

PREVENTION OF THE STIGMATIZATION OF INDIVIDUALS IN RESPONSE TO DIGITAL TRACKING (CONSIDERING COVID-19 ISSUE)

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ABSTRACT

The aim of the research is to identify possible manifestations of the stigmatization of individuals stemming from the use of digital applications while conducting anti-epidemic measures in Ukraine and developing measures to prevent stigmatization caused by the introduction of such applications.

Materials and methods: The study is grounded on dialectical, analytic, synthetic, comparative, statistic, sociological and criminological research methods. More than 120 citizens were interviewed to find out their attitude to *Act at Home* mobile application. The calculations were performed with the use of Excel spreadsheets of Microsoft Office 2016. The theoretical basis of the article is the specialized literature on medicine, law and computer science.

Results: The paper substantiates the connection of the mechanism for the prevention of stigmatization of people who use mobile applications to track their contacts in the conditions of COVID-19 with the positive and negative obligations of member states of the Council of Europe on insuring of non-interference in private and family life. A system of general and special means of prevention of this antisocial phenomenon has been developed. The authors also identify the requirements for mobile applications that could reduce the risk of stigma.

Conclusion: The conclusions suggest the ways of further prevention of stigmatization of people who use mobile applications to track their contacts. The paper outlines the content of the positive and negative obligations of the member states of the Council of Europe to ensure non-interference in the private and family life of citizens who are under observation or self-isolation due to COVID-19 pandemic.

KEY WORDS: stigmatization, COVID-19 pandemic, digital tracking technologies, *Act at Home* mobile application

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INTRODUCTION

The problem of social stigmatization of people suffering from certain types of mental and physical illnesses has become a widely discussed topic in the past 50-60 years in the format of acute social discourse and among health care and other human sciences representatives. The beginning of the systematic research of the phenomenon of stigmatization per se and the stigmatization of people with any existing health disorders, in particular, was initiated by I. Hoffman, the American sociologist and the father of the stigma theory, who defined stigma as the number of physical or social indications that discredit the identity of an individual to the point that they make that individual incapable of social perception on the one hand, and, as a dynamic process of devaluation of an individual that causes intense discreditation of those individuals on the other hand [1]. However, I. Hoffman's scientific research was mainly focused on the issues of stigmatization of patients with mental disorders and their lives within total institutions [2].

In the last quarter of the XXth century, instead of a psychiatric bias, the process of stigmatization significantly changes its vector, allegedly acquiring the features of terri-

torial expansion in which stigmatization began to expose to entire social groups and even countries on a scale of any dangerous infectious disease (for example, given the percentage of HIV-infected inhabitants of a number of countries on the African continent¹), or the area (region) from which a certain disease has spread around the world. Therefore, "Mexican flu", "Asian fever", "Spanish flu", "Hong Kong flu" and others became the common names. According to foreign experts K. Usher, J. Durkin and N. Bhullar, anxiety and fear associated with the infection can lead to acts of discrimination [3, p. 315]. So, S.-Y. Ren et al. report that Wuhan residents are accused of COVID-19 outbreak and attacked by other Chinese people; in addition, the Chinese have since been exposed to international stigmatization [4]. Once, according to S. Monson, the outbreak of Ebola in 2014, which was considered to be a problem of African origin, led to the discrimination of African people [5].

¹ Note. Today, for example, in Lesotho, the proportion of people affected by HIV is 17.4%, in Botswana – 16.0%, in South Africa – 11.88%, in Namibia – 10.86%, in Zimbabwe – 9.92%, in Mozambique – 6.2%. See: The spread of HIV in the world. 2020. [Online]. Available: <https://www.radiosvoboda.org/a/26723139.html>.

In addition, the objects of stigmatization and discrimination can become particular people who have become infected or being informed about as asymptomatic carriers of the infection. In Ukraine, the incidents are known when the houses of infected people or the people with suspected coronavirus infection were marked with so-called “information leaflets” [6]. Thus, one can't but agree that stigma can: 1) drive people to hide the illness to avoid discrimination; 2) prevent people from seeking health care immediately; 3) discourage them from adopting healthy behaviors [7].

