Journal of Midwifery &

Reproductive Health



Imprisoned Pregnant Women's Lived Experience of Prenatal Care: A Phenomenological Inquiry

Somayeh Alirezaei¹, Robab Latifnejad Roudsari^{2,3*}

- ¹ PhD Student in Reproductive Health, Student Research Committee, Mashhad University of Medical Sciences, Mashhad, Iran
- ² Professor, Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran
- ³ Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran

ARTICLE INFO

Article type: Original article

Article History: Received: 02-Oct-2021 Accepted: 22-Nov-2021

Key words: Qualitative Research Phenomenology Pregnant Women Prison Prenatal Care

ABSTRACT

Background & aim: Considering that the world's female prison population has increased by about 53 per cent since 2000, the phenomenon of pregnancy in prisons is also increasing. One of the basic and specific needs of pregnant women is to receive prenatal care in prison. The purpose of this study was to understand the meaning of prenatal care in lived experience of imprisoned pregnant women.

Methods: The present qualitative study was conducted using interpretive descriptive phenomenology through interviews with 11 pregnant and early postpartum women in prison. The participants were purposefully selected from pregnant women imprisoned in 2020 in Mashhad, Iran. Van Manen's six-step phenomenological approach was used for data analysis.

Result: The main theme of the "fence of deprivation" emerged from the analysis. This theme consisted of two sub-themes including "overlooked healthcare" and "limited welfare services". According to the research findings, the deficiencies and deprivations that surrounded pregnant women in prison cause health problems and impaired welfare for incarcerated women during pregnancy.

Conclusion: The experience of prenatal care in prison can be likened to being placed in a fence of deprivation. Prisons are neither able to provide healthcare essentials nor to identify the healthcare needs as well as special needs and wants during delivery for pregnant women. Our results suggest a reexamination of the services currently available, including strengthening healthcare provision and making sure required health information is available to incarcerated pregnant women at an early stage of pregnancy.

▶ Please cite this paper as:

Alirezaei S, Latifnejad Roudsari R. Imprisoned Pregnant Women's Lived Experience of Prenatal Care: A Phenomenological Inquiry. Journal of Midwifery and Reproductive Health. 2022; 10(2): 3258-3267. DOI: 10.22038/jmrh.2022.62850.1795

Introduction

Women are an increasing minority of prisoners universal, and most are reproduction age (1). As the number incarcerated women has increased, pregnancy has become an important concern. Correctional facilities are not instructed to track or report pregnancy-related statistics, and most facilities do not have any routine process for collecting such information (2). Also, their specific health care needs may be overlooked or remain unmet (3). Data on maternal and fetal effects all through imprisonment are rare, permitting few research to find out an in-depth account of maternal and fetal effects in incarceration (4).

Although imprisoned pregnant women are at excessive threat of disadvantaged perinatal effects because of elements which include culture, low stages of education, get admission to antenatal care, smoking, consuming alcohol, and unlawful drug habits (5). Deficient prenatal care via being pregnant is related to numerous little one fitness problems, inclusive of low start weight and preterm labor (6, 7), in addition to infant mortality (8). Certain deprived segments of the populace hold to experience dwindled access to prenatal care much like incarcerated pregnant women (9). National Commission on Correctional Health Care (NCCHC) and American

^{*} Corresponding author: Robab Latifnejad Roudsari, Professor, Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran. Tel: 00985138591511; Email: LatifnejadR@mums.ac.ir, rlatifnejad@yahoo.com



