REVIEW ARTICLE



SOCIAL WORKERS'ACTIVITIES IN THE FIELD OF POPULATION' MENTAL HEALTH PRESERVATION IN THE XXI CENTURY

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ABSTRACT

The aim: Social work is focused on overcoming inequality and social isolation of individuals and communities due to health conditions. Therefore, substantiating the activities of social workers to preserve mental health of citizens is an important component of the new strategy for the development of the profession in the XXI century.

Materials and methods: The methodological basis of the study is a holistic approach to the interpretation of individual health in the unity of physical, mental, social, and spiritual components; ecosystemic approach assumes the impact of the environment on the social functioning of the individual; interdisciplinary approach identifies ways of dealing withmental health challengein the global context; social inclusion approach provides a basis for the practice of experts of the social spherein the XXI century.

Conclusions: The article substantiates the need for social workers to maintain the mental health of the population under the negative impact of global factors within their own countries and internationally. The evolution analysis of the international experience of transformations of social work practice in the area of mental health preservation is carried out. Preserving the mental health of citizens under the negative effects of globalization processes depends on the concerted actions of states, international organizations, civil society, communities, and individuals themselves. This encourages social workers to work at regional and international levels with institutions interested in fair policies and practices in social and health services.

KEY WORDS: mental health, social work, globalization, inequality, social inclusion

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INTRODUCTION

One of the most typical areas of employment for social work professionals is the area of mental health, including in psychiatric care, along with being involved in the field of healthcare in general. This situation is typical for the United States, Canada, Great Britain, Australia, Israel and a number of European countries, where social work is a well-developed professional activity. The relevant statistics on the situation in the United States can be considered an example of the growing role of social workers in mental healthcare particularly in the context of globalization. A 1982 survey of members of the National Association of Social Workers (NASP) showed that mental health practices were among the largest, with nearly 90,000 employees (26.6%). The second-largest involvement of social workers is in the field of somatic or physical health where 18.1% were found, totally almost 45% of NASP members involved in health care overall[1].

1995 NASP data show that the number of social workers in the mental health area increased to 39%;12.9% association members indicated medical institutions as the place of their main practice. This gave reason to consider the health sphere the third largest after the sphere of services to families and children, among 24.9% of the surveyed members of NASP. At the beginning of 2000, the number of social workers – members of NASP, who recognized the

field of health as a place of their main practice, was already 47% of the total[2]. According to the American Hospital Association (2002), in 2000, 76% of psychiatric hospitals and 86% of general emergency hospitals reported the existence of social services in their structures. In January 2005, almost 40% of the NASP members self-identified as mental health social workers; 8% as healthcare workers [3].

Today, in the United States, the healthcare sphere is important both at the clinical/individual level and at the macro level. According to the Bureau of Statistics of the US Department of Labor, for the period from 2014 to 2024, the employment of social workers is expected to increase by 12%, exceeding the average growth rate for all professions (7%). An increase of 19% is expected in employment for social and mental healthcare workers, in particular, especially for those who provide services to people with addictions [4].

The first social worker in the psychiatric ward of Massachusetts General Hospital appeared in 1903, so the United States can be considered the "home" of social work in the area of mental health. From the second half of the XXth century, the US was the first in the world at the legislative level to recognize the activities of mental health social workers as professionals of a separate professional field. The US public movement "For Civil Rights" in the 1960s made it possible to reorient hospital social work to the needs of

the community, ensure the "socialization of psychiatry," and provide social rehabilitation services to people with mental health disorders [5, 6].

Since then, different countries have built and developed their own system of training and interaction of mental health professionals. Current trends in world development, including the transparency of European borders and the acquisition of English as a universal tool for professional communication, have led to mutual influences and transformations, active borrowing from, and permanent review of the effectiveness of mental healthcare systems.

THE AIM

Social work is focused on overcoming inequality and social isolation of individuals and communities due to health conditions. Therefore, substantiating the activities of social workers to preserve mental health of citizens is an important component of the new strategy for the development of the profession in the XXI century. This social work focusis necessary to combat the challenges that deepen health inequalities and social exclusion at the level of individuals, communities, and countries.