At the same time, while becoming increasingly publicized (especially in the context of global COVID-19 pandemic), stigmatization because of a disease goes with another determinant manifestation of globalization, namely, digitalization of the world. After all, almost no one disputes the fact that the use of high technologies, and mobile applications (hereinafter - MAs) in particular, appears to be a reasonable alternative to human resources “spending” for controlling the spread of the disease and overcoming its consequences. Thereby, it becomes possible to save the capacity and resources of many social institutions in terms of necessary organizational anti-epidemic measures conducting, thus allowing them to focus on purely curative actions.

A number of researches can be mentioned devoted to the problem of stigmatization stemming among people with diseases or those having relatives with diseases, as well as the use of high technologies for the prevention of further spread of infectious diseases.

In particular, prominent results in that regard are accumulated in the scientific papers of R. Barrett *et al.* (2008) [8], M. Schoch-Spana (2010) [9], Michael P. McCauley *et al.* (2013) [10], Arjan E. R. Bos *et al.* (2013) [11], B. Link *et al.* (2016) [12], Daniel S. Goldberg (2017) [13], Luke D. Mitzel (2018) [14], G. Cohen *et al.* (2020) [15; 16], S. Park *et al.* (2020) [17], L. Ferretti *et al.* (2020) [18], Emma E. McGinty *et al.* (2020) [19] and others.

Nevertheless, there are no scientific research in Ukraine and abroad that would be focused on the evaluation of the risks of negative consequences, specifically, manifestation of stigmatization caused by the use of mobile applications as the means of monitoring the spread of any disease. There are objective reasons for that.

One of them is that those applications have been widely introduced fairly recently. However, the large scale of the disease and a rather skeptical attitude to those applications suggests that we need to initiate the research of their effectiveness and the effectiveness of similar applications as well as their role in prevention the stigmatization of patients in response to digital transformations of the world. The urgency of the issues chosen for the research is also indicated by the real possibility of risks of violation of the right to non-interference in private and family life stipulated by Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms in response to the use of mobile applications by the individuals in self-isolation or those infected with COVID-19.

THE AIM

The aim of the research article is to identify and analyse the features of possible (socio-economic, legal, psychological morale, technological etc.) manifestation of the stigmatization of individuals stemming from the use of digital (mobile) applications for those individuals' contacts tracking at the time of anti-epidemic measures in the country (self-isolation and observation), along with the developing of both, the ways of neutralization of identified manifestation of stigmatization among the patients using those applications and the requirements for those mobile applications.

MATERIALS AND METHODS

The given research was conducted from May to August 2020. It is based on the results of summarizing: 1) the anonymous survey answers of citizens of Ukraine by means of Google Form to find out their attitude to the national mobile application “Act at Home”; 2) analytical papers of the Ministry of Health of Ukraine and the World Health Organization; 3) data of state and branch statistics of Ukraine. The collected empirical and statistical data were processed with the capabilities of descriptive statistics. The article is based on dialectical, analytical, synthetic, comparative, statistical and specific sociological research methods. The calculations were performed by means of Excel spreadsheets of Microsoft Office 2016. The theoretical basis of the article is the specialized literature on medicine, law and computer science.

RESULTS

Despite their versatility and accessibility to the general public along with optionality and confidentiality, the use of mobile applications (hereinafter - MAs) to counteract COVID-19 is often accompanied by public stigmatization of users. This process is manifested through the implementation of social pressure on an individual or a group of people, with a certain stigma imposed as a result, which further determines the behavior of the stigmatized individual and becomes the part of that individual's “Self [20, p. 264]”.

Manifestation of stigmatization can be both internal (among the staff or within educational groups, among the residents of an apartment building etc.) and external (within the society, among the residents of territorial communities, national minorities etc). This implies the existence of certain differences in the ways of stigmatization and discrimination of people endowed with negative (stereotypical) characteristics. In view of this, it would be useful to provide information obtained during the survey of Ukrainian citizens about their attitude to the mobile application “Act at home”. Thus, almost three fourths of surveyed citizens said that they tried to analyze the possible consequences before using this mobile application.

