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**REHABILITATION OF PATIENTS WITH SUICIDAL BEHAVIOR:  
DIGITAL SUPPORT OPPORTUNITIES**Mariya V. Ivanovskaya (a)\*, Ol'ga Yu. Sevost'yanova (b), Alexander S. Fedonnikov (c),  
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elena-andriyanova@yandex.ru**Abstract**

The article analyzes the experience of using digital technologies in the prevention and rehabilitation of persons with suicidal behavior in Russia and abroad. Potential dangers and opportunities when using Internet resources in matters of suicidology have been identified. Against the background of a large amount of information about destructive behavior, there is a general lack of Internet resources based on the recommendations of the World Health Organization (mandatory content of information on the provision of psychological and psychotherapeutic assistance, warning about the features of the content, the absence of cultural and religious stereotypes, the absence of devaluation of factors of suicide focused on myths and stereotypes). Online communication is an adequate tool for solving the problem of rehabilitation of young people with suicidal behavior in connection with its actual role of socialization. A review of special sites and applications in the Internet space indicates an acute shortage of resources for persons prone to auto-aggressive behavior, which determines the tasks of digital support of the rehabilitation process. The analysis of the resources showed the absence of web platforms based on official providers of medical and social assistance, which is an important medical and social problem, defining the primary state task in the healthcare sector.

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## 1. Introduction

Digitalization functions have evolved to ensure global development, improve various aspects of life, improve the quality of economic, social, informational, medical and other spheres. Digital technologies have firmly entered all spheres of everyday life, thus shaping completely new socio-cultural situation of the development of the individual and society as a whole.

The introduction of restrictive measures due to the spread of coronavirus infection served as a powerful catalyst for the introduction and development of remote forms of production, provision of services, and assistance around the world. The person found himself in a new unusual situation of forced self-isolation, which has a disorienting, disorganizing effect on behavior, and also leads to the development of states of increased anxiety, fears, feelings of loneliness and social deprivation, which, in turn, is a risk factor for the formation of suicidal behaviour. This state of affairs, in turn, has raised the issue of methods of providing psychological assistance in quarantine conditions. So, by the Director of the WHO Regional Office for Europe, Kluge (2020), a statement was made informing about the active development by WHO and its partners of digital tools for providing first aid and psychological support to the population.

Currently in Russia, there are examples of the effective use of innovative technologies for the implementation of medical goals, but all of them are either very limited and operate at the doctor-doctor level, or are in the form of pilot projects, or similar practices are carried out by private medical companies.

Meanwhile, there is a high degree of need and readiness of the Russian population for digitalization in medicine. Thus, according to the Phillips Health Index study conducted in 2019 by Phillips, 89 % of Russians do not want to visit a medical organization or they note difficulties even at the stage of making an appointment with a doctor (Future Health Index 2019: International Annual Survey, 2019). Modern solutions – telemedicine, electronic cards and digital technologies can increase access to quality medical services, as well as stimulate citizens to timely contact a medical institution.

The socio-economic burden of suicidal mortality is comparable to the impact of diseases traditionally priority for health care. Death at a young age destroys labor reserves. According to Lyubov et al. (2012), the economic assessment of the consequences of suicides is becoming a unified denominator of a complex biopsychosocial phenomenon, reduced to irreplaceable, but fundamentally preventable social losses. The consequences of suicide can also be considered on a psychological level. So, family members and relatives of a person who made a suicidal attempt, both completed and incomplete, need support in the acute period and support in the distant one.

The digital space, built into the structure of modern society, shapes the lifestyle of young people. However, according to Soldatova and Ilyukhina (2021), digital transformation processes not only expand opportunities the younger generation, but also form new specific forms of online risks, namely destructive online behavior. Thus, according to Roskomnadzor, on February 24, 2021, the distribution of videos calling for suicide began on the TikTok social network, one of which gained 432 thousand views per day.

