

Informal Professional Communication of Rehabilitation Specialists and its Significance for their Practical Activities

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SUMMARY

Aim: To investigate the scope, forms and activeness of informal professional communication of rehabilitation specialists using information and communication channels and its significance for their practical activities.

Materials and Methods: The following methods were used during the research: sociological; statistical; structural and logical analysis; generalization. Copies of the author's original sociological survey questionnaire were used as research materials.

Results: The analysis of the results of survey revealed that absolutely all interviewed rehabilitation specialists consider it useful to create virtual groups for professional communication with colleagues in the field of rehabilitation through modern information and communication channels. $44.9 \pm 3.7\%$ of respondents recognized themselves as passive participants of such groups. But $98.9 \pm 0.8\%$ of the survey participants consider the information received in such communication groups to be useful for professional clinical activities in the field of rehabilitation. It was determined that the issues of correct preparation of documentation when providing services under the packages of the National Health Service of Ukraine ($78.7 \pm 3.1\%$) and the problems of organizing the provision of rehabilitation services in health care facilities ($74.2 \pm 3.3\%$) were discussed most often in the groups.

Conclusions: The development of virtual professional communities of rehabilitation specialists helps them to exchange information and improve their knowledge in matters of organizing the provision of rehabilitation services in health care institutions and processing documentation. Provided that the facilitation of communication topics of professional groups is established, it is possible to improve their functioning and attract more specialists to active participation.

Key words: communication, rehabilitation, virtual professional communities, social media

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INTRODUCTION

Rehabilitation is recognized as one of the most important types of health care services at all stages of providing medical aid and care [1]. As governments and other interested parties take the lead in changing the way rehabilitation is perceived and prioritized, relevant policy interventions are increasingly being developed, but most of them do not recognize the role of rehabilitation services in achieving public health goals [2]. In the initiative "Rehabilitation 2030", WHO identified priority directions for strengthening rehabilitation, which also include strengthening mechanisms for planning and providing rehabilitation services at the subnational level, creating a large multidisciplinary contingent of rehabilitation specialists taking into account the specifics of each country, strengthening networks and partnerships in the field of providing rehabilitation services [3]. To ensure the above, measures are constantly implemented to improve the situation and scientific research is conducted. Research on the professional communication of rehabilitation service providers between themselves and other medical workers deserves particular attention. But most of the work in this

area involves formal communication between rehabilitation specialists and health professionals in an interdisciplinary team to coordinate medical care [4-6] and organizing effective communication between healthcare providers and patients [7-9].

In Ukraine, the process of strengthening rehabilitation in the health care system began recently, but it has already achieved certain progress in legislative provision and practical organization of rehabilitation in the system of health care [10]. But, taking into account the COVID-19 pandemic and Russia's armed aggression against Ukraine, informal virtual professional communication of various specialists with the help of modern information and communication channels has gained special development in the country. This did not go unnoticed by rehabilitation specialists and plays a certain role in providing information in the field of rehabilitation care and improving the qualifications of specialists. The advantages and disadvantages of virtual communication of health care professionals of various specialties and their use of social media to create virtual professional communities have already been repeatedly studied in the world [11-15].

Taking into account the constant development of the rehabilitation course in Ukraine and the circumstances that lead to the limitation of live communication, it is relevant to study the extent of the use of such virtual communication by rehabilitation specialists and its significance for their practical activities.

AIM

The aim of the research is to investigate the scope, forms and activeness of informal professional communication of rehabilitation specialists using information and communication channels and its significance for their practical activities.

MATERIALS AND METHODS

The following methods were used during the research: sociological; statistical; structural and logical analysis; generalization. Copies of the author's original sociological survey questionnaire were used as research materials. The questionnaire included the following components: introduction (addressing to the respondent, informed consent to participate in the study, instructions for filling in); main part with questions about respondents' participation in virtual professional communication groups, existent and desired content of information and communication channels; cluster of questions on socio-demographic and professional characteristics of respondents. Questionnaires were created using the tools of Google Workspace package (Google forms). During the research, a total of 185 rehabilitation specialists who are involved in informal communication through information and communication channels were interviewed. After removing invalid questionnaires, data from 178 completed questionnaires were analysed. Processing of the results was carried out with determination of relative values in percentages. The reliability of the results was assessed using standard methods (average error of the relative value (m), coefficient of reliability of the differences (p) of relative values according to the Student's criterion). Calculations were made using licensed software using Google Workspace packages (Google sheets) and Microsoft Office Excel 10 descriptive statistics. The survey was conducted in 2022.