The article analyzes the cases implying dissemination of specific information about the individuals who use the above-mentioned MAs, as well as information about those

being temporarily relieved of duties, among members of social groups. It also concerns the imposing of fear on the other staff members, dissemination of private and family life information of an individual, advisory opinions regarding to the avoidance of those individuals along with intentional creation of psychological barriers for communication with such individuals (internal stigmatization).

At the external level, stigmatization is usually manifested through the access to publicly available sources of information, social networks, often supported by the media, certain public associations and even some states [21].

Regardless of the form of existence, manifestation of the given phenomenon in society is the result of a set of factors that, depending on their direction, can be general or special. Thus, according to the recommendations for preventing and overcoming stigmatization, developed by the Center for Strategic Communications of Hopkins University, there are three main groups of factors that cause stigmatization in concern with COVID-19.

They are defined as follows:

- 1) as a new disease with unknown characteristics;
- 2) people tend to be afraid of unknown things;
- 3) the existing fear is easily explained by the hostility of “strangers” [22].

The provided factors have common socio-psychological nature, they reveal the main causes of stigmatization of people with COVID-19, those under observation or in self-isolation.

In this respect, according to the systematic analysis of the practice of the effects of COVID-19 overcoming in different countries [23], the use of MAs to track contacts also leads to a separate group of factors, namely, specific nature prerequisites for stigmatization. In our opinion, those factors can be:

- 1) non-compliance with the principles of confidentiality, voluntariness, inadmissibility of interference in the private and family life of individuals with contacts processed by means of MAs;
- 2) formation the stereotypes of danger from people obliged to use corresponding information and communication technologies (hereinafter – ICT) in the media, labor, educational and other social groups;
- 3) use of IT-architecture model in the developing of MAs, which provides for centralized processing of personal data of individuals who have installed corresponding applications during the implementation of measures to overcome COVID-19, maintaining the default geolocation of a subscriber and low security of relevant ICT;
- 4) the lack of a consistent systematic information campaign in some countries aimed at overcoming stereotypes in society of the potential danger of those used MAs for the purpose of contacts digital tracking in the process of implementation the measures to overcome COVID-19;
- 5) the existence of a wide range of officials vested with access to personal data obtained as a result of contacts digital tracking by the national legislation of individual states;
- 6) inadequate public awareness of the methods, grounds and consequences of the MAs use for digital tracking

of contacts in the process of measures to overcome COVID-19 implementation, as well as the rights and guarantees of the users of those applications;

- 7) media dissemination of information about the occurrence of specific cases of stigmatization among MAs users, etc. Therefore, it is not for nothing that 54% of respondents after using this application said that they are afraid that the information collected may harm them in the future.

The scientific assessment of the manifestations and preconditions for the spread of stigmatization of those using MAs to track contacts, indicates the indispensable link between the essence of this phenomenon with the processing of sensitive personal data of the population. This relationship is crucial for the formation of national mechanisms to prevent stigmatization of individuals who use MAs to track their contacts in the context of the implementation of measures to overcome COVID-19. After all, this involves building a mechanism to prevent stigmatization of this specific category of population on the basis of positive and negative obligations of member states of the Council of Europe arising from the provisions of Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms [24].

Although the purpose of Article 8 of the above-mentioned international legal act is mainly to protect individuals from arbitrary interference by public authorities, it does not require the state to refrain from such interference only; in addition to this initially negative task, there must be positive obligations and ties inseparable from real respect for private life. Those obligations may include measures to ensure respect for privacy, even in the field of relations between individuals [25, p. 7].

Thus, the prevention of stigmatization of individuals with their contacts tracked by means of MAs from the standpoint of Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms should be carried out both by introducing regulatory requirements for the development and use of relevant ICTs and application and implementation of measures aimed at neutralizing the manifestation of factors that cause stigmatization by the subjects of public or private law. Therefore, states should ensure the protection of health information collected in the process of COVID-19 pandemic counteraction, promote awareness of the rights and consequences of ICTs use by MAs users, and create conditions for their non-discrimination in society.