There are known cases of the formation and development of death groups using the Internet, the task of which is to drive and force young people to commit suicide. All this confirms the need for Internet

resources, adequate in terms of quantitative and qualitative ratio, focused on social and psychological support for people who have faced the problem of suicide, as well as on the rehabilitation of people who have already made a suicidal attempt.

The use of digital technologies is justified due to the feasibility of interaction and impact through the same digital channels. Ignoring digitalization in the prevention and rehabilitation of suicidal behavior will lead to such negative consequences as the spread of self-injurious behavior via the Internet.

## **2. Problem Statement**

The problem of suicidal behavior is not only an urgent health issue, but also a global challenge to public order in general. The prevalence of suicidal behavior has gone beyond the boundaries of marginalized groups of the population, its accelerated growth is noted among socially adapted youth. Thus, the issue of the mental well-being of the population is due to the priority humanistic positions.

## **3. Research Questions**

According to official data for 2016 (WHO, 2018), the death rate from suicides included Lithuania (31.2 cases per 100 thousand population), Russia (31.0 per 100 thousand population), Guyana (29.2 per 100 thousand population). Despite these high rates, Russian state medical institutions do not use digital technologies in the prevention and rehabilitation of patients with suicidal behavior. No online help resource has been found on the official websites of mental hospitals. In social networks, popular among young people, there are no similar resources for the query “stop suicide” and “no suicide” that correspond to the WHO recommendations on combating the spread of suicidal behavior.

In Russia, the practice of providing crisis assistance in an online format is carried out the Internet service of emergency psychological assistance of the EMERCOM of Russia (Internet service for emergency...). After passing a simple registration to create a personal account, any user can ask the question he is interested in and get a competent answer. However, this format has a number of technical limitations. Lack of feedback in real time reduces the effectiveness of this format of social and psychological assistance, limiting the range of mechanisms of psychological influence to the recommendation of a hotline telephone (Suicide is not an option).

Since August 15, 2010 the project “Suicide is not an option” has been carrying out its activities to provide professional psychological assistance to people at risk of suicidal behavior. On their official website, which is among the first to be published on request "psychological online support for suicidal risk", anyone in need can send a letter describing their problem to the specified email address. Within 3 days, in response to the appeal, letters from various psychologists will be received, thanks to which the applicant can choose a specialist whose answer he liked the most. This project is an excellent example of providing psychological assistance in an online format in Russia; however, the large time interval between contacting and providing assistance is the main disadvantage of such sites (Suicide is not an option).

Since 2014, in Russia, there has been a non-profit, charitable organization "Your territory online", the main task of which, according to the information indicated on the official website (Your territory), is to contribute to the reduction of suicides among the young population of Russia. This organization is engaged in the provision of emergency psychological assistance to people under the age of 23 in the format of electronic correspondence. We can turn to a professional psychologist for help by filling out a special form on the website, and send an answer to your e-mail address within 4–5 days. Thus, the effectiveness of this format, in the context of providing crisis psychological assistance, can be questioned (Your territory. Online).

Despite the positive experience of using Internet resources in providing psychological assistance to people with suicidal risk, in Russia there are many sites with thematic information of controversial content. So, for example, with the help of such content, a radical attitude towards the auto-aggressive behavior of religion is broadcast, which, in most cases, does not help a person who finds himself in a difficult situation of choice. Also, there are sites with a dubious reputation, where users and employees themselves speak negatively about the quality of the platform's work. All of the above indicates that getting high-quality psychological help on the Internet is also an accident, where the network algorithms determine which resource will be in the first lines of the search.

One of the most interesting examples of providing crisis psychological assistance in a digital format is the activities of the Israeli non-profit organization «SAHAR», created in 2000. According to official information, the organization provides anonymous, instant, free online help to people in Israel who are experiencing emotional stress. Volunteers trained by leading mental health professionals provide all services. «SAHAR» is an active member of the National Council for Suicide Prevention. The activities of the digital center include the following items (Support and Listening ...):

- 1) personal chat providing online support by crisis center specialists;
- 2) support forum where online support group meetings take place with access to all stakeholders;
- 3) 24/7 email support.

The site also contains useful thematic links and articles.