MATERIALS AND METHODS

The methodological basis of the study is a holistic (biopsychosocial-spiritual) approach to the interpretation of individual health as the unity of physical, mental, social, and spiritual components, where the mental component depends largely on social conditions; an exosystemic approach considering the impact of the environment (in a broad sense) on the social functioning of the individual; an interdisciplinary approach in identifying ways and means of solving the problem of mental health disorders in the context of increasing globalization impacts and their negative consequences for mental health; a social inclusion approach, opposing social exclusion, is seen as the basis of practice for social sphere professionals in the XXI century. This approach considers the need to change environmental conditions to adapt them to the needs of people with mental health disorders.

The method of critical review of the literature is used. Sources reflecting the participation and contribution of social workers in maintaining mental health of citizens (publications in scientific periodicals, including those indexed by scientometric databases Scopus, WoS, etc., monographs, collections of scientific papers, conference proceedings, etc.) were considered. Literature was searched and selected on the basis of keywords (social workers, mental health, globalization, social work development, health inequalities). Mostly English sources, as well as materials from the Ukrainian context published in the last 20 years of the XX and XXI centuries were taken into account. Various documents governing the assistance of persons with mental health disorders were used as important resources, in particular reports of international social workers organizations, official documents and regulations of national

professional organizations of social workers, and the World Health Organization documents.

REVIEW AND DISCUSSION

Today WHO defines mental health as a state of well-being in which all people can realize their potential, cope with life stresses, work productively and fruitfully, and contribute to the life of their community. Globally, mental health disorders account for a significant proportion of morbidity and are a major public concern. This is due to the close connection between mental health and macro-social problems, such as poverty, unemployment, lack of social protection, etc. Reflexively, mental health problems have a complex relationship with the economic, social, educational systems, social exclusion trends, and stigmatization of people with mental health disorders. With this in mind, the world community is now actively focused on developing modern approaches to maintaining and improving the population mental health [7].

Numerous epidemiological studies in most countries show major mental health disorders such as depression, schizophrenia, bi-polar disorder, dementia in 5-7% of the world population; another 15-23% have borderline mental and behavioral disorders, among which the most common are alcoholism, drug abuse etc. The WHO predicts a further increase in the number of mental illnesses; in the third decade of the XXI century, they will be in the top five diseases, accounting for almost half of all diseases [8].

In modern conditions, when people lives are under constant stress and the impact of unforeseen circumstances, such as military conflicts, man-made disasters, climate change, environmental violations, "mental health of individuals...requires constant attention and needs the most recognition [7]. At the same time, social workers see mental health as part of a holistic health strategy, which is an integral part of building community resilience in overcoming difficulties and challenges towards sustainable development and well-being.

2004 can be considered the beginning of the process of forming a new strategy of social work in the XXI century, when the leadership of the International Federation of Social Workers (IFSW), the International Association of Schools of Social Work (IASSW) and the International Council on Social Welfare (ICSW) concluded the need for changes in everyday social work practice in the XXI century as a response to globalization challenges. Joint research in this area, presented in professional publications [9] and on the websites of international professional organizations of social workers during 2008 – 2012, made it possible during the great financial and social crisis to develop a common platform for action by the world social work community together with the UN, WHO and other interested bodies. This was also facilitated by several international events that identified the key provisions of the Global Strategy for Social Work in the New Environment: the IFSW General Meeting (Brazil, 2008) approved the final "Health and Disease" document; the IASSW, IAASW, and ICSW World

Conference in Hong Kong (2010) in support of global change initiatives sustained the first report "Promoting Socio-Economic Equality" [10], the tripartite meeting in Ghana (2011) set out a "New Agenda for Social Work".

This decision was preceded by a report by the World Commission on the Social Consequences of Globalization, established in 2002 at the initiative of the International Labor Organization. The main conclusion of the report "Fair globalization: creating opportunities for all" (2004) was to recognize the enormous potential of globalization, which requires immediate direction in a fair direction. This means that deep and persistent inequalities in achieving prosperity are growing between and within countries as well as between groups of people. According to the members of the Commission, "fair" globalization means creating real opportunities for most people and countries. To do this, globalization processes need to be more balanced and based on democratic regulations, strong social dimensions, rest on the principles and values recognized by the international community.