RESULTS

Analysis of the demographic characteristics of the study participants found out that the average age of rehabilitation specialists lay within 45.1 ± 12.5 years. The distribution of respondents by gender showed that 18.0% of the respondents were male and 82.0% were female. Regarding the place of residence, the majority of the study group consisted of urban residents – 97.8%. Professional structure of the group: 62.9% – respondents with medical specialties (doctors of physical and rehabilitation medicine, doctors of exercise therapy, physiotherapists); 32.6% of respondents work in specialty 227 “Physical Therapy, Occupational Therapy”; 4.5% – “Nursing” and “Psychology”. In order to establish the difference in the answers to certain questions, the general research group was further divided into 2 subgroups: A (respondents with medical specialties) and B (respondents

with the specialties “Physical Therapy, Occupational Therapy”, “Nursing”, “Psychology”).

The analysis of the survey results revealed that absolutely all interviewed rehabilitation specialists consider it useful to create virtual groups for professional communication with colleagues in the field of rehabilitation through modern information and communication channels (social networks, messengers). However, $22.5 \pm 3.1\%$ of them indicated that they see the benefit of such communication only in separate groups or separate social networks and messengers.

When determining the most convenient information and communication channels for professional communication with colleagues, their distribution by priority was found (Figure 1). It should be noted that the respondents could choose several channels for communication. So, the surveyed rehabilitation specialists identified social messengers as the most convenient for communication: Viber ($85.4 \pm 2.6\%$) and Telegram ($74.2 \pm 3.3\%$).

The next step was to analyse the answers of the study participants regarding the number of virtual communication groups with colleagues to which they are connected. Thus, $16.8 \pm 2.8\%$ of respondents reported one group of communication, $34.8 \pm 3.6\%$ – two groups, $25.8 \pm 3.3\%$ – three groups, $10.1 \pm 2.3\%$ – four groups and $12.4 \pm 2.5\%$ – five or more.

The engagement of rehabilitation specialists in communication groups was determined by the level of viewing messages and participation in communication. $44.9 \pm 3.7\%$ reported getting acquainted with the informational content of communication groups several times a day, $36.0 \pm 3.6\%$ reported viewing it once a day, $19.1 \pm 2.9\%$ reported viewing it once every few days.

However, half of the respondents ($52.4 \pm 3.7\%$) only view the content of the information and communication channel, and $47.2 \pm 3.7\%$ of participants discuss various topics: 43.8% of them rarely do this, and only 3.4% – often (Figure 2).

A detailed analysis revealed that the majority of rehabilitation specialists of medical specialties (subgroup A) only view the available content of the information and communication channel. This was reported by $58.9 \pm 4.6\%$ of the participants of subgroup A. The interviewed specialists of subgroup B are more active, as $57.6 \pm 6.1\%$ of them indicated the practice of discussion in communication groups, in contrast to subgroup A ($41.1 \pm 4.6\%$), which was confirmed at a reliably significant level ($p < 0.05$).

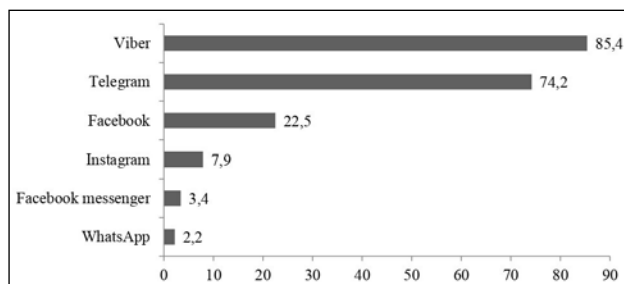


Figure 1. Distribution of priority information and communication channels for informal professional communication of rehabilitation specialists (%)