College of Obstetricians and Gynecologists (ACOG) recommends that prenatal care be provided for all pregnant women in prison (10, 11). Women in prison have health care needs unique from incarcerated men, including gynecological and obstetric services (12). While incarceration can provide a chance to address the unmet health requests of a highly disadvantaged and underserved population, it might worsen those same health differences in a majority of women (13). A 2008 report from the United States (US) Department of Justice notes that 46 % of pregnant imprisoned women reported they received no pregnancy care (14). Incarcerated pregnant women prenatal care perceive it in a negative light. In the United Kingdom (UK) study, pregnant prisoners felt stigmatized and that strong there was often a lack of lines of communication between them and their maternity care providers. These findings have been replicated in one American study, wherein incarcerated pregnant women felt they have been handled with a loss of respect in comparison to unfastened pregnant women (15). Prisoners expressed dissatisfaction that offerings furnished with the aid of using healthcare professionals (16). In a chain of semi-structured interviews, Plugge et al (2008) determined that incarcerated women preference and fee being a pregnant recommendation from their health care provider (17). The preceding studies have proven that corrections officers themselves renowned that the maternal and infant health rules and programs provided to pregnant women, became inconsistent (18). Health professionals regarded the initiation of a communication approximately incarcerated pregnant women as a sensitive issue, and that they notice the voices of these receiving antenatal care in the back of the bar areas crucial because the voices of these receiving it out of the jail world (19). The purpose of this takes a look at changed into to feature the voices of the incarcerated women who are pregnant and receiving antenatal care. In selecting Interpretative Phenomenological because of the methodological approach, we dedicated to exploring and interpreting the means through which incarcerated pregnant women make feel in their lived experiences.

Incorporating such views into the improvement and implementation of maternity offerings might also additionally inspire jail's high-quality engagement with them.

Methods

The hermeneutic phenomenological approach described by Van Mannen was used for this study. This approach comes under interpretative descriptive phenomenology (20). It was used because the researcher aimed to move towards the lived experience of female prisoners' pregnancy and ask what is the experience like. Also, the researcher, as an active participant, was immersed in the phenomenon under study and frequently returned to the phenomenon and data to understand the lived experiences of participants.

Participants were Iranian pregnant women who experienced incarcerated pregnancy. Using purposive sampling, 11 women were purposively selected (Table 1).

The study was coducted in one of the central prisons in Northeast of Iran. The setting was a security center and the need for permission for the first author to attend the women's ward. Prison officials suggested a convenient time for the interview. All interviews were conducted in a private room in the women's ward.

Semi-structured interviews were conducted during a ten-month time-period from August 2019 to May 2021. Data was collected through in-depth interviews lasting approximately 45-60 minutes. The opening question for the interviews was: "Can you tell me about your first dealing with antenatal care in prison?" The rest of the questions were as follows: "Can you tell me about your experience with the care provided?", "Could you tell me about any challenging of the care given that you experienced?", "In what way do you think care provided could be better tailored to you and your needs?"



Table 1. Demographic characteristics of participants

No	Age	Education	Occupation	Parity	Gestational Age/ postpartum	Crime	Conviction	Duration of imprisonment	Prison record
1	28	Fifth elementary	Stylist	G7D2L3A2	Postpartum	Drug trafficking	Unknown	1 Month	First
2	35	Fifth elementary	Stylist	G3L2	40 W	Murder	Unknown	5 Month	First
3	26	Fifth elementary	Workless	G5L3D1	23 W	Drug trafficking	Forever	2 Month	First
4	31	Illiterate	Workless	G3A1L2	Postpartum	Murder	Unknown	1 Year	First
5	38	Diploma	Employee	PG	10 W	Fraud	7 Years	3 Year	First
6	38	Diploma	Prostitute	G3L3	Postpartum	Corruption	5 Years	3 Month	First
7	21	Diploma	Housewife	PG	39 W	Theft	Unknown	5 Month	Second
8	41	Fifth elementary	Servant	G6L5	35 W	Drug trafficking	4 Years	2 Years	Fourth
9	42	Fifth elementary	Worker	G10A2L8	Postpartum	Drug trafficking	6 Years	4 Years	First
10	38	Fifth elementary	Workless	G3L2	30 W	Theft	9 Years	65 Years	Sixth
11	32	Diploma	Stylish	G2L1	20 W	Stick-up	Unknown	46 Years	Second

Participants were free to rminate the interview at any time. Researchers wrote field notes after each interview and all interviews were recorded and transcribed verbatim immediately and then converted to Rich Text Format for MAXQDA 10 software to facilitate data management.