In the report of the UN Department of Economic and Social Affairs "Global Social Crisis" (2011), all the problems identified in 2004 were re-identified. This confirmed the growing negative impacts of globalization on the social sphere and public health, especially mental health. It strengthened the resolve to develop a new social work strategy, where the key place is given to the global responsibility for individual health, including mental health, as described by the social determinants of health[7].

The statement «Health and Disease» identified an important step in this direction for healthcare in social work [11]. This statement reaffirmed IFSW emphasis on the equal right of all people to enjoy basic social conditions for health, including a minimum standard of living to maintain good health and a sustainable, health-promoting environment for living. As all people have an equal right to access healthcare resources and social services aimed at preventing illness, injury, and disorder, IFSSW commits to work towards realizing these universal rights, upholding social justice in health matters in social policy.

Social workers consider health as a vital resource. Therefore, working with people to maximize their opportunities, is recognized as a requirement of social workers daily practice. IFSW experts substantiate three main reasons for recognizing all social work as a healthy activity as follows. First, almost all people have already experienced health problems in different countries or are at risk due to social conditions. Second, every day social workers provide services to meet basic health needs – social determinants (ensuring adequate income, well-being, adequate quality of housing, safe working conditions, safe and sustainable living environment, supportive personal and social relations). Third, social workers fulfil their duties to make it easier for people to reap the full benefits of effective health (care) through performing appropriate roles in health care facilities, work under the guidance of healthcare professionals in interdisciplinary and transdisciplinary health teams.

Based on this, IFSW recognizes the issue of health as a matter of respect for fundamental human rights and social justice, which obliges social workers to apply these principles in policy, education, research, and practice. Social workers acknowledge the two basic values of social work for equal rights of all people to: 1) access social conditions to ensure human health, is the social determinants of health; 2) access services and other resources for health promotion, prevention, treatment or disease management.

The Commissionon Social Determinants of Health (CS-DH) at the WHO Regional Office for Europe (WHO/Europe), prompted by the Concepts and principles of equity and health and the European strategies for tackling social inequities in health [12], considers achieving equity in matters of public health as the most important and fundamental in the healthcare activities of both social workers and professionals in other specialties. The issue of maintaining the mental health of the population is officially recognized by the UN and WHO as a problem that requires, for solution, an interdisciplinary and cross-sectoral approach. The main recommendations of the CSDH relate to improving the conditions of everyday life; solving the problem of unfair distribution of power, money, and resources.

Health inequalities are the result of the influence of social determinants of health: the social conditions in which people are born, grow, live, work and age; experience of health at an early age; education; economic situation; professional employment, relevant work; housing; environment; effective systems for the prevention and treatment of ill health. These determinants are crucial for the formation of inclusive, equitable, economically productive and healthy communities. Positioning human health and well-being as key features of a successful, inclusive, just society in the XXI century meets high human rights standards at both national and international levels [13, 14].

The conceptual principles of social work in the issues of preserving public health in the context of transformations of the social sphere in the XXI century were highlighted. They include: overcoming striking health inequalities between developed and developing countries; promoting economic and social development to achieve a higher level of health for all; encouraging individuals to protect their health as a means of promoting sustainable economic and social development, improving the quality of life and achieving peace and prosperity in the world; acknowledging the preservation of public health as a duty of governments and not an exclusive area of market relations or individual responsibility; participation in individual and collective health decisions as a right and responsibility of everyone [11].

The latter principle means not only the possibility for a person to decide the "fate" of own health but also the responsibility to improve access to services or living conditions. Significant changes in addressing health inequalities can be achieved through participation and empowerment as a way to realize human rights at the global, national, and local levels [15].

