



Dimensions of the Inter-sectoral collaboration in Maternal Health Promotion Activities: Experts Viewpoint

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Abstract

Background: A significant portion of maternal mortality has social causes. Inter-Sectoral Collaboration (ISC) is among important strategies for decrease the Maternal Mortality Rate (MMR). The present study aimed to explain participants' viewpoint on the dimensions of the Inter-Sectoral Collaboration in Maternal Health Promotion Activities (MHPA) in Developing Countries.

Methods: In this qualitative phenomenological study, data were collected using semi-structured interviews with experts from 2019 to 2020. The participants were selected using the purposive sampling method; interviews were continued until reaching data saturation. Data were analyzed using the content analysis method with the MAXQDA software.

Results: From the participants' view, ISC in the maternal health services has the 3 main themes and 9 sub-themes. The main themes were "Transparency", "Participation" and "Coordination".

Conclusion: The collaboration of activities within and outside of the health domain is a fundamental approach to promoting maternal health, so formulating effective community policies based on the dimensions of collaboration should be considered.

Keywords: Inter-sectoral collaboration; Mothers Health; Content Analysis

Background

Maternal mortality is an important indicator for health status in all countries. Despite the World Health Organization's (WHO's) goal of reducing maternal mortality, many countries have not attained it [1,2]. Many preventable deaths of pregnant mothers occur due to determinants out of health sector [3]. The factors affecting maternal health are complex; coordination and interactive plans between the health sector and other sectors of society are essential to improve

the pregnant mothers' health [2]. Some developed countries have been focused on ISC planning within and outside the health sector to reduce maternal mortality and improve their health, for example in the Republic of Korea, 25 laws have been adopted to coordinate implementation at different ministries to improve child nutrition and reduce obesity [4]. The structures of the ISC process vary from country to country and affected from the structure of

the organizations and legislation of the country [5]. Commitment between sectors for collaboration can be achieved through the establishment of an understanding within the framework of policies, treaties, and legal support. Community policymakers can facilitate cross-sectoral communication through coordinated programs. For example, a coordinated program to reduce violence in society is a joint task of the police and the judiciary [2,4]. In other words, coordinated action by the education system, the police and the judiciary, as well as other relevant parts can identify the causes of violence and eliminate the roots of violence [6]. There is no coherence policy in Iran for ISC in maternal health services. Despite the planned efforts, maternal mortality rate is still far from the Millennium Development Goals [7,8]. A number of mothers lose their lives due to the lack of physical access to well-equipped health centers and in some cases, educational inequities between the rich and poor areas as well as the differences between regions in health literacy and self-care information [9]. In some parts of developing countries, differences in mothers' access to social facilities leads to maternal death; unfavorable roads and road accidents as well as lack of access to adequate food resources are other causes of maternal mortality [10]. Increasing knowledge and understanding of dimensions of inter-sectoral coordination and collaboration is necessary to create a higher sense of responsibility.

Objectives

The aim of this study was to extract the dimensions of the Inter-sectoral collaboration in maternal health promotion activities through interviews with experts in 2020.

Methods

This qualitative study was of content analysis type. After obtaining permission from the relevant institutions, explaining the study to the interviewees and obtaining written consent, semi-structured, face-to-face interviews were conducted in the environment proposed by the participants. The interviews lasted 30-90 minutes. The study was performed among health departments at the universities of Tehran and Tehran Provincial Government.

Participants

Semi-structured interviews were conducted with 20 health staff of the medical sciences universities in Tehran, 10 faculty members from the relevant fields and 20 service providers both inside and outside the health sector which were selected by purpose-based method. The interviews based on having sufficient information about the study and research questions, proceeded until reaching data saturation. Experts in this study included graduate and postgraduate healthcare professionals and faculty members in midwifery, gynecology, epidemiology, sociology and social medicine with at least three years of experience.

Data collection

In this semi-structured study, the following questions were asked to achieve the participants' viewpoint:

- Is cross-sectoral coordination in maternal health services necessary?
- In your opinion, in what areas can cross-sectoral coordination in maternal health services be?
- What do you think about the dimensions of cross-sectoral coordination in maternal health services?

After reaching data saturation, the interviews ended. Each interview lasted about 60 to 90 minutes.

