Self-care behaviors of pregnant women during COVID-19: A policy brief

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Article Info	A B S T R A C T
Article type: Policy Brief	**Introduction**: Infectious diseases and the related pandemics are one of the health problems of human societies, and especially affect various aspects of health of pregnant women as a high-risk population. Given the importance of pregnancy period, the present study aimed to explain the self-care behaviors of pregnant women during the COVID-19.
	Materials & Methods: The present qualitative study was conducted among pregnant women in Ilam city using conventional content analysis method. Using purposive sampling method, 16 pregnant women were studied and data were collected using semi-structured interviews. Simultaneously with the collection, data were analyzed using conventional content analysis method. MAXQDA version 10 software was used for data management. **Results:** The average age of the participants and the average gestational age were 30 years and 38 weeks, respectively. Three main themes were extracted: 1- Self-care against illness, 2- Negative effects of the pandemic on pregnancy, and 3- Changes in the care system, and 8 categories.
✉ *Correspondence to:* Afsaneh Raiesifar Associate Professor of Nursing, Department of Nursing, School of Nursing and Midwifery, Ilam University of Medical Sciences, Ilam, Iran **Email:** a.raiesifar@gmail.com	**Conclusion:** The results of the study show that the COVID-19 pandemic has created a new style of self-care and health care in pregnant women. To improve the health of this vulnerable group, health policies during the crisis need to focus on strengthening virtual care, psychological support, and equitable access to servicesThe implementation of these strategies requires intersectoral cooperation, financial resources, and education of stakeholders. **Keywords**: Pregnant women, self-care behaviors, COVID-19, policy brief

Introduction

Infectious diseases such as COVID-19 have had widespread impacts on the physical and mental health of communities (1). Pregnant women, due to physiological and immunological changes, are at a higher risk of developing complications from this disease (2). Indeed, pregnancy is one of the most critical periods in which the adoption of healthy behaviors becomes particularly important, as it is considered a crisis that places expectant mothers in stressful and challenging circumstances. These conditions can, in turn, influence the lifestyle as well as the physical and psychological characteristics of the mother (3)

pregnancy and childbirth. Therefore, they often take measures to achieve favorable outcomes. The health-related practices, decisions, and behaviors that constitute a mother's lifestyle during pregnancy not only influence the health, growth, and development of the fetus but also have long-lasting consequences for the lives of both mothers and their children (4). Findings from various studies also indicate a higher prevalence of mood disorders during pregnancy. However, in most pregnancies, the focus is primarily placed on the physical and physiological aspects, while the psychological and emotional dimensions are often overlooked. These changes can, in turn, increase stress, anxiety, and depression (5(.

Moreover, the results of studies confirm that psychological disorders among pregnant women increased during the COVID-19 pandemic due to concerns about the risks of the disease, the involvement of family members, and potential threats to the unborn child, among other factors (6, 7). Pregnant women faced multidimensional challenges during the pandemic, including the need to modify self-care behaviors, psychological pressures resulting from quarantine, and limited access to healthcare services. At the same time, there remains a significant scientific gap regarding COVID-19, which necessitates continuous updating of available evidence and dissemination of information (8). Since

qualitative studies focus on individuals' specific experiences and perceptions and can provide realistic insights into the subject of interest, conducting such studies to explore the unknown consequences of the disease across physical, psychological, and social dimensions could be highly valuable for healthcare decision-makers and policymakers (9).

Given the key role of women in family health, and the particular vulnerability of women especially pregnant women during the COVID-19 pandemic, examining self-care behaviors among pregnant women during this period appears essential for informing health and clinical decision-making in future crises. Therefore, the present study was conducted with the aim of exploring self-care behaviors of pregnant women in Ilam during the COVID-19 pandemic, using a qualitative approach.

Materials and methods

This qualitative study, employing a content analysis approach, was conducted in selected comprehensive health centers of Ilam in 2021, following approval from the Ethics Committee of Ilam University of Medical Sciences (Ethics Code: IR.MEDILAM.REC.1399.113). Sampling was carried out using purposive sampling, with maximum variation in background factors taken into account. Interviews continued until data saturation was achieved.

Inclusion criteria consisted of willingness to participate in the study, absence of pregnancy-related complications such as gestational hypertension, gestational diabetes, hospitalization during pregnancy, and threatened miscarriage, as well as the ability to comprehend and convey concepts to the researcher. Participants were excluded in case of withdrawal or unwillingness to continue.

