



COLLABORATION OF THE PUBLIC HEALTH SERVICE WITH PRIMARY HEALTH CARE AT THE TERRITORIAL LEVEL

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Keywords: *intersectoral cooperation, public health service, primary health care, barriers.*

Introduction. *Intrasectoral collaboration in public health represents a huge potential for optimizing the three fundamental public health actions: disease prevention, health protection and healthcare awareness. The COVID-19 pandemic has significantly impacted the engagement of the parties particularly interested in disease prevention and control.*

Material and methods. *A mixed qualitative and quantitative research (in-depth interviews/questionnaire survey) was carried out within this paper.*

Results. *Most of the respondents assessed the intrasectoral cooperation as unsatisfactory and consider that the latest reform of the Public Health Service had a negative impact on it. The pandemic alert caused by the COVID-19 infection served as a catalyst to improve cooperation. The main barriers to collaboration are considered the lack of staff and insufficient communication, various viewpoints and lack of public health knowledge, an overlying complex legal framework and lack of motivation, which often requires central authority involvement.*

Conclusions. *Some barriers to cooperation can be overcome without any systemic changes and centralized involvement, while more easily achievable measures such as joint trainings are sufficient. Thus, understanding these aspects can greatly improve the interaction between services.*

Cuvinte cheie: *conlucrare intrasectorială, serviciul de Sănătate Publică, asistență medicală primară, bariere.*

CONLUCRAREA SERVICIUL DE SĂNĂTATE PUBLICĂ CU ASISTENȚA MEDICALĂ PRIMARĂ LA NIVEL TERITORIAL

Introducere. *Conlucrarea intrasectorială în domeniul sănătății publice reprezintă un potențial enorm de valorificare în cele trei sectoare fundamentale de sănătate publică: prevenirea îmbolnăvirilor, protecția și promovarea sănătății. Pandemia COVID-19 a influențat simțitor implicarea părților interesate, mai multe eforturi fiind depuse în prevenirea și controlul bolii.*

Material și metode. *Studiu mixt calitativ-cantitativ (interviuri în profunzime/sondajul pe bază de chestionar).*

Rezultate. *Majoritatea respondenților au apreciat conlucrarea intrasectorială ca nesatisfăcătoare și consideră că ultima reformă a Serviciului de Sănătate Publică a influențat-o negativ. Alerta pandemică provocată de infecția COVID-19 a servit drept catalizator pentru îmbunătățirea colaborării. Principalele bariere în conlucrarea eficientă sunt considerate lipsa de personal, comunicarea insuficientă, viziuni diferite și cunoștințe reduse în domeniul sănătății publice, cadrul legal prea complicat și motivarea nesatisfăcătoare, pentru înlăturarea cărora deseori este necesară implicarea managementului central.*

Concluzii. *Mai multe bariere în conlucrare pot fi depășite fără schimbări la nivel de sistem și implicări de la nivel central, fiind suficiente acțiuni mai ușor realizabile, cum ar fi instruirile comune. Cunoașterea acestor aspecte ar putea să contribuie la o îmbunătățire considerabilă a interacțiunii dintre servicii.*

INTRODUCTION

Successful cooperation in any field of activity can be provided through the rational and efficient use of resources. Therefore, it is very important that all activities are carried out professionally and in a team spirit in order to achieve the goals, by strengthening forces and promoting the right management strategy. Intrasectoral collaboration in public health represents a huge potential for optimizing the core actions within this area. The Public Health Service and Primary Health Care share common goals in the three main areas of public health: disease prevention, health protection and healthcare awareness. Although primary health care services focus primarily on the health of individuals, there has recently been a growing interest in discussing health issues at the population level (1 – 4), in fighting off the social determinants of health issues (5, 6), and in expanding methods for collaboration with other institutions, especially those related to public health, which, in turn, also show an increased interest in effective collaboration (7 – 12). For some activities, such as immunization or emergency preparedness, this cooperation shows a rather long history (13), but an increasing number of specialists in both services recognize the need to expand and deepen the relationships in terms of common health issues and develop skills sharing and partnership development strategies (14). According to specialized literature, effective collaboration may be influenced by institutional factors (common missions and visions, as well as outlined goals and objectives), factors influencing key partnership processes (transparency, stability, sustainability, implementation of performance evaluation strategies), factors affecting the possibility of cooperation (availability of common data and the ability to analyse them, the presence of specific social, economic or environmental factors), and factors that promote cooperative use of resources (15 – 22).