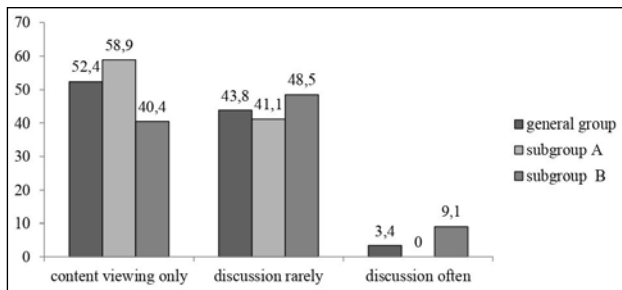


Figure 2. Engagement of respondents in informal professional communication groups (%)

It was discovered that $44.9 \pm 3.7\%$ of respondents identified themselves as passive members of the group, who do not offer topics for discussion at all, and $44.9 \pm 3.7\%$ as inactive (rarely offer topics for discussion). Only $2.2 \pm 1.1\%$ of surveyed professionals were identified as active users. It should be noted that $7.1 \pm 1.9\%$ do not remember whether they offered topics for discussion during the entire period of using communication groups.

The study participants were asked to identify topics that are most often discussed in groups and topics that, in their opinion, are more interesting for communication (Table 1).

It was determined that most often in the groups, the issues of correct preparation of documentation when providing services under the packages of the National Health Service of Ukraine (NHSU) ($78.7 \pm 3.1\%$) and the problems of organizing the provision of rehabilitation services in health care facilities ($74, 2 \pm 3.3$) were discussed, and most rarely - issues of modern diagnostic methods in the field of rehabilitation medicine ($39.3 \pm 3.7\%$) and the issues of the amount of salary by position ($29.2 \pm 3.4\%$). A more detailed analysis of the answers showed that a number of topics are considered by the interviewed rehabilitation specialists to be discussed more often:

- Issues of activities and means of professional development – 1,4 times ($p < 0,001$);
- Issues of modern diagnostic methods in the field of rehabilitation medicine – 1,9 times ($p < 0,001$);

- Issues of modern rehabilitation methods for various pathologies – 1,8 times ($p < 0,001$).

Despite the potency in forming the content of information and communication channel on rehabilitation issues, $98.9 \pm 0.8\%$ of the study participants consider the information received in such communication groups to be useful for professional clinical activities in the field of rehabilitation. At the same time, only $39.3 \pm 3.7\%$ of respondents noted that the specified information is very useful to them, for $49.4 \pm 3.7\%$ the information contains only useful elements, and $10.1 \pm 2.3\%$ of the surveyed specialists indicate on the sporadic nature of useful information.

The formation of content can also be influenced by the professional composition of the group of informal virtual communication. Therefore, the research participants were asked to choose the optimal composition of the virtual community in their opinion, with the participation of specialists exclusively or mixed groups (Table 2).

It was discovered that more than half of all research participants ($56.2 \pm 3.7\%$) consider the virtual community consisting only from specialists in the field of rehabilitation (doctors of physical and rehabilitation medicine, doctors-physiotherapists, doctors of exercise therapy, physical therapists, occupational therapists, nurses, speech and language therapists, psychologists) to be the most effective for professional communication. Almost a third of the total research group ($32.6 \pm 3.5\%$) considers it more appropriate to communicate in a joint group of healthcare management specialists and rehabilitation specialists. No significant difference was found in the answers of the respondents divided by subgroups in the study.

DISCUSSION

The use of social networking sites facilitates effective communication between healthcare professionals and has benefits in terms of information dissemination, professional networking and collaboration [11]. In the United Kingdom, a large number of doctors and nurses use social media to access online medical forums for further education [12]. In

Table 1. Distribution of respondents' answers regarding existent and desired topics for discussion in professional communication groups (%)