IFSW representatives believe that to overcome health inequalities, social work must increase its effectiveness at the political level in working with international, governmental, and non-governmental organizations committed to work for health development. Therefore, it is necessary to interact with social movements that advocate for reform and improvement of health care and individual health. Examples are the Public Health Movement, the Global Forum for Health Research (GFHR), and the World Social Forum. Cooperation requires a change of approach in the activities of IFSW in the context of globalization. A common problem is the lack of social services that promote the health of individuals, families, and communities in clinics and hospitals. People are not able to access social services "at the point of need". Limited social work and social service resources lead to rationing and, thus, to the unfair distribution of scarce resources. Consequently, the IFSW needs to increase access to social work services in the field of health and, above all, mental health, in all places of practice.

The IFSW has identified the most important steps in the implementation of the social work strategy to preserve and strengthen the health of the population, and above all, mental health in the XXI century: 1)to identify and challenge, at all levels any harmful effects of social policy on health, advocating a policy of strengthening, protecting and preserving health; in this regard, to involve social workers in the main place of work in medical institutions; 2) to rely on a holistic understanding of health and a healthy personality in decision-making in both practice and policies; 3) to realize that health is a key aspect of life the preservation of which requires great effort on the part of the individual and the supportive efforts of social workers 4) to acknowledge health is a fundamental human right, with the role of social workers to assist individuals to achieve it ensure universal access to basic health resources and poverty eradication; 5) to acknowledge health depends on social, economic, environmental, and political conditions with associated inequalities and injustices which social workers are ethically bound to work to eradicate; 6) to acknowledge that health depends on local, national and global social policies and practices, necessitating the universalization of primary health care services. In short, maintaining good health depends on concerted actions of states, international organizations, civil society, and the people themselves and motivates social workers to cooperate with international, governmental, non-governmental, and public structures interested in fair policies and practices of social and medical services and involvement people to participate in planning and evaluation of health services.

Negative consequences of globalization lead to other social problems, the solution of which requires the professional intervention of social workers at the macro, mezzo, and micro levels of practice. The final document of the Joint World Conference on Social Work and Social Development (Hong Kong, 2010) – "The Global Agenda for Social Work and Social Development" – presented prospects for the development of the sphere through dialogue between global, regional, and local organizations, which helped identify priorities and action plans for the new conditions. The document identifies the need for new

methods of activity, which does not mean abandoning the traditional principles of social work: on the contrary, it requires their active use at all levels [15]. The interrelationship and interdependence of issues of training in the field of social work, practical activities, and sustainable social development were recognized as unchanged.

In the wake of global transformations, social workers at the international level are working to ensure fair and decent standards of well-being for the world population. They recognize that for many people, opportunities for social mobility and full realization of their potential are beyond their own control, and are related to such as factors heredity, place of birth, and access to resources. Social workers realistically assess social constraints and are optimistic about human potential [10]. Respect for human dignity and rights remains the core of the social workers activities, despite the reality that often demonstrates social injustice. Practical experience and research as an integral part of social work practice show that people systems and lifestyles can be changed for the better, and "together we can create a better world". This conviction has been the driving force behind their efforts to shape the Global Agenda for Social Action and Social Development. This will help to address the challenges posed by the global change that perpetuates poverty, oppression, inequality of opportunity, and access to resources [16].

The final consultations on global transformations of social action and social development took place in the form of a tripartite meeting of IFSW, IASSW, and ICSW representatives in Ghana in 2011. This meeting adopted a new Social Work Platform, defining common commitments and determination to promote social justice in the XXI century. Representatives of the three international social workers organizations came to a common conclusion on the state of affairs in the social sphere and noted the following:1) the full range of human rights is available only to a minority of the world population; 2) unjust and poorly regulated economic systems driven by unaccountable market forces, non-compliance with international labor standards and a lack of corporate social responsibility have damaged the health and well-being of peoples and communities, increasing poverty and inequality;3) realization of the rights to cultural diversity and self-expression that contribute to the full intellectual, emotional, moral, and spiritual life of people are threatened by globalization; 4) this leads to the "standardization" and marginalization of entire peoples, influences that have especially devastating consequences for indigenous people and representatives of "first nations"; 5) the prosperity of people is possible in communities by maintaining relations that in the context of globalization are broken under the influence of dominant economic, political and social forces; 6) human health and well-being are affected by inequalities and fragile environments related to climate change, pollutants, hostilities, natural disasters, and violence. Finally, the reaction of the international community is inadequate [15].