However, studies that have attempted to identify local barriers to collaboration between public health and primary health care are still scarce. Barriers identified to date include lack of communication and an agreed way of assessing or measuring collaboration between public health and primary health care (19). Recent studies have also identified other barriers to mutual collaboration, such as, reduced awareness, lack of communication and data exchange problems, low ability to

deal with certain public health challenges, especially with regard to new issues, scarce resources (23), etc.

Further study of these issues will help understand how to improve cooperation between the Public Health Service and Primary Health Care.

Purpose of the study: to assess the intrasectoral collaboration practices between Public Health Service (PHS) and Primary Health Care (PHC) at the territorial level.

MATERIAL AND METHODS

To achieve the proposed objectives, a mixed qualitative and quantitative study (parallel triangulation study design) was carried out. The qualitative study included 14 in-depth interviews with the heads of public health and primary health care centers. The quantitative study involved a descriptive survey based on a questionnaire designed for the benefit of the study. Qualitative pre-testing of the questionnaire was conducted on a limited group of participants (no. 5), whose responses were not included in the final analysis. The minimum sample size was calculated taking into account the total number of specialists working in the corresponding institutions (available source: Statistical Yearbook of the 2020 Health System of Moldova included the error margin of 5%, a 1.5 design effect to ensure a 95% confidence interval, involving 634 specialists of the Public Health Service and Primary Health Care, including 10% of non-response rate. The invitations for participation and the questionnaire with informed consent were sent to the e-mail addresses of institutions randomly, which were selected from the list of the relevant above-mentioned institutions, which further engaged all the qualified employees in public health sectors or family doctors in completion of the survey. The inclusion criterion was the consent to participate in the study. SPSS ver.23 and Microsoft Excel were used to create and analyse the database. The obtained results are presented as a proportion (%) with standard error of the mean ($\pm SEM$). To compare the categorical data, the χ^2 test was used, $p < 0.05$.

RESULTS

After the data filtering procedure, 623 questionnaires were included in the analysis. Of the total number of survey participants, 63.1% were wo-

men, of which 85.2% had a work experience ≥ 10 years. General physicians showed little interest in the study's arguments, accounting for 42.2% of the expected number of participants. The comparative analysis of responses obtained from both groups showed no statistically significant differences ($p > 0.05$).

About half or 52.0% ($\pm 2.0\%$) of the respondents confirmed the presence of some collaboration barriers, whereas lack of communication (ap-

proximately 2 out of 5 respondents) and insufficient staff engagement (approximately 1 out of 4 respondents) were found as the main occurring reasons at the territorial level. The rest of the participants indicated two or more concomitant reasons (fig. 1).

Generally, intrasectoral collaboration has been considered difficult due to several factors such as different visions in both sectors, motivational base, legal framework, and lack of knowledge in Public Health (fig. 2).