Data were analyzed using van Manen's phenomenological approach. interpretative Adopting the holistic method suggested by Van Manen, every record turned into reviewing several times. The researchers stated their supposed sense of the transcript as a descriptive text. The selective and detailed or line-by-line method was used to distinct thematic statements. After the thematic phrases called cluster themes emerged, the basic contents of each interview was compared with the previous ones to discover similarities and differences. The contents were then considered into subthemes primarily based totally on their similarities. The subthemes were furthermore merged into lines with their interrelationships, from which the main themes appeared. Making a strong link between the data and the phenomenon and using in-depth descriptions of the findings reduced the likelihood of deviation from the main path. In the last step, both the whole and contextual data were considered and the link of each part in the meaning making of the phenomenon was tested (20).

Lincoln and Guba explained that dependability, confirmability, transferability and credibility Confirm rigor in qualitative research. In order to attain credibility in our research, hermeneutic participatory discussions among researchers were done. Experience of the

authors in the field of qualitative research as well as subject under study, i.e. antenatal care enhanced the confirmability. All members of the research team approved the data analysis process. All interviews were recorded and transcribed immediately to ensure dependability. To meet transferability, the context of data collection was completely described.

The Local Ethics Committee of the Mashhad University of Medical Sciences and the General Directorate of Prisons Organization approved the research proposal under the code of IR.MUMS.1398.099. Contributors were guaranteed about the confidentiality of their answers. The purpose of the study was explained and written consent was obtained. The participants were ensured that audio files would be deleted after transcription.

Results

The theme was "fence of deprivation", which emerged in relation to pregnant women's experience of prenatal care in prison. This theme reflects the shortcomings and deprivations that surround pregnant women in prison and cause them to face health problems during pregnancy. This theme consisted of subthemes including "overlooked healthcare" and "limited welfare services" (Table 2).

1) Overlooked Health Care

Some incarcerated pregnant women complained of the lack of their "special" status as "pregnant women" in prison, and considered the lack of health care as a form of deprivation and neglect. This theme consisted of cluster themes including "having suboptimal prenatal



care"," not being visited by the committed healthcare team" and "not being visited by

obstetrician".

Table 2. The cluster themes, subthemes, and main theme emerged from the analysis

Cluster themes	Subthemes	Main Theme	
Having suboptimal prenatal care			
Not being visited by the committed healthcare team	Overlooked healthcare		
Not being visited by the obstetrician	overlooked healtheare	Fence of deprivation	
Entrapment in an insecure environment		rence of deprivation	
Yearning for proper comfort	Limited welfare services		
Need to healthy food			

1-1) Having suboptimal prenatal care

Incarcerated pregnant women have expressed concern that the lack of routine, periodic and regular prenatal care in prison will have a negative impact on pregnancy health. Some participants, despite having been in prison for a long time, have not yet been adequately assessed and have not received pregnancy services:

"I've been here for a few months, they didn't know that I was pregnant at all, I told them myself, of course it didn't matter, they didn't take care of me at all, I don't know if everything is normal or if I have a problem".(Participan3, 26y, G5L3D1)

Pregnant women who had the experience of being cared for and visited in prison stated that the provision of prenatal care is occasionally and entirely personal issue:

"Nobody in prison does care if the pregnant woman does not want and insists to do it. Even if you have a problem, you have to go and come so much that it is your turn to go to the doctor". (Participan5, 38y, G2A1)

According to the experience of some participants, the current rules and protocols in the prisons organization, and especially the women's ward, were designed in such a way that prisoners' women were not allowed to use medical services whenever they wished:

"Once I wanted to go to the health center to control fetal heart rate, they didn't allow, because according to the schedule, it was not my turn. I was so worried until tomorrow that I checked". (Participan11, 31y, G2L1)

1-2) Not being visited by the committed healthcare team

Ignorance of pregnancy by the healthcare team was accompanied by feelings of frustration

and heartbreak for incarcerated pregnant women. For some women, a constant suspicion was that the healthcare team ignores pregnancy health Indeed, it was not preferred, and it was not a priority:

"You have to fight for everything in prison, whatever you ask, they don't care. If you want a medicine or an ultrasound, you have to go and come so much to do it". (Participan3, 26y, G5L3D1)