Data analysis

- The interviews with experts were first recorded and then transcribed. In data analysis:
- First, the text of the interviews was carefully read.
- The text of the interviews' interpretation was carefully written.
- The themes were identified by discussion between the members of the research team.
- To overcome any doubts and making the results conclusive, the text was revised.
- In the next step, the texts were compared, and the themes were identified.
- At this stage, the themes were discussed by the members of the research group.
- Finally, the themes were extracted. Code analysis was performed with MAXQDA-10.

Rigor

Goba and Lincoln methods were used to confirm the accuracy of the study [11]. Data transferability was determined through the review and approval of seven experts and the credibility of data from the interviews was confirmed by approval of the participants at the same time as the data collection and with the use of the viewpoints of six faculty members. Data confirmability was determined using the views of five faculty members who did not participate in the study; the study procedures were recorded and its coherence was identified. To confirm dependability, notes were taken while the data was collected and the collected data was merged.

Ethical considerations

The study was launched after permission from the Ethics Committee and obtaining a written certificate from the University. Considering the confidentiality of the information and the results of the research, the consent form was signed by the participants.

Results

Table 1: Themes and Sub themes of Inter-sectoral collaboration in Maternal Health Services from the participants' viewpoint.

Themes	Sub-Themes
Transparency	Determining Specific Processes of Sectors
	Transparency in infrastructure
	The clarity in policy making
Participation	Participatory in plans
	Other Sectors Involvement in Intervention
	Comprehensive evaluation of Access to goals
Coordination	Integrative Frameworks for Collaborative Planning
	Accountability in Activities
	Inter-sectoral Conflict management

Study interview content were analyzed and a total of 150 codes were obtained. In the next step, the codes were summarized in 9 sub themes and 3 main themes (Table 1).

Theme 1: Transparency

Transparency refers to the free flow of information. The theme of transparency includes the three subthemes of "Determining Specific Processes of Sectors", "Transparency in infrastructure" and "The clarity in policy-making".

Determining specific processes of sectors

This sub-theme refers to determining the specific duties and plans of the different sectors that work together. For appropriate ISC, the process relationship through which the health sector structure with other sectors should be identified; therefore clear inter-sectoral process planning in the ISC is very important [5]. Below are some of the participants' experiences: "In Intersectoral Collaboration, each sector must know its tasks; clear processes can be purposeful and bring partnership to the expected result. It clarifies the interactions and relationships across levels of hierarchy and performance between sectors" (Participant No.12). "Careful planning and transparent processes improves performance and facilitate the achievement of a common organizational goal. Lack of transparency often misleads common processes "(Participant No.1). Other participants said: "In each collaborative effort, the designation of a goal-based program is the first step in health management" (No.5). "It's not just in the health sector, in each joint activity; each sector must know its share in plan and what is expected from each side, what role does each person in this scenario?" (No.12).

Transparency in infrastructure

The resources (Human and Financial) for ISC should be determined precisely according to the objectives.

"The access to resources is necessary for determining the level of collaboration, collaboration at the level of the ministry, provincial or city level have unique resource structure, therefore transparency

is necessary to achieve a common goal "(Participant 7). Another expert believed that: "Health financing is initially focused on paying for health care and health interventions, but then; how to use these funds to purchase health care and different interventions will be important to maximize treatment outcome". A faculty member said: "In intersectional collaboration financial risk is shared across sectors, the payers aren't responsible for the total cost of delivery of intervention / service, therefore interventions as well as the purchase of services are facilitated" (No.7).

The clarity in policy-making

The opinion of one of the hospital managers was as follows: "Promoting the health of pregnant mothers is possible through the partnership of civil society organizations and cooperation the private and public sector, achieving common goals depends on clear and defined policies. Health is an inter-sectoral subject and isn't limited to the health sector. Transparency of common policies and strategies between the sectors is necessary to achieve common goals in public health" (No.3).

Theme 2: Participation

This theme consists of the subthemes of "Participation in plans", "Other Sectors Involvement in Intervention" and "Comprehensive evaluation of Access to goals".