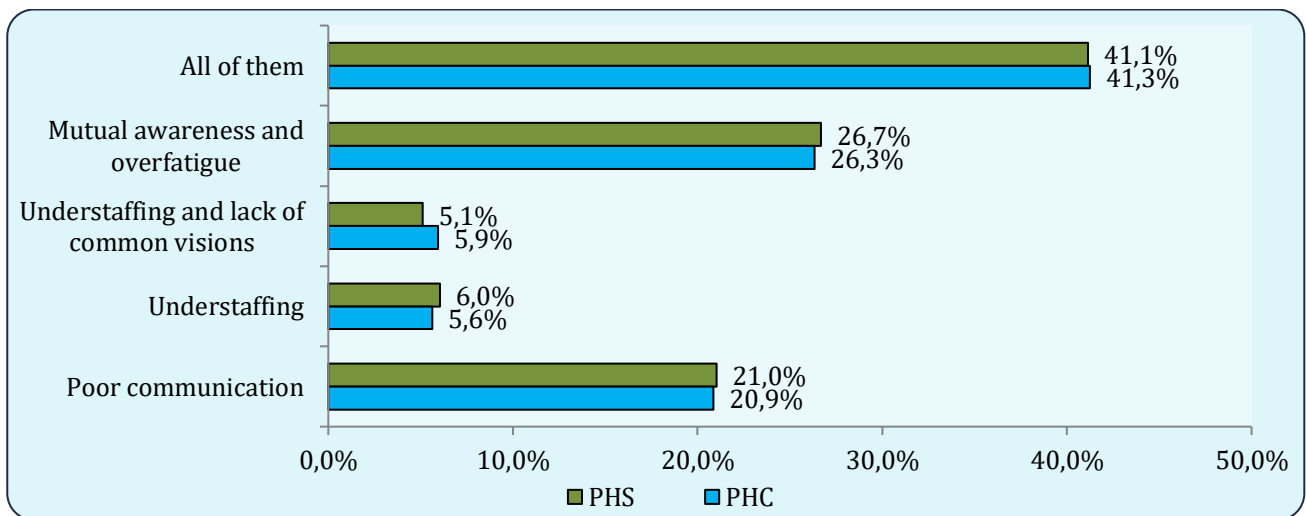


Figure 1. Perceived barriers to cooperation at the territorial level.

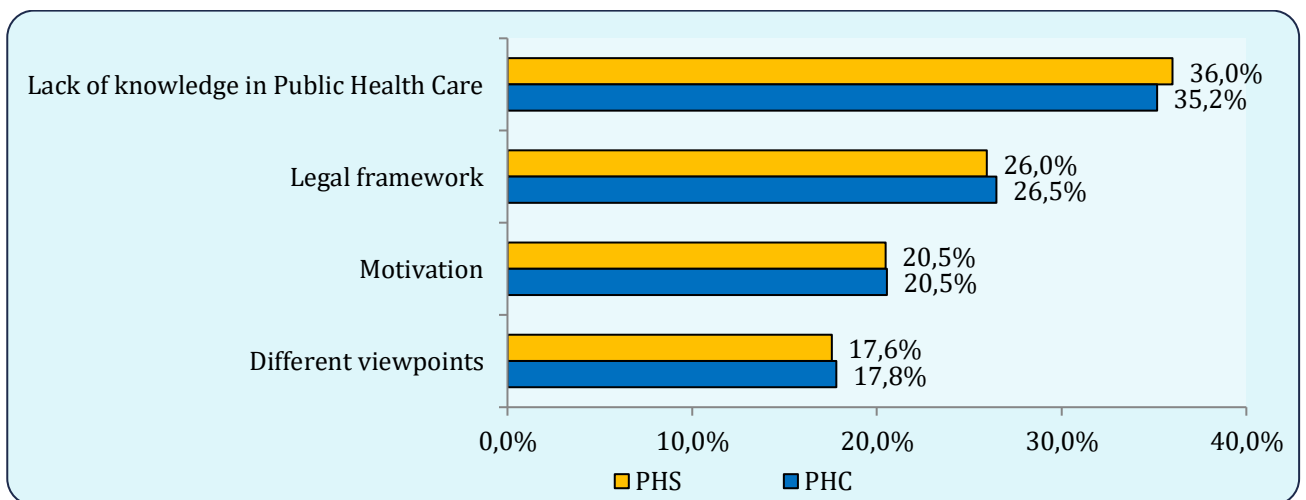


Figure 2. Factors complicating intersectoral collaboration at the territorial level.

Only 36.4% ($\pm 1.9\%$) of respondents think it is essential to amend some legislative/ regulatory acts that would bring clarity and improve cooperation in the future, and 88.9% ($\pm 1.3\%$) of respondents consider it necessary to organize joint trainings on intrasectoral cooperation. However, only 14.4% ($\pm 1.4\%$) of respondents reported that they

had heard about the organization of this training method.

Around half or 49.8% ($\pm 2.0\%$) of the respondents consider that the involvement of the central authorities is necessary to remove the existing barriers. As regarding the coordination factor at the

territorial level, 22.5% of respondents think the District Council led by the District President (as the main link at the administrative territory level) should be involved in coordination, 20.9% of respondents – by the Extraordinary Public Health Commission, and 11.2% respondents – by the Commission for Emergency Situations. Only 4.3% of the respondents chose the Territorial Public Health Council as their answer, and 41.1% of the respondents consider that all of the above mentioned bodies should be involved in coordination.