The experiences that most pregnant women received from prison treatments were accompanied by negative descriptions of poor health care staff, their inability to correctly diagnose, and the incompatibility of in-prison care with what is done outside:

"Their work is not very good, you more likely are checked not you treat your pain, for example, they tell you this is the pain, this is the problem, but they cannot do it themselves".(Participan11, 31y, G2L1)

1-3) Not being visited by obstetrician

A 31-year-old mother, who has spent four years in prison, believed that many members of the prison health team are unaware of pregnancy and its needs, so what a pregnant prisoner needs and depends on is not answered:

"I think they don't know anything about prenatal care. For example, when I go, I ask for an ultrasound, they say that it will be arranged for it, but never arrange it". (Participan11, G2L1)

Some participants pointed to the lack of constant presence of midwives as one of the problems of pregnant women in prison. Midwives were not available at any time they need or want:

"The midwife is not always present. Some days, she is present in the morning. If you want



to go in the afternoon to hear the sound of the fetus's heart, there is only a nurse, who is not specialist." (Participan5, 38y, G2A1)

Although irregular, the presence of a midwife in the women's health center could still be very helpful. However, some pregnant women pointed to the lack of an obstetrician and gynecologist in such an environment and the urgent need of female prisoners to the presence of a gynecologist:

"Here the presence of a gynecologist is mandatory. Women have many diseases that a midwife or general practitioner cannot diagnose and treat". (Participan2, 35y, G3L2)

Limited Welfare Services

Female prisoners found it difficult to meet the minimum requirements for living in prison. For some unfortunate situations that they had to endure, they had lot of stress and anxiety, and felt a sense of inferiority and worthlessness. This theme consisted of cluster themes including "entrapment in an insecure environment", "yearning for proper comfort" and "need to healthy food."

2-1) Entrapment insecure environment

According to the experience of the participants, poor ventilation in the rooms could aggravate shortness of breath or nausea. The stuffy atmosphere and poor ventilation in the mothers' room were more pronounced:

"The windows are welded and closed according to the law, since the windows are closed, the air is suffocated. There is no breathing at all. In our room, where thirty-nine people breathe at the same time, is there any clean air left? "(Participan5, 38y, G2A1)

Participant No. 9 pointed out that the lack of refrigeration and heating systems made the conditions inside the ward more unbearable for a pregnant woman. There may be structures like a cooling device for the summer or a heater for the winter, but their limited number and low quality did not meet many people's need in the departments:

"There is an air conditioner, also there is heater for cold weather, but it does not work at all. It means that it is not warm in the winter and is not cool in the summer. In our room, which has thirty-nine boards, there are two heaters. Sometimes it cannot be tolerated at all". (42y, G10A2L8)

The lack or insufficiency of health issues in the ward among the prisoners was a matter of concern for most pregnant women. Living in a environment with such closed people threatened the pregnancy health of these women. Understanding the risk of transmitting the infection to other women when they used health services and were not careful of prisoners to maintain the health status of these services was another issue of concern expressed by the participants:

"Some toilets are very dirty, you surely get an infection, for example, some women do not wash their hands, I do not dare to approach women like this or share food with them". (Participan6, 38y, G3L3)

Some of the other participants did not find the comfort needed by a pregnant woman in the tumult of the prison. Hours of silence in prison were limited, especially for pregnant women, and living in such a tumultuous environment can be exhausting:

"The only time when silence and calm be possible is two hours after lunch; I often wake up with a lot of noise from others. It is very annoying; you do not have a good moment of peace". (Participan5, 38y, G2A1)

Yearning for proper comfort

From the participants' point of view, most of the things designed to spend long periods of unemployment in prison, including sewing, were not physically suitable for pregnant women, so they faced problem to come with the concept of being slow and tedious which was pregnancv simultaneous with imprisonment, and suggested that they be given the responsibility of doing easier jobs:

"There may be a lot of work in prison, for example, sewing or a lot of handicrafts, but for me there is nothing to do. It is so bad that pregnant women are not employed. They can give us easier jobs". (Participant4, 31y, G2L1)