In its turn, from the standpoint of negative commitments, it is a question of preventing interference in an individual's private life during the implementation of anti-epidemic measures to a greater extent than allowed by national legislation. In particular, Council of Europe documents have repeatedly stressed the need for member states to avoid processing of information related to MAs users geolocation, limit the processing of personal data to information sufficient for counteracting the effects of the pandemic, promote the use of ICTs to enable intercommunication among the devices, rather than the uses of MAs and authorized officials.

In its judgment in *Leander v. Sweden*, the European Court of Human Rights stated for the first time that the storage by public authorities of information about an individual is an interference with his or her right to privacy and that such interference must comply with Article 2 (2) 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms [26, p. 13].

As far as the given provision restricts the right of an individual for non-interference into private and family life for health reasons, it imposes an obligation on the member states of the Council of Europe to ensure a balance between the interests of individuals whose personal data are processed with MAs and the interests of the society in terms of overcoming the consequences of COVID-19.

Therefore, it is essential to ensure that the above-mentioned measures and the associated data processing are necessary and relevant to the legitimate aim, so that they reflect a fair balance of all relevant interests as well as rights and freedoms at risk at all stages, as stipulated in the Convention. For the Protection of Human Rights and Fundamental Freedoms (Article 8) and the Convention 108+ (Articles 5 and 11) [27].

The necessity to fulfill those commitments by the member states of the Council of Europe and the European Union in the context of implementing measures to overcome COVID-19 pandemic is emphasized in a number of “soft law” acts, including, Joint Statement on Digital Tracking of Contacts by Alessandra Pierucci, the Committee of the Council of Europe Convention Commissioner on the protection of individuals with regard to automated processing of their personal data (“Convention 108”) and Jean-Philippe Walter, the Council of Europe Commissioner for Data Protection on 28.04.2020 [27], and “Guidelines on geolocation and other tracking tools” in the context of the COVID-19 outbreak approved by the European Data Protection Council of the European Union on 21.04.2020 [28].

Thus, in the member states of the Council of Europe and the European Union, the prevention of stigmatization is based on the human rights standards proclaimed by the Council of Europe and the related legal policy instruments of specific states.

In this context, the analysis of the practice of preventing the situation with stigmatization that has developed in the member states of the Council of Europe as a result of COVID-19 counteraction allows us to distinguish two main levels of counteraction to this anti-social phenomenon - general and special ones. Each of these levels of stigmatization preventing not only reflects the manifestations of social stigmatization and the factors that contribute to the proliferation of the given phenomenon against those people whose contacts are processed with MAs, but also takes into account the division of responsibilities of Council of Europe among the member states regarding to non-interference into private and family life of individuals.

Legal literature proves the development of the above-mentioned approach to illegal behavior prevention with the use of ICTs. Within the framework of implementation of the basic provisions, such prevention of manifestations of

illegal behavior can be carried out through the formation of a system of normative measures aimed at eliminating the causes and conditions that contribute to the illegal use of ICTs in society and conducting nationwide information and education campaigns on the prevention of discrimination on the grounds of use or refusal to use ICTs for specific purposes (general prevention) [29].

Special prevention involves practical implementation of a set of legal, organizational and information technology measures aimed at overcoming the consequences of illegal behavior of certain individuals or collective entities and preventing the actions of people prone to the use of ICTs for illegal purposes.

Concerning stigmatization, the separation of general and special types in the structure of its prevention implies the need to concentrate efforts on regulatory and informational measures aimed to prevent the emergence in the society of factors endowing it with negative traits of people who use MAs for tracking contacts.

The implementation of normative measures can be determined through the application by law-making bodies of specific states of legislative techniques and normative constructions that will eliminate or minimize the “legalization” of factors potentially leading to stigmatization. This may include, in particular, the definition of regulatory requirements for security and confidentiality of data processing with specifically designed MAs, the imposition of sanctions and other measures to influence those allowing the facts of stigmatization.