Participation in plans

The dominant concept concerning participatory plans is sectors contribution to achieve object by providing funding for project implementation. One of faculty members believes that: "In order to achieve the goals of ISC in maternal health each participant consider collaborative share in policy making and process plan (No.17). Another believed that: "In ISC, each side has a duty defined according to the goals; for achieving these goals, the sectors must be aware of the necessity of the implementation of the processes"(No.8). "The relevant departments and authorities promise to move towards the goals, but In some cases, implementation and operation of obligations haven't Predicted and appropriate plan; since there isn't

monitoring, we only see that due to poor road conditions, many mothers still do not have access to well-equipped centers and they lose their lives” (No.16).

Other sectors involvement in intervention

Maternal health is a multisectoral approach, so interventions to pregnant mothers' health promotion can be effective when all sectors work together. A health policymaker believes that: “The intervention performances of the various sectors of education and economics, politics and health are interrelated and changes in thinking and acting in one sector are likely to affect other sectors” and others said: “Each sector has specific tasks and capabilities. The maternal health strategies don't achieved by one sector alone, only the multiple health needs of pregnant mothers can be met if all the relevant interventions in a collaborative and coordinated manner” (Governor's Expert, No.13).

Comprehensive evaluation of access to goals

In process management, Step-by-step and final evaluation is necessary to determine access to defined goals. One expert said: “All stakeholders should take a participatory process in promoting maternal health, the performance of sectors should be measured together according to the achievement of common goal” (No.10).

Coordination

Today, due to the complexity of communities and health needs, coordination between the health sector and other social sectors has a basic need to provision of care. This theme consists of the subthemes of: “Integrative Frameworks for Collaborative Planning”, “Accountability in Activities” and “Inter-sectoral Conflict management”.

Integrative frameworks for collaborative planning

For prevention from failure in access the collaborative health goals, a comprehensive planning framework is an important factor. One expert from hospital management committee believed that: “A comprehensive framework in all stages of planning, an implementation and evaluation program prevents any process owners from getting confused. A practical framework is needed to strengthen joint programs to promote maternal health and prevent avoidable deaths” (N.12).

Accountability in activities

Accountability in participatory maternal health activities is a governance approach that engages citizens' health sector and civil society organizations in a collaborative process. A faculty member said: “The interventions to promote maternal health are multidimensional, user and service provider relationships, related sections of the community are sometimes disrupted due to lack of proper coordination. Accountability can lead to trust, cooperation, and interaction between the parties” (No.3).

Intersectoral conflict management

During the participatory process, when common goals are not properly defined or financial disputes arise, members may experience a variety of operational conflicts that require proper management to access the goals [12]. One of the participants said that: “Different goals, perspectives and interests may create different perceptions of the stakeholders and lead to conflict, in some cases; participants have been able to overcome these differences by using common strategies” (No.9).

Discussion

Pregnant Mothers Health is largely dependent on outside the health sector. Other sectors usually contribute to health through governance, policy-making, and action. To properly perform the process ISC in MHPP, identifying the dimension and responsibilities of the parties is essential. One of the main themes of ISC in MHPP was transparency, which resulted from three subthemes. The concept of “Determining Specific Processes of Sectors” is determining the plans of different sectors to achieve common cross-sectoral goals [13]. During the design of coordinated inter-sectoral interventions for the prevention of heart disease, Schnackenberg concluded that transparency in health and other sector programs is essential to reducing mortality and achieving goals ; Also, having specific programs can prevent stakeholder confusion [11]. The Wilunda et al believe that transparency in the provision of health services to pregnant mothers is important because each sector with accurate and complete information can participate in the planning and implementation of agreed processes [9]. “Transparency in infrastructure” was another subtheme that in most studies, two dimensions of structure and provision of resources (or Financial transparency) have been emphasized [4,6,10]. It is recognized that lack of transparency in the structure of joint processes between different sections of society and the health sector may be an obstacle to proper decision making [14]. Musavi et al in a study concluded that the lack of transparency in the structure of participatory activities is a major obstacle in setting operational goals [12]. The reason for emphasizing transparency in the structure is to facilitate the various stages of planning and policy-making, as well as the implementation of joint programs related to maternal health [15]. “The clarity in policy-making” was one of the main themes of effective ISC in the maternal health. In most cases, commitment means adherence to the principles and treaties that the parties define in order to achieve certain goals [15]. All cross-sectoral activities should be clearly planned and based on the needs of the sectors [11]. Gebre et al specified the clarity of policy-making in organizations in three dimensions: emotions, norms, and continuity. It seems that at intersectoral level, due to the extent of the processes, wider dimensions have been emphasized by participants for ISC [16]. The role of social “participation” with the health sector in the prevention of disease and mortality has