Analysing the data obtained during the in-depth interviews, a series of barriers to collaboration between the Public Health Service and primary healthcare were identified. Thus, the managers assessed the territorial cooperation between these services as unsatisfactory, with a note that "there is room for improvement and that more openness and communication, involvement and dedication from both sides are required". It is also generally agreed that the last reform of the Public Health Service (dated in 2018) on the creation of the National Agency for Public Health with 10 territorial Public Health Centres had actually a negative impact on the administrative territories related to the territorial Public Health Center. Almost all respondents stressed that the COVID-19 pandemic alert has led to increased participation and acted as a catalyst for improved intrasectoral collaboration. For example, since the pandemic onset, cooperation between the two services has increased significantly. Joint efforts have been made in several areas, such as the COVID vaccination campaign, followed by staff training, provision of vaccines and equipment to maintain the local cold supply chain, and the development of the National Vaccination Registry with real-time monitoring of the immunization process, in particular, the joint organization of information campaigns among the population to increase the vaccine acceptability and awareness on the benefits of vaccinations. However, the vast majority of respondents agreed that the results could have been much better if cooperation had not been hampered by some external and internal factors. Almost all participants in the study found the cur-

rent legal framework too complex, as there are too many overlapping regulations and the fast speed to which they modify.

In order to improve intrasectoral cooperation, the following solutions were indicated as necessary: promoting openness on both sides, organization of joint trainings, optimizing communication, staff and equipment provision in accordance with specific needs, and funding at the same level, etc.

DISCUSSIONS

The analysis of the specialized literature revealed that there is a limited number of studies in this field, especially regarding the barriers in local collaboration between public health and primary healthcare institutions.

Moreover, a consensus was also found on the results obtained in terms of intrasectoral collaboration and the identified barriers. For example, similar results were obtained in a US 4-state multicenter study, which studied the increased interest in collaboration between these services to enhance community health. Thus, despite the increased understanding on how these collaborations work, little is known about the barriers occurring at the territorial level (24). This study found that primary care providers and public health specialists report similar barriers to collaboration. Thus, barriers at the institutional level included problems in the primary health care settings, where providers feel overwhelmed and where resources are limited, the need for systemic change, lack of partnership, and geographic challenges. Barriers to collaboration included lack of mutual awareness, difficulties in communication and data exchange, weak institutional capacity, failure and the need to optimize the available resources.

Determining the similarities between the study results and those from international studies, as well as learning the prior lessons by identifying some aspects of the local framework, could help improve the intersectoral collaboration for quality, continuity, sustainability and development.

CONCLUSIONS

1. In the course of the study, it was found that the cooperation between the Public Health Service with primary healthcare is unsatisfactory, due to a series of territorial barriers.
2. The study participants consider that the latest reform of the Public Health Service had a negative impact on intrasectoral collaboration, as well as on primary healthcare settings.

3. The pandemic alert caused by the COVID-19 infection led to a more active involvement and was a catalyst for an enhanced intersectoral collaboration.
4. The study results identified a series of major barriers in the collaboration between the services under study, namely, different visions and insufficient knowledge regarding public health, the deficient legal framework, inadequate staffing, and lack of initiative and common priorities.
5. The study determined that to overcome these barriers and provide a more effective collaboration, the involvement of central authorities is needed, and that cooperative working conditions, motivation, responsibilities, and joint trainings should be provided at the administrative-territorial level.
6. The obtained results suggest that while some barriers to collaboration (such as the legal framework, the motivational framework, and funding) require systemic change to be overcome, others (such as providing a common vision, communication, mutual awareness) could be overcome through joint training without any additional resources. Further study of these issues will help understand how best to support collaboration between the Public Health Service and Primary Health Care.

CONFLICT OF INTERESTS

The authors declare no conflict of interest.

ETHICAL APPROVAL

The research was conducted under strict conditions of anonymity and carries no ethical risks. The approval of the research ethics committee

was not required.

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