but can be different for various countries. This research was very important for European countries as «more than 20 institutes from Europe and abroad followed the project as collaborating partners» [9, p. 1057]. Consequently, the level of medical literacy must be taken into consideration for developing European strategies of public health.

The research of the British scientists R. M. Simpson, E. Knowles and A. O’Cathain, which was done in 2018, proved that state’s involvement for increasing medical literacy of adults should be best aimed at people with lower education level, those who have some disabilities, and those who live in the regions of Great Britain with low income [6].

Lately the works of the foreign scientists «Health Literacy, Social Determinants of Health, and Disease Prevention and Control» by S. Coughlin, M. Vernon, C. Hatzigeorgiou and V. George [1], «Health Literacy: Cancer Prevention Strategies for Early Adults» by R. F. Simmons, S. Cosgrove et al. [5], «Embedding health literacy into health systems: a case study of a regional health service» by L. Vellar, F. Mastroianni, K. Lambert [10], «Patterns of Self-care in Adults With Heart Failure and Their Associations With Sociodemographic and Clinical Characteristics, Quality of Life, and Hospitalizations A Cluster Analysis» by E. Vellone, R. Fida, V. Ghezzi et al. [11] and others were devoted to the study of the medical literacy issue of adult population. Medical literacy, which is considered by the scientists as a quality obtained by an adult, allows adults and communities to perform better control of their health state. Based on the study of the scientific works, the following definition of medical literacy for adults can be summarized: medical literacy is considered to be literacy of a health issue, which characterizes an adult’s ability to maintain, support and restore his/her own psychological and physical health.

An issue of medical literacy development among adult population in Eastern European countries, namely, in Slovakia and Ukraine, has been insufficiently studied by now.

THE AIM OF THE STUDY

The given article is aimed at studying the specifics of medical literacy development in European countries, such as Slovakia and Ukraine, and making a comparative analysis of the research so as to identify the levels of medical literacy among adult population and making up recommendations.

MATERIALS AND METHODS

Research methods: theoretical: analysis, classification, summary of research results; empirical: observation, surveying; methods of mathematical statistics for processing and interpretation of the obtained results. The results of our own study as well as the others were used for the comparative analysis. Particularly, in the research, where the authors participated personally, some fragments of adults surveying in Slovakia in 2022-2023 were available in the project «Education for Adult Health». The diagnostic surveying of adults was made according to the modification of European Health Literacy Survey Questionnaire (HLS_EU_Q47), which was offered to the respondents to fill out in the format of a Google form. The study of medical literacy levels of adult population in Slovakia was based on the following methodological approaches: andragogical, competency-based, cultural, person-centered, and systems-based. The scientific originality lies in the assessment of the medical literacy level for different age groups of the adult population in Slovakia.

RESULTS

Many European countries participated in the study of medical literacy of their population, and, as a result, they obtained disappointing results, so they began to look for mechanisms how to improve the situation. For example, in Germany in 2018, a team of experts (D. Schaeffer et al.) developed National Health Literacy Plan which included the following recommendations: allow the education system to encourage sanitary literacy in the first life cycle (the educational institutions are required to be involved); promote medical literacy at a working place; enable understanding of information about health provided by mass media; allow municipal governments to increase medical literacy among their people, confirm sanitary literacy as a standard at all healthcare levels and integrate events of medical people’s awareness in looking after people with chronic diseases; promote further research of medical literacy among different groups of population [7].

J. Matulcik, analyzing the levels and specifics of medical competency of the population in Austria and Germany, states that different aspects of medical literacy allow the people of these countries to use available opportunities for strengthening not only their own health, but also health of their communities and the whole society.

Several terms for medical literacy are used in German-speaking countries, more frequently sanitary literacy or literacy of health issues. The effective understanding of medical competency and its integration in everyday life are essential factors for people to be satisfied with their bodies. The availability of a certain level of medical literacy influences on the changes of an adult's eating habits under stress, while a high level of this literacy protects businessmen and managers from exhaustion and burning-out. The scientist points out that in German and Austria the institutional medical education is implemented at the public vocational schools, centers of family education as well as at the factories in the form of supporting health, which is quite favorable [2].

Taking into consideration the experience of such countries as Austria, Germany and Poland, the research «Education for Adult Health» in the Slovak Republic the representatives of the Department of Pedagogy and Andragogy, Comenius University in Bratislava. We will analyse the results of this study.

956 respondents were surveyed: 809 (84,4 %) were female ones and 150 (15,6 %) male. The female majority turned out to be more active in this research. The respondents were classified by their age as follows: the youth aged 18-22 amounted to 284 (29,7 %), 23-27-198 (20,7 %), 28-32-79 (8,3 %) adults, 33-61-329 (34,41 %).