Discussion topic	Answers (n=178)		Reliability of difference
	Existent	Desired	
Problems of organizing the provision of rehabilitation services in health care facilities	74,2±3,3	73,0±3,3	p>0,05
The issue of financing rehabilitation services through the NHSU	41,6±3,7	36,0±3,6	p>0,05
The issue of the amount of salary by position	29,2±3,4	28,1±3,4	p>0,05
The issue of correct preparation of documentation when implementing the NHSU packages	78,7±3,1	80,9±2,9	p>0,05
Issues of activities and means of professional development	48,3±3,7	66,3±3,5	p<0,001
Issues of modern diagnostic methods in the field of rehabilitation medicine	39,3±3,7	73,0±3,3	p<0,001
Issues of modern rehabilitation methods for various pathologies	50,6±3,7	88,8±2,4	p<0,001

Table 2. Distribution of respondents' answers regarding the priority professional composition of the virtual community (%)

Professional composition of a communication group	Answers		
	General group (n=178)	Subgroup A (n=112)	Subgroup B (n=66)
Management and rehabilitation professionals (heads of rehabilitation health care facilities, heads of rehabilitation departments, physical therapists, occupational therapists, nurses)	32,6±3,5	35,7±4,5	27,3±5,5
Specialists only in the field of rehabilitation (doctors of physical and rehabilitation medicine, doctors-physiotherapists, doctors of exercise therapy, physical therapists, occupational therapists, nurses, speech and language therapists, psychologists)	56,2±3,7	57,1±4,7	54,5±6,1
Specialists in only one specialty (only doctors, only physical therapists, nurses, physical therapist assistants, occupational therapist assistants, speech and language therapists only, etc.)	4,5±1,6	1,8±1,3	9,1±3,5
Management and rehabilitation professionals, as well as social workers and patients with long-term rehabilitation needs	6,7±1,9	5,4±2,1	9,1±3,5

the USA 88.0% of doctors and nurses were found to use social media and 10.4% of doctors indicated that they participate in medical forums online [13]. However, over the past 5 years, the situation with the development of information and communication technologies has developed significantly. Our research shows that absolutely all interviewed rehabilitation specialists consider it useful to create virtual groups for professional communication with colleagues in the field of rehabilitation through modern social media. This is also explained by the fact that, by creating professional networks, social media unite professionals beyond the geographical location of their usual practices [11]. Healthcare professionals in many countries have begun to use social media to create viable virtual professional communities [14], which has ensured rapid progress in their development worldwide to improve evidence-based practice and clinical outcomes in healthcare [15].

But it has already been repeatedly denoted that virtual communities can have observers, passive and active participants [14, 16]. In our study, it was found that 44.9±3.7% of rehabilitation specialists recognize themselves as passive participants in virtual communication groups, and 47.1±3.7% are active to varying degrees, which confirms the above statement.

Despite the activeness in the formation of the content of information and communication channels on rehabilitation issues, only half of the participants of virtual groups, 98.9±0.8% of the study participants consider the information received in such communication groups to be useful for professional clinical activities in rehabilitation.

Often, clinicians prefer to use social media that allow them to communicate within their profession and clinical specialty [14]. The majority of the participants in our study (56.2±3.7%) also see the most effective organization of virtual professional communication within one sphere - rehabilitation. However, 32.6±3.5% of participants still wanted to involve health care managers in virtual communication groups. This is probably related to the modern health care reform in Ukraine, the active development of rehabilitation and the introduction

of new organizational models in providing rehabilitation services to the population.

It should be noted that the majority of the interviewed rehabilitation specialists (88.8±2.4%) still consider sharing the experience and gaining new knowledge regarding modern methods of rehabilitation for various pathologies as a priority direction for communication. This indicates a desire to constantly improve one's qualifications, grow professionally and provide quality rehabilitation services. Given that at the time of the survey, the specified topic was less often discussed in virtual groups, it would be a good recommendation to strengthen the role of administrators in facilitating professional communication on the topics most interesting to participants.

CONCLUSIONS

The research demonstrated a high level of participation of rehabilitation specialists in informal virtual communication using information and communication channels. The development of virtual professional communities of rehabilitation specialists helps them to exchange information and improve their knowledge in matters of organizing the provision of rehabilitation services in health care facilities and processing documentation. Provided that the facilitation of communication topics of professional groups is established, it is possible to improve their functioning and attract more specialists to active participation.

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A – Research concept and design, B – Collection and/or assembly of data, C – Data analysis and interpretation, D – Writing the article, E – Critical review of the article, F – Final approval of article



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