In order to prevent violations of fundamental human rights, the Joint Statement on Digital Contact Tracking emphasizes the need for Council of Europe member states to take, inter alia, the following general preventive measures:

- 1) large-scale processing of personal data must be carried out only if, according to scientific evidence, the potential health benefits of such digital epidemic monitoring, in particular contact tracking, and its accuracy outweigh the benefits of alternative and less intrusive solutions;
- 2) the establishment of the MAs for digital contact tracking should be voluntary and open;
- 3) considering any possible impact of digital contact tracking systems on the rights and fundamental freedoms of individuals, the development of such systems should be based on a preliminary analysis of this impact prior to their implementation;
- 4) the purpose of the digital system for tracking COVID-19 contacts is to identify individuals having a potential risk of the virus infection. This strictly excludes further data processing for any unrelated purposes, such as commercial or law enforcement ones;
- 5) the information processed for the purpose of digital contact tracking should be minimized without collecting any unnecessary or unrelated data;
- 6) there should be no direct identification of users of the data tracking system, as such systems must use only unique and impersonal identifiers generated by the system and inherent to it;
- 7) data used for digital contact tracking should be stored

only during the COVID-19 pandemic overcoming period [27].

According to their purpose, the above-mentioned measures are aimed at the implementation of international standards for the development and use of MAs designated to monitor contacts while implementing the measures of COVID-19 overcoming. Our study found that the main inconveniences of using *Act at home* application include: limited travel, leisure, technical imperfections of the programme and the inability to obtain comprehensive information on its use at the time of installation.

Along with the introduction of sanctions and other measures of legal coercion for manifestations of stigmatization into national legislations, the requirements for MAs actually form legal guarantees to prevent manifestations of stigmatization in response to COVID-19 at the level of individual states or the society as a whole.

At the same time, the positive commitments of the member states of the Council of Europe and the European Union on the general prevention of possible stigmatization may be reflected in national strategies, programs to overcome negative public attitudes towards people or individual social groups taking into account digital tracking of their contacts while overcoming COVID-19 pandemic. In our opinion, the given context implies the focus of such measures on facilitating the process of elimination the distrust for MAs as well as common prerequisites for violating the rights of people with ICTs use to non-interference into their private and family life, overcoming media stereotypes as for danger and other risks from the relevant category of population.

At the stage of stigmatization preventing, systemic and adequate media campaign for the ensurance of public awareness of the features of infection, the course and ways of overcoming the effects of COVID-19, the behavior of individuals with the disease and preventing discrimination against that specific category of individuals becomes vitally important.

As stipulated in the Guidelines for Preventing and Overcoming Stigmatization introduced by the Center for Strategic Communications of Hopkins University, some words and expressions used to discuss COVID infection (e.g., “suspicious case”, “isolation”, etc.) may be perceived by people in negative context and provoke stigmatizing behavior. Therefore, all means of communication, including the media, are recommended to use wording that promotes respect for human dignity, recognition of human rights and opportunities [22].

Collectively, the general means of stigmatization prevention among those using MAs to track their contacts while overcoming COVID-19 are intended to overcome the prerequisites for the phenomenon at the stage of potential emergence of those prerequisites within the society and the change of public attitude towards certain ICT users.

Without reducing the functional potential of general prevention of stigmatization, special prevention of this phenomenon is largely based on measures of individual legal coercion, educational and socio-psychological work within specific social groups. The implementation of this level of

stigmatization preventing involves the development of special measures designed to ensure elimination and prevention of discrimination against people with contacts processed by means of MAs in future. In this context, the main emphasis is shifted to preventing individual cases of disclosure of confidential information about people with contacts tracked by means of mobile applications, eliminating the manifestations of their labor and socio-economic rights restriction as well as manifestations of hostile behaviour and fearful attitudes of other individuals towards them [30].

Thus, at this stage the model of behavior is built either by certain groups or individuals, in which discrimination against stigmatized individuals is subject to public condemnation, and the cases specified by national law are subject to administrative or criminal penalties.