The decrease of respondents number was observed after the age of 51. The respondents over 62 amounted to 66 (6,9 %). The highest age of adults who participated in the survey was 86 years. Consequently, the elderly people were less interested in this research. Concerning the regions in Slovakia, the people of Bratislava and Bratislava region were active – 276 (28,8 %) people. According to the level of education the respondents were classified as follows: the majority of the surveyed people (54,3 %) had secondary education, 10,1 % of respondents had PhD degree, almost 19,3 % had Master's degree and 15,1 % – Bachelor's degree.

The questions of the surveying questionnaire were focused in the way so as to show subjective viewpoints and approaches of searching and obtaining information in the field of healthcare. The respondents reported about the sources they obtain information from about health and healthy lifestyle. The respondents could select among 12 options, besides, they had an opportunity to add the other reply. 84,2 % of respondents search for the information about health and healthy lifestyle in mass media and the Internet, which was the most widespread answer. The educational institutions were called the second popular source by 76,4 %, while 70,4 % mentioned a doctor, which was the third popular source, and the fourth (62,71 %) – a family and friends. Only 0,3 % of respondents don't look for any information about health and healthy lifestyle. See fig. 1

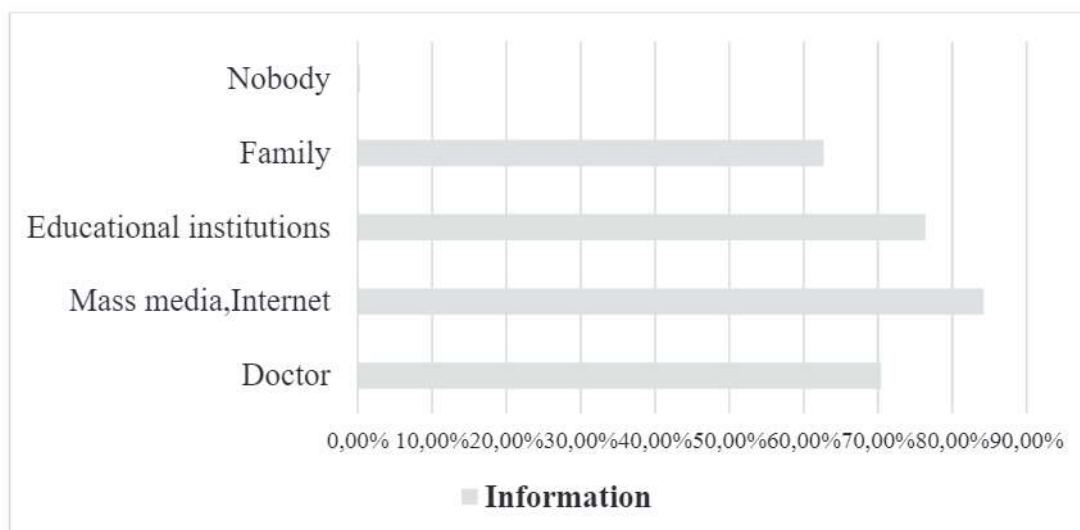


Figure 1. Sources of obtaining information about health and healthy lifestyle

The level of sanitary literacy, especially among younger respondents and respondents with lower education, increased during the pandemic. The respondents began to use more vitamins, improved their diet, went in for sport and got more interested in their physical and psychological health. The female respondents ($p = 0,004$, $r = 0,093$), young respondents ($p < 0,001$, $r = -0,142$) and respondents with lower education ($p < 0,001$, $r = -0,130$) were interested in their psychological health. The young respondents ($p =$

$0,012$, $r = -0,081$) and respondents with lower education ($p < 0,001$, $r = -0,139$) were looking for the information about health and diseases more frequently. More educated ($p < 0,001$, $r = 0,183$) and older respondents ($p < 0,001$, $r = 0,145$) did not change their lifestyle because of the Covid-19 pandemic, which can be related to their proper lifestyle and enough care they took of hygiene and healthy lifestyle before the pandemic. Summarizing the respondents' replies to the questions given in the questionnaire, the researchers

after processing the results obtained the levels of medical literacy among adults: low, sufficient, high.

The levels of adults: low level was identified among 297 (31,1 %) respondents, sufficient – 549 (57,4 %), and high – only 110 (11,5 %). The majority of adults in Slovakia had the sufficient level of medical literacy. The youth turned out to be the most active on an issue of health awareness, which partly proved the researchers' assumption.