Recognizing these realities, representatives of international social work organizations have formulated the main tasks for the agenda. Among their top priorities are the issue of healthy social development, the solution of which relates to strong and resilient communities. Achieving this will be facilitated by the stable well-being and strengthening of the role of social work practitioners in improving and strengthening communities. Activities aimed at eliminating the root causes of poverty and oppression and changing social conditions to those that truly ensure respect for human rights and dignity have not been overlooked. The international community of t social workers advise that the path to such changes is through strengthening the role of education and training of social workers, creating an appropriate working environment for effective and ethical practice, coordination of research and activities to improve them [15].

The official presentation of the "Global Agenda for Social Work and Social Development: Commitment to Action" took place during the regular session of the UN General Assembly (03.2012). With this document, IASSW, IFSW, and ICSW set out a strategy for implementing the new Agenda, including a commitment to establish a global network of regional Agenda Support Centers and conducting research on conditions beneficial to positive outcomes in social work and social development. The Stockholm World Conference on Social Work focused on the implementation of the Agenda and the choice of specific action strategies [17]. The document emphasizes the importance of understanding the concept and notion of social work and confirms its characteristic functions, namely social integration and combating failures in other areas of social policy, such as crime, healthcare, education [18, 19].

It is worth remembering that the ethical and moral duty of every social worker is to realize the importance of personal practical experience, inform policy development, set priorities by interacting with global and regional political institutions; emphasize the contribution of social work to social development, especially during discussions on the Millennium Development Goals, health inequalities [20], social protection, or the preservation of the physical environment [9] as global issues.

A limitation of this study is that it took into account mainly the experience of social workers activities in the United States, Canada, and the United Kingdom of Great Britain, as countries with a high level of social work in general, and social work in the field of mental health in particular. The peculiarities of the introduction of social work in the field of mental health in the post-Soviet countries have not been studied. These issues in comparison with the Ukrainian experience will be the subject of our further study

CONCLUSIONS

The globalization processes of the XXI century increase differences and inequalities between people and countries in their ability to achieve health, especially mental health as well-being. This is due to unfair allocation of resources or the inability to use one own health potential. Thus, social

work in the area mental health is one of the current areas of development of the sphere, and many challenges for mental health are associated with the impact of unpredictable rapidly changing circumstances. International experience confirms that solving these problems is within the realm of social workers, who can play a spectrum of important roles.

Social workers play roles not only as health managers, coordinators of interaction between different professionals, "health instructors", and liaisons between a person with mental health disorders and the environment. They can also be agents of change and lobbyists of policies aimed at the development of mental health in the community. In particular, social workers can be more active and increase their effectiveness at the political level in cooperation with international, governmental, and non-governmental organizations in the healthcare sector, which will help to address the global challenges of poverty, oppression, inequality, and access to resources.

The need for the practical involvement of social workers in maintaining mental health has increased especially during the COVID-19 pandemic. The vast majority of the population has experienced the negative impact of both illness and quarantine on mental health of themselves or loved ones. This applies not only to people who have already had problems with, for example, substance abuse or previously diagnosed mental illness, but also to anyone who has experienced an infection or is at risk of becoming ill, or is experiencing the effects of a previous illness, or worse, witnessed the fatal outcome of the disease caused by COVID-19. Social workers should be the ones to help return to a "habitual", "normal" life without quarantine, fear of getting sick or dying, anxiety about relatives, pain of loss and limitations. They should help to restore the social inclusion of all citizens as a guarantee of preventing health inequalities and any social dysfunctions. Therefore, social workers should become an integral part of the health team – an interprofessional group of experts who provide care to patients with COVID-19 and also carry out preventive measures. In modern Ukrainian conditions such teams should work in family medicine clinics, educational institutions, and in production.