been shown in many studies [15,16,17]. Various factors outside the health sector can affect pregnant mothers' health. Collaboration between the health sector and other sectors of society is essential to promote maternal health and the existence of joint programs to achieve a common goal [14]. "Other Sectors Involvement in Intervention" were another sub-theme of participation in this study. In many cases, health promotion interventions in vulnerable groups require the cooperation of the health sector and other sectors of society [15]. Strengthening the potential of other sections of society to implement health in all policies is done through continuous efforts to strengthen inter-sectoral interventions [11]. Many of the factors inside and outside the organizations providing services to pregnant mothers affected from economic and social factors and lack of proper management of intervention could lead to non-compliance with bilateral obligations [17]. Another dimension of participation is "Comprehensive evaluation of Access to goals"; the evaluation process is a series of formal actions to assess the performance of the organization within a specified interval time and includes assessment all the behaviors and activities of individuals or organizations in relation to achieving a specific goal in a specific period [18]. Mothers' health is one of the indicators of development in the country; thus, all sectors that directly or indirectly contribute to the promotion of maternal health are required to develop their own operational plans. Acting in isolation and, in some cases, the lack of a coherent assessment system can lead to irreparable harm to the health of mothers. In many cases, periodic and end-of-term evaluations can reduce costs significantly [19]. The results of the study Yuqi Ta correspond to the result of this study; they also concluded that achieving goals will not be possible unless all stakeholders define goals for themselves; both in stages and in a final form, and pursue the achievement of those goals [20]. "Coordination" is another key theme of ISC in the field of maternal health promotion. The stakeholders can develop and approve a clear framework that reflects a common view of the issue (s) that needs to be addressed [18]. "Integrative Frameworks for Collaborative Planning" is subtheme of coordination. The proposed framework can play a major role in increasing the efficiency and effectiveness of the ISC by adopting an integrated concept because the ISC functions are highly interrelated Lodenstein also described the development of a participatory framework for joint activities as a factor in studying the dimensions of cross-sectoral coordination in the control of chronic diseases. He summarized inter-sectoral collaboration framework in the control of chronic diseases to three subthemes: "clear shared management", "relationship" and "resources" [21]. Accountability in Activities in maternal health management is inter and intra sectoral response to customer (pregnant mothers) needs [14]. The cultural values of the community and process owners in the field of maternal health and the values of all stakeholders (internal and external clients) should be respected. Considering the values of individuals at all levels involves the durability of fulfilling the obligations [7, 21].

Conclusion

The results of this study are consistent with the study Chol et al; they concluded in their study that accountability is one of the important dimensions of cross-sectoral coordination activities to promote adolescent's health [22]. Various dimensions have been described in some studies for accountability; Kirkham et al. reported a significant positive correlation between different dimensions of accountability such as informational, functional, and ethical dimensions with the legal dimension of accountability [23]. The political accountability is fundamental in justice-based policies; according to the results of macro-level studies, the factors promoting the health of different population groups are affected by political accountability [24]. Stakeholders in the collaborative process, may endure some form of mental or operational conflict, it has been due to lack of proper communication or financial disagreements [25]. Stakeholders have been able to dominate these conflict by using their common collaborative goals [26]. Based on the results, transparency, participation, and coordination are among ISC dimensions; to achieve maximum potential, policy makers and managers in the field of maternal health at multi levels should provide the necessary conditions for realizing the above mentioned.

Author's Contribution

Masoomesh shakeri, Soad Mhfoozpour, were responsible Study design and design and data collection and Mahmood Modir and negin choopanii the data analysis and final revisions to the paper content.

Ethical Approval

This article is part of the results of my dissertation entitled "Designing a Model for Promoting Mothers' Health Using Multi-criteria Decision-making" which was approved with the IR.IAU.Z.REC.1399.075 Code of Ethics. In this study, all ethical considerations, including obtaining permission from the relevant organization and experts, also ensuring the confidentiality of results and presenting the results to the relevant organizations were considered.

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Conflict of Interest

The authors had no conflict of interest.

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