The complex study of medical literacy levels among adult population in the first quarter of the 21st century was not made in Ukraine. However, the sociological levels study of Ukrainian doctors' sanitary literacy from the healthcare administration, which was conducted on the premises of National Medical Academy of Postgraduate Education after P. L. Shupik should be singled out [3].

N. Ryngach carried out the targeted surveying of the doctors and administrators of medical institutions (n = 96; 100 %), aged 30-62, who were attending the retraining courses. The respondents were surveyed with a special tool for assessing European surveying of medical literacy: The European Health Literacy Survey Questionnaire, HLS_EU_Q47. The results were collected and processed based on the rules of anonymity, voluntariness and confidentiality. It turned out during surveying that the doctors, first of all, had some problems of using their knowledge and skills in practice. However, they didn't have any difficulties «in understanding some information... and practically all understood that they needed to take additional training and obtain skills and tools for educational purposes with their patients and relatives» [3, p. 82].

According to the results of the sociological research «Ukrainian society and European values» (2017), which was conducted in collaboration with the office of Friedrich Ebert Foundation in Ukraine, it was confirmed that Ukrainians are quite critical about their attitude to following a healthy lifestyle. Replying to the question «Do you agree with the statement that in comparison with Ukrainians the people in Europe lead a healthier life?», 62,0 % of Ukrainian respondents answered affirmatively. It is interesting that 81,3 % of them agree that the people in Europe in comparison with Ukrainians tend more to keep order in public places (it decreases the risk of unnatural death or physical and psychological traumas), as well as take more care of vulnerable categories of citizens (79,6 %). 75 % of Ukrainians think that Europeans are more law-abiding and tend more to plan their life (71,7 % of respondents pointed it out), which also directly reflects on personal and public health [4, p. 82].

Despite the very high level of understanding in Ukraine, the values of health, good awareness of population about the necessity of active society actions for forming the healthy nation, specific actions both of different categories

of adults and doctors cannot be considered sufficient. As a result, it is necessary to emphasize once again, that the need of medical literacy increase about health, i.e. medical literacy of adult population, is essential.

Consequently, most of research which was done in Ukraine to study the levels and specifics of medical competence among adult population were related only to the study of functional medical competency among different groups of doctors and patients.

Assessing the research experience of medical literacy levels of adult population in Slovakia positively, it is worthwhile single out the progressive ideas of Slovak experience which can be implemented in an area of health support and restoration among adults in Ukraine: non-formal and informal education of adults should be recognized as an integral part of increasing medical literacy among different categories of adult population; promote further flexibility of educational opportunities for adults so as to preserve personal and public health; arrange training of communicative competencies for medical education providers so as to give educational help to the people with restricted medical literacy; renew the social partnership in an area of psychological and physical health preservation and support of adult population.

Considering the importance of medical literacy among adults for the society, the policy of increasing its level among all social and age categories should be implemented in Ukraine at the national level, providing enough financing, setting up projects aimed at forming and developing awareness of adult's personal health. Besides, the joint interaction is required among the institutions of Ministry of Healthcare, Ministry of Education and Science and Ministry of Social Policy, which is especially important for arranging the information policy, issuing educational and methodological materials, informing and educating people, developing education programs and trainings for doctors, medical and social specialists who work with adults.

The wide promotion of educational work with adults as tools of the national policy are offered: issues coverage in mass media, on the sites of medical universities and institutions, in social networks, access expansion of physical entities to specialized Internet portals and Internet platforms for patients, consultation and organization of different educational medicine-oriented services in communities.

At the regional level during the war, it is necessary to publicize the theoretical and promote practical information about the specifics personality's psychological support, preservation and restoration of his/her physical and psychological health; make it available for public about existing opportunities how to prevent seasonal diseases among adult population; inform about people rights in healthcare area.

At the level of healthcare institutions and medical universities, it is necessary to expand the range of education and information services to preserve, support and restore health of different categories among adult population. Such kind of adult education as informal should be focused on at this level. Currently, the prospective direction of increasing medical literacy among adult population under different kinds of restrictions is educational institutions' activities of informal education.

DISCUSSION

Seems appropriate to consider the understanding of medical literacy in the context of adult education, in respect that its dependence on human cultural development. Cultural development of adults and their literacy in maintaining and supporting health cannot be overlooked.

According to current recommendations, samples of respondents were random. Hence, survey results of respondents in both Slovakia and Ukraine must be supplemented with real data, including those obtained by researchers directly conducting a survey of different categories of the adults [9]. Such real-world studies aim to analyse the factors influencing health awareness among adults. The obtained results should be interpreted with several limitations, inherent to its modest sample size of respondents. Besides, the obtained division of respondents by gender raises a question: the number of women was by several folds higher than men. There is a need to clarify the age groups of adults that should be prioritized when assessing health literacy levels based on research assumptions [11].