REFERENCES

- National Task Force on the Preparation and Practice of Health Educators.
 A Framework for the Development of Competency-Based Curricula. New York: National Task Force. 1985, 123p.
- Cowles L. A. Social Work in the Health Field. A Care Perspective (2nd ed.). New York – London: Oxford. 2003, 306p.
- 3. NASW Fact Sheet. The National association of social workers. 2006, 35 p.
- United States. Bureau of Labor Statistics. Occupational Outlook Handbook. Social Workers. 2016. URL: https://www.bls.gov/ooh/ community-and-social-service/social-workers.htm. [date access 12.09.2020]
- Grinker R., MacGregor H., Selan K. et al. Early years of psychiatric social work. Social Service Review. 1961;35: 111–126;
- Klos L. On Solving the Problem of Mental Health Care with the Social Work Input. Mental Health: Global Challenges Journal. 2018; 1: 32–37. doi: 10.32437/mhgcj.v1i1.16.

- Flaherty M. P., Sikorski E., Klos L. et al. Peace work and mental health: From individual pathology to community responsibility. Intervention, Journal of Mental Health and Psychosocial Support in Conflict Affected Areas. 2019; 18 (1): 28-36. doi: 10.4103/INTV.INTV 59 18.
- World Health Organization. Policy and practice on mental health in Europe struggle with difficulties, WHO Regional Office for Europe, Copenhagen, Denmark. 2019. https://www.euro.who.int/__data/ assets/pdf_file/0006/96450/E91732.pdf [date access 12.09.2020]
- 9. Jones D., Yuen A., Rollet C. Rising to the Global Challenge: IASSW, ICSW and IFSW Join Hands to Build an Agenda for the Next Decade, International Social Work. 2008; 51(6): 847–849.
- DePanfilis D., Zlotnik J. L. Retention of Front-line Staff in Child welfare.
 A Systematic Review of Research, Children and Youth Services Review. 2008; 30: 995–1008.
- 11. The Social Work and Health Inequalities Network. 2010. http://cdn.ifsw.org/assets/ifsw_84833-10.pdf. [date access 12.09.2020]
- 12. Whitehead M., Dahlgren G. European strategies for tackling social inequities in health: Levelling (P. 2; 3). Copenhagen: WHO Collaborating Centre for Policy Research on Social Determinants of Health; University of Liverpool: Studies on social and economic determinants of population health. 2007, 405p.
- 13. laremenko O. Formuvannia zdorovoho sposobu zhyttia molodi: problemy i perspektyvy. [Formation of a healthy lifestyle of young people: problems and prospects]. Kyiv: Ukrainskyi in-t sotsialnykh doslidzhen. 2000, 68p. (In Ukrainian)
- 14. Ministry of Health and Social Policy. Moving forward equity in health: monitoring social determinants of health and the reduction of health inequalities: An independent expert report commissioned through the Spanish Presidency of the EU. 2010. http://www.msssi.gob.es/profesionales/salud Publica/prev Promocion/promocion/desigualdadSalud/PresidenciaUE_2010/conferencia Expertos/docs/haciaLa EquidadEnSalud_en.pdf [date access 12.09.2020]
- 15. International Federation of Social Workers. Hong Kong Agenda Consultation Papers to Build The Global Action Agenda. 2010. http://www.ifsw.org/p38001915. html. [date access 12.09.2020]
- 16. Jones D., Truell R. The Global Agenda for Social Work and Social Development: A place to link together and be effective in a globalized world. International Social Work. 2012; 55(4): 454–472.
- Stockholm World Conference. Social Work and Social Development 2012: Action and Impact. 2012. http://www.swsd-stockholm-2012.org [date access 12.09.2020]

- 18. Asquith S., Clark C., Waterhouse L. The Role of the Social Worker in the 21st Century A Literature Review. Edinburgh: Scottish Executive. 2005, 74p.
- 19. Payne M. Which Hats Fit? Approaches to Definitions of Social Work. Community Care. 2006: 26,:34–35.
- 20. Bywaters P., McLeod E., Napier L. Social Work and Global Health Inequalities: Practice and Policy Developments. Bristol: The Policy Press. 2009, 62p.

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