In Europe, the experience of the Dutch National Center «113 Suicide Prevention», whose name begins with a helpline, is noteworthy. The activities of this organization are carried out by professional psychologists, psychiatrists, as well as trained volunteers. The list of services includes the following positions (113 Suicide Prevention, n.d.): crisis chat, support phone, chat therapy, self-help course, self-testing, consultation for the close environment of a person who has signs of suicidal thoughts / behavior. The center is also focused on broad educational activities, which includes participation in the development and dissemination of training methods for medical personnel and other specialists in suicide prevention. «113» has a broad international focus, participating in the European Alliance Against Suicide and the International Against Suicide Movement. The center works closely with the University of Amsterdam VU and the psychiatric institution GGZ inGeest, and is also the founder of the SURE-NL scientific consortium, aimed at scientific research on the prevalence of suicide (113 Suicide Prevention, n.d.).

In Australia, more than 70 % of people between the ages of 14 and 25 in need of assistance are reported to be in need of assistance, making suicide the leading cause of death among young people,

ahead of road traffic deaths (ReachOut, n.d.). Timely provision of psychological assistance through the Internet will help in solving this problem. For example, Australia's online service ReachOut has provided free, anonymous online support to young people and their parents for over 20 years.

The ReachOut community collaborates with leading academic experts in the mental health field. The list of services includes the following items: access to scientific articles on the prevalence of mental illness among young people; online community with a forum; training volunteers; list of mobile applications for self-diagnostics; self-help training. The implementation of this project is aimed at reducing the stigmatization of mental illnesses and increasing psychological assistance to those in need (ReachOut, n.d.).

The specific activity of the Italian non-profit organization SOPROXI, founded in 2006, is to provide specialized support to all those who have lost a loved one as a result of suicide. Practicing psychiatrists, psychologists, psychotherapists, as well as students of specialized specialties, carry out the following activities: online counseling; email service; formation of support groups, individual and group psychotherapy (SOPROXI, n.d.).

#### **4. Purpose of the Study**

The purpose of our work is to analyze the available online platforms focused on the problem of implementing the social rehabilitation of people with suicidal behavior in Russia and abroad. The identified deficit poses a challenge for us to develop a model of an online platform that meets the requirements of the WHO.

#### **5. Research Methods**

The basis of this study is a content analysis of Russian (2) and foreign (4) Internet resources dedicated to the provision of online crisis psychological assistance in the field of suicidology.

#### **6. Findings**

In Russia, a lot of attention is currently being paid to the development of digital technologies and their application in healthcare, which is primarily associated with the spread of a new coronavirus infection. However, the dynamics of the process does not meet the modern requirements of the development of society, and therefore, the study of the factors affecting this process is most relevant.

The analysis of the experience of using digital technologies in the rehabilitation of patients with suicidal behavior in Russia and abroad revealed the following features of this type of practice.

First, digital support, which includes the use of social networks, websites and applications is a necessary task due to the promising role of the Internet.

Secondly, there is a shortage of online resources based in state specialized institutions, which reflects the relevance and necessity of creating such projects.

Thirdly, the development of online support should include the use of the positive experience of the existing single Russian and foreign specialized online platforms.

Fourthly, it is important to search for channels for disseminating information about existing Internet resources to provide high-quality psychological assistance in the field of suicidology. So, such services can be advertised at the level of medical and public organizations, as well as through various media.

## 7. Conclusion

Thus, digital rehabilitation of persons with suicidal behavior is a socially significant task that requires widespread and development. The Internet space is a significant resource in the development of effective support systems for persons prone to auto-aggressive behavior. The development and testing on the basis of official providers of medical and social assistance of an online resource, functionally aimed at social and psychological rehabilitation of people with suicidal behavior, will help in the near future to solve this medical and social problem.

The urgency of the creation of a digital space model with an orientation on the opinion of the rehabilitation agents (directly people with suicidal behavior, close circle, as well as psychiatrists, psychotherapists, psychologists, social services) determines the medico-social and medico-psychological studies of this problem.

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