The idea that medical literacy is at the intersection of a personality's abilities and competency and a complicated range of services, organizations and systems not only in the framework of public health, but also in the society and in the whole state, is controversial. Health value must affect directly the policy in an area of public health, everyday medical practice, which is above all oriented towards a patient. An issue of medical literacy increases at different levels by coordinated interdisciplinary cooperation and appropriate people and experts' attitude requires further discussion.

The approach, which is based on the principle of the whole society participation, is required to increase the level of medical literacy among adult population: state institutions and administrations, NGOs and other institutions must unite their efforts to increase the level of medical literacy among people of different gender and communities and create the conditions for the development of activities to support health and welfare.

The understanding of promising directions for the development of medical literacy of adults in the studied countries is debatable. We believe that the following should be included: the introduction of medically oriented cultural projects, the popularization of ideas for the

enlightenment of various categories of the adult population in the field of protection, support and restoration of physical and mental health, the creation of an educational environment for interested categories of adults in medical institutions in communities.

CONCLUSIONS

It turned out that being literate in health matters means taking care of your own health and the health of one's family and community in the context of social health, to realize and understand what factors affect it. A person with a sufficient level of med literacy, able to bear responsibility for one's own health, as well as for the health of others.

The research results of medical literacy levels among adult population can be used for the development of the state policy in an area of pedagogical education, healthcare, adults' education; by the government to develop the concepts of demographic and gender policy; for updating legislation, issuing teaching and methodological materials for the institutions of high and postgraduate education; in the activities of social and psychological services for people. The establishment of medical literacy levels among adult population helps to develop the activities for the improvement of people's health during large-scale negative events in a state.

Prospects for further research. In the future, it is necessary to analyze the experience of education providers for adults in an area of healthcare, where doctors' associations and unions are assigned a leading role. Besides, the prospects of medical literacy development of different adult categories should be considered in the context of gender-unequal attitudes to understanding of this literacy among men and women, promotion male/female understanding of support, preservation and restoration of health. It is worthwhile to conduct further randomized clinic tests using bigger respondents' samples.

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COMPLIANCE WITH ETHICAL REQUIREMENTS

The comparative study was carried out in accordance with the rules of academic integrity. Voluntary consent was obtained from all participants before the research.

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Резюме

МЕДИЧНА КОМПЕТЕНТНІСТЬ ДОРОСЛОГО НАСЕЛЕННЯ В СЛОВАЧЧИНІ ТА УКРАЇНІ

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Вступ. У статті наведено результати діагностики рівнів медичної грамотності різних категорій дорослого населення Словаччини. Це дослідження було виконано представниками кафедри педагогіки філософського факультету університету Коменського в Братиславі разом з українськими колегами.

Метою дослідження є вивчення особливостей розвитку медичної грамотності в європейських країнах та проведення порівняльного аналізу досліджень з виявлення рівнів медичної грамотності дорослого населення на прикладі Словаччини й України і складання рекомендацій.

Матеріали та методи. Діагностичне опитування дорослих здійснено за модифікацією European Health Literacy Survey Questionnaire (HLS_EU_Q47), який було запропоновано заповнити респондентам у форматі Google-форми. Методологічними підходами в дослідженні були андрагогічний, компетентнісний, культурологічний, особистісно орієнтований та системний.

Результати. З'ясовано, що більшість респондентів у європейських країнах мають недостатній рівень медичної грамотності. У Словаччині більш активними і та обізнаними в питаннях здоров'я виявилась молодь віком від 18 до 24 років. Встановлено, що в Україні комплексних досліджень з питань медичної грамотності дорослих не було проведено. Позитивно оцінюючи досвід дослідження рівнів медичної грамотності дорослого населення у Словаччині варто виокремити прогресивні ідеї щодо його впровадження в сферу підтримки, збереження і відновлення здоров'я дорослих в Україні. Складено рекомендації з підвищення медичної грамотності різних категорій дорослого населення на державному, регіональному рівнях і рівні інституцій і закладів зі сфери охорони здоров'я та освіти.

Висновки. Результати дослідження рівнів медичної грамотності дорослого населення можуть бути пропонувані представникам сфер державного управління, освіти дорослих, охорони здоров'я з метою оновлення законодавства, оформлення навчально-методичних матеріалів для закладів вищої і післядипломної освіти.

Ключові слова: доросле населення, громадське здоров'я, компетентність, медична грамотність, підготовка