Pregnant or postpartum women were unable to work in prison, so they were in distress and spent the most of their days in their cells, which affected their economic situation consequently, the health of their pregnancy in prison. Because the purchase of necessities



needed during pregnancy was dependent to their financial situation:

"In prison, if you do not have money and you are pregnant, you will surely be hungry." (Participant7, 26y, PG)

Pregnant women often relied on their families to provide the requirements for themselves in prison. However, it was difficult for women who did not have the financial support of their families to purchase additional foods. Some women felt guilty about asking their family for money:

"The only person I have outside is my sister, I don't like asking her for money, I just need to take care of my other child. I am ashamed to ask her to give me money." (Participant4, 31y, G2L1(

Another frustration of pregnant women in prison was the lack of proper pregnancy clothes. Either most of these women did not have a person outside of prison or their poverty prevented them from getting proper pregnancy clothes in prison:

"All my clothes are tight, our clothes are government clothes, but none of them are good for a pregnant woman." (Participant9, 42y, G10A2L8)

2-3) Need to healthy food

Food was one of the first and most important topics that women inmates talked about. Lack of ability to control food health was difficult for pregnant women. Most women used negative descriptors to express their emotions, their frustration with food, and their food deprivation and hunger, which they tolerated.

The perception among participants in the study that there is not enough food in prison was repetitive, despite the fact that some of them considered the prison as a safe shelter. Almost all participants complained about the food situation in the prison:

"I get very hungry during the day, I'm very embarrassed to tell anyone, but sometimes I have to walk 14 rooms to someone give me something. Some have but do not give." (Participant8, 41y, G6L5)

A common finding among prisoners' pregnant women was that they expressed concern about the low quantity and quality of food on pregnancy health. Participant No. 2 expressed her concern about the lack of food and nutrients in prison due to its impact on pregnancy health:

"It's not any nutrition a pregnant woman needs, not all vitamins and nutrients need a pregnant woman." (35y, G312)

Prisoners in the mothers' wards sometimes received snacks such as a small glass of milk, biscuits, porridge, and one fruit such as an apple or banana during the day. Participants, however, complained about the inadequacy of these snacks, while these snacks were not given to those in other wards. Some participants stated that lack of dietary diversity and nutritional deficiencies are as factors, which overshadow pregnancy health and lead to physical weakness and disability:

"Before, I had everything I wanted. Here, I have not eaten fruit for two weeks. With this model, I should not expect my body to be healthy for childbirth." (Participant 8, 41y, G6L5)

The carvings of pregnant women were another topic of discussion. According to the participants, these carvings were not answered in prison. Participant No. 11 explained how she controlled her desire:

"It is not controlled in a pregnant woman; for a prisoner like me, when you really want something, you cannot have it at the moment, and you cannot say anything." (32y, G2L1)

Discussion

This study was carried out to identify the meaning of prenatal care for prisoners' pregnant women. "Fence of deprivation" was the main theme, and "overlooked health care" and "limited welfare services" were two sub-themes describing prenatal care in prison.

The theme of the "fence of deprivation" reflects the lived experiences of the participants in this study regarding the indifference and inattention shown by the prison organization towards incarcerated pregnant women. In fact, the prison organization, as a system that also deals with pregnant women, lacks policies and guidelines appropriate to this important and vulnerable population. In support of this theme, we can refer to the concept of "Institutional thoughtlessness". This concept was introduced by Crawley in his study on elderly male prisoners. He attributed this neglect to the deprivations and unmet needs of men by the prisons organization, and described it as "a way that the prisons organization takes to respond



simply and with the least resources to the needs and sensitivities of elderly individuals."(21).

The sub-theme of "overlooked healthcare" obtained in the present study refers to the lack of care programs for pregnant women in prison, lack of specialists and lack of sense of commitment and responsibility of the prison towards the health of pregnant prisoners. This theme is supported in the concept of Goffman's Asylums. Explaining this concept, he writes that the prison organization does not distinguish between staff and patients and describes them both as "prisoners" (22).