Before the official start of the interview sessions, an introductory meeting was held in which the researcher was introduced, verbal explanations about the study objectives were provided, and written informed consent for participation and audio

recording was obtained. To ensure confidentiality, each participant was assigned a unique code. Data were collected through semi-structured individual interviews and field notes. Each interview lasted approximately 30 to 60 minutes. After the completion of each interview, the content was transcribed verbatim onto paper as soon as possible following 2–3 rounds of listening, and subsequently typed. For data analysis, conventional qualitative content analysis based on the method of Lundman and Graneheim was applied (10). Data management was facilitated using MAXQDA software, version 10. To ensure the trustworthiness and rigor of the data, Guba and Lincoln's criteria including credibility, transferability, dependability, and confirmability were employed (11). To enhance credibility, multiple strategies were applied, such as ensuring diversity among study participants, prolonged engagement with participants and the research setting, providing detailed information about the study objectives, continuous comparison of data, audio recording, immediate transcription and analysis following each interview, and incorporating feedback into subsequent interviews. Furthermore, data validation was achieved through member checking by several participants and external peer review, with necessary modifications applied accordingly.

Results

Data from interviews with 16 pregnant women were analyzed. The mean age of participants was 29.5 ± 8.98 years, and the mean gestational age was 30.38 ± 6.54 weeks. The majority of participants had a university education, and six were employed.

The main findings derived from the interviews were categorized into three overarching themes: self-care in the prevention of illness, negative impacts of the pandemic on pregnancy, and changes in the healthcare system. These themes comprised eight subcategories: adaptive care, utilization of accessible information resources, changes in daily activities, social isolation, negative thoughts, psychological distress during the pandemic, shifts in care priorities, and new approaches in the provision of care.

Recommended Policies

1.   Development of psychosocial protocols for pregnant women during crises: Considering the specific psychosocial impacts of crises, particularly on pregnant women, it is recommended that remote psychological counseling programs be implemented. In addition, continuous psychological assessments through specialized interviews and standardized psychometric tools should be integrated into routine prenatal care programs, especially during periods of crisis

2.   Revision of in-person care systems and expansion of remote healthcare services (telemedicine) for pregnancy: Considering the concerns and difficulties associated with in-person access to healthcare centers and teams during crises, it is essential, based on experiences from the COVID-19 pandemic, that all centers develop and provide remote care platforms—such as dedicated applications, structured phone calls, and specialized care platforms—for use during exceptional circumstances. Necessary training should also be provided to stakeholders to ensure effective utilization when needed. This approach can prevent interruptions in care, particularly at the onset of crises. Examples include designing mobile applications or conducting weekly phone consultations with midwives or physicians

3.   Development of self-care guidelines tailored to crisis conditions: Given the changing health needs during crises, it is necessary to develop clear and easily understandable guidelines covering various aspects of self-care including psychological, physical, and medication-related issues which can be made accessible to stakeholders during exceptional circumstances.

Requirements and Barriers for Implementing Policy Options

Implementation Requirements

The implementation requirements include legal, financial, and technical aspects. The proposed policies necessitate the development of new regulations and guidelines at higher managerial levels, including the Ministry of Health and Medical Education. Additionally, these guidelines should specify the resources and sources of funding and technical support required for the proposed initiatives, including equipment, digital infrastructure, and human resources.

Potential Barriers

The potential barriers can be categorized into cultural, economic, and organizational challenges. Cultural barriers include resistance from pregnant women, their families, and healthcare personnel toward adopting new methods and changes. Economic barriers involve insufficient funding for the development of infrastructure and the implementation of supportive programs. Organizational barriers include a lack of coordination among various institutions, such as the Ministry of Health, insurance providers, and healthcare centers.

Proposed Strategies to Reduce or Overcome Barriers

Strategies to mitigate or overcome these barriers include education and awareness-raising through the organization of training workshops for pregnant women, their families, and healthcare personnel; fostering a culture of intersectoral collaboration by establishing joint committees between the Ministry of Health and relevant organizations; and piloting the proposed initiatives in a single province before scaling them up nationally.

Target Audience of the Research Project

The intended audience for this research includes health policymakers (Ministry of Health, Planning and Budget Organization), healthcare centers (hospitals, obstetrics and gynecology clinics, and health centers and bases), universities and research institutions, as well as non-governmental organizations involved in implementing supportive and educational programs.

Conflict of Interest:

The authors declare no conflicts of interest.

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