Therefore, the prevention of stigmatization of people obliged to use MAs in response to COVID-19 overcoming is a complex multi-level social and legal mechanism, the successful implementation of which should take into account the forms of manifestation and the factors that cause the existence of the given phenomenon within the society. Based on world human rights standards, the above mentioned social and legal mechanism acquires a meaningful national content (both, instrumental and functional), which determines its effectiveness and appropriateness for the extinction of the facts of stigmatization of individuals at the level of certain states.

DISCUSSION

Multifunctionality and complexity of implementation as well as heterogeneity of the approaches of the member states of the Council of Europe and the European Union to the formation of the mechanism to prevent stigmatization of individuals concerning the feature of MAs use for the purpose of COVID-19 effects overcoming have provoked a fierce debate in the scientific literature.

The main result of the debate lies in the need for each state to formulate a national information policy in a way that minimizes the imposition on the society of stereotypes associated with distrust towards mobile applications designed to track the contacts of people infected with COVID-19 and the risks of individuals installed those applications [31].

According to the International Report “On Human Rights and COVID-19”, all the states must urgently act while counteracting fearful rhetoric and ensure that measures concerning COVID-19 do not increase the vulnerability of certain social groups in the face of violent abuse and discrimination. Dissemination of accurate, clear and evidence-based information and public awareness campaigns are the most effective means of overcoming discrimination fueled by misinformation and fear. Additional efforts are needed to monitor cases of discrimination, as well as timely and public response measures [13].

Thus, the authors of the above-mentioned international document emphasize the importance of preventing stigmatization at the level of general prevention. At the same

time, placing the main emphasis on the informational, explanatory campaign against stigmatization in concern with COVID-19 without mentioning the risks of this phenomenon in response to the use of MAs for tracking contacts causes the inexhaustibility of these measures to overcome the manifestation of stigmatization.

In his statement on 25.06.2020, dr. Hans Henri P. Kluge, the Director of the European Regional Office of the World Health Organization, expressed the idea that digital tools could not work without public trust. Any interference must take into account the need to protect individuals' privacy and personal data. In the digital environment, all the necessary measures must be taken to protect fundamental human and gender rights, and the epidemic is not a basis for deviating from this principle. The responsibility for solving the tasks related to data ownership, data protection and obtaining the consent of citizens lies with the state [31].

The analysis of the existing debates on the problem of preventing stigmatization of individuals with the use of MAs to track their contacts in response to COVID-19 in the scientific literature and international documents revealed that they generally have a common denominator in solving the given problem. Its essence is the need for the increase of general preventive measures with the purpose of overcoming corresponding anti-social phenomenon, specifically educational measures to avoid social stigmatization, ensuring a balance between public awareness of COVID-19 and privacy of personal and family life. At the same time, overcoming discrimination against individuals using specific mobile applications should be emphasized as well as preventing misinformation about their public danger and individual sanctions for manifestation of stigmatizing behavior.

CONCLUSIONS

The conducted research on the prevention of the stigmatization of individuals whose contacts are tracked in the conditions of Covid-19 by using MAs allows us to reach the following main conclusions:

1. The prevention of stigmatization of individuals who use MAs is carried out with the use of general and special means of prevention of this phenomenon. But, in any case, the content of these tools is determined by the national legislation of specific states.
2. At the heart of the national policy to prevent stigmatization of people who use MAs for digital contact tracking are the positive and negative commitments of the member states of the Council of Europe to ensure the right of everyone to privacy and family life.
3. In order to avoid stigmatization of individuals whose contacts are tracked during COVID-19 using the MAs, it is important that the use of these applications eliminates or minimizes the recording of geolocation information of people whose contacts are subject to digital tracking.
4. An important condition for stigma combating is the development of national programs and their approval by

the governments of the member states of the Council of Europe. Such programs should include forms and tools for monitoring the manifestations of infodemia and misinformation, responsible actors, the principles of media behavior during the coverage of Covid-19, as well as a mechanism to stop this phenomenon. In addition, it is important to ensure that the principles of confidentiality, adequate protection and the minimum necessary processing of personal data of employees with Covid-19 are observed.

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