The present study showed that the lack of knowledge of health personnel about midwifery issues and the lack of training of these people could be associated with the health risks of pregnancy of pregnant prisoners. In an ethnographic study, it was observed that untrained prison staff and nursing staff violated the nursing and midwifery directives, which oblige a pregnant prisoner to give birth alone in a cell without the presence of a midwife (23).

The prisoners' pregnant women in this study did not receive the same amount of health care, as it is provided in the community. This is contrary to international requirements and recommendations (24-26). Sykes defined poverty and deprivation as the lack of facilities and services and their provision at the minimum consumption to maintain the health of prisoners (27). Similarly, in the study of Abbott (2018), this lack of facilities and health services equivalent to the free society was mentioned (28). Ross et al. argued that health care is mixed prison "culture". Health accustomed to the prison "climate" also provide these services (25). This will potentially affect pregnant women, negatively, as members of a homogeneous group who have unique needs (29).

In the present study, a midwife who worked for the prison organization provided prenatal care. However, due to not being constantly in the prison, care was not provided on a routine and continuous basis. It can be argued that in case of being just one midwife as a permanent member of the prison staff, still she would be the only staff, who could not cover all the services which is needed for incarcerated pregnant women and this can have a negative

impact on the health of prisoners' pregnancy. It is clear that in the absence of an alternative midwife, providing the services in a level equivalent with community services will not be possible. In UK prisons, a community midwife often visits the prison during weeks, but a lack of planning makes it impossible to access an alternative midwife to cover services in her absence (26).

The sub-theme of "limited welfare services" that found in the present study showed that most of the physical needs of women to enjoy a normal pregnancy, especially in relation to food, comfort, appropriate environment and overall welfare was faced restrictions in prison. Pregnant women were often hungry, or poorly dressed, and often worn too tight or too loose clothes due to insufficient access to pregnancy clothes. Most of the women talked about where they live, describing the stuffy, polluted air, as well as their limitations and their thirst for fresh air. Evidence suggests that the physical desire for food, comfort, safety and security of pregnant women are ignored by the prison (30).

In the present study, lack of comfort and convenience for pregnant women was a common problem that was often associated with physical and mental suffering. Other studies have reported a lack of facilities and comfort in prisons (31, 32). The results of this study showed that the physical pain caused by the lack of welfare facilities in prison was unbearable for most of pregnant women. For example, no access to proper equipment such as a mattress or pillow at night was associated with back pain in the next day. In UK prisons, pregnant women are allowed to have extra pillows, but they must be "licensed". However, in many cases, despite the signed license, they are still not given extra pillows and have to wait for weeks (33).

Sykes (2021) states that the loss of liberty is not merely limited to "physical loss", but goes beyond this, which indicates the "loss of status" from the point of view of the "moral rejection of the criminal by the free community " (27). The prison environment has been described as brutal, but so far, the question of how such difficult conditions affect pregnant women remains unanswered. The results of this study showed that some women are more afraid of pregnancy than others. Some participants talked



about the anxiety and stress of endangering their health during pregnancy. Similarly, in another study, some pregnant women expressed feelings of anxiety about other inmates and the threatening status of their unborn child. Women in prison also expressed other feelings, such as claustrophobia, helplessness. and especially in the later stages of pregnancy that make them unable to work (34). The feeling of isolation and loneliness that was prevalent among incarcerated women and being locked in a room for a long time showed system's lack of thinking about the signs and symptoms of pregnant women (21).In the environment, some prisoners can be dangerous to others, especially for pregnant women; hence, on April 2004, "The Federal Court of Canada" in a letter titled "The Canadian Correctional Institution", ruled that in the absence of evidence, there is no duty to warn the prisoner about the possible dangers and threats to the health from the other cellmate (35).

This study had some strengths including use of in-depth approach for data collection, which allowed participant to guide the flow of the discussion, also, continuing data collection until achievement of data saturation, and the conducting data analysis by two researchers. The findings from this study may assist the future development of more effective health care programs for incarcerated pregnant women.

There were some limitations in this study as well. The data was collected from just one prison and the perspectives of the pregnant women who participated in the interviews may not reflect those of incarcerated pregnant women elsewhere; although, the purpose of qualitative research is not generalizability, instead, it provides an in-depth perspective of the experiences of women engaged with prenatal services in prison, which can be used to inform service development.

Conclusion

This study identified several key issues from viewpoints of incarcerated pregnant women. The themes emerged in this phenomenological study reflected the experience of pregnant women about pregnancy care in prison. The findings of this study and review of the available literature showed that prisons are neither able

to provide necessities nor to identify the physical functions and health needs including specific needs of pregnant women.

Current evidence on the effectiveness of interventions for managing pregnant women in prison is limited and therefore the design of any new intervention should include consultation with key stakeholders. The themes generated by this study could be a basis for conducting new empirical research as well as informing health promotion programs. Incarcerated pregnant women are a vulnerable group who present challenges which prison officials and it must be addressed. Our findings suggest a reassessment of the services currently available, including developing services and making sure that practical information is available to incarcerated pregnant women at an early stage of pregnancy. Such early efforts may promote a trusting relationship between incarcerated pregnant women and correctional organization prenatal care.

Acknowledgements

The present article is a part of a doctorate dissertation of the first author (Somayeh Alirezaei) in Reproductive Health, which is financially supported by Mashhad University of Medical Sciences, Mashhad, Iran under grant number of 980109. The research team is sincerely grateful for the support of the Vice Chancellor for Research of Mashhad University of Medical Sciences and all the incarcerated pregnant women who shared their experiences with the researchers.

Conflicts of interest

Authors declared no conflicts of interest.

References

- Sufrin C, Clarke J, Mullersman K. Pregnancy in Prison Statistics (PIPS): A Multi-Sector Research Collaboration. Presentation at Johns Hopkins Health System. Baltimore. 2016; 6: 89-105.
- Sufrin C BL, Clarke J, Jones R, Mosher WD. Pregnancy outcomes in US prisons, 2016–2017. American journal of public health. 2019; 109(5): 799-805.
- 3. Saar M BB, Mathon-Mathieu F. Mothers Behind Bars: A state-by-state report card and analysis of federal policies on conditions of confinement for pregnant and parenting women and the effect on their children. Washington, DC: The National



- Women's Law Center. 2010.
- 4. Nair S MJ, Hutchinson-Colas J, Turock H, Chervenak F, Bachmann G. Pregnancy in incarcerated women: need for national legislation to standardize care. Journal of Perinatal Medicine. 2021; 49(7): 830-836.
- 5. Knight M PE. Risk factors for adverse perinatal outcomes in imprisoned pregnant women: a systematic review. BMC Public Health. 2005; 5(1):
- 6. Alexander GR, Korenbrot CC. The role of prenatal care in preventing low birth weight. The future of children. 1995:103-120.
- 7. Cunningham SD LJ, Shebl FM, Boyd LM, Robinson MA, Grilo SA, Lewis SM, Pruett AL, Ickovics JR. Group Prenatal Care Reduces Risk of Preterm Birth and Low Birth Weight: A Matched Cohort Study. Journal of women's health. 2019; 28(1):
- 8. Partridge S BJ, Holcroft CA, Abenhaim HA. Inadequate prenatal care utilization and risks of infant mortality and poor birth outcome: a retrospective analysis of 28,729,765 U.S. deliveries over 8 years. American journal of perinatology. 2012; 29(10): 787-793.
- 9. Gadson A AE, Mehta PK. Exploring the social determinants of racial/ethnic disparities in prenatal care utilization and maternal outcome. Semin Perinatol. 2017; 41(5): 308-317.
- 10. Sufrin C. Pregnancy and postpartum care in correctional settings. Retrieved from National Commission on Correctional Health Care website: http://wwwncchcorg/filebin/Resources/Pregna ncy-and-Postpartum-Care-2014 pdf. 2014.
- 11. Practice ACoO. ACOG committee opinion number 304, November 2004. Prenatal and perinatal human immunodeficiency virus testing: expanded recommendations. Obstetrics and gynecology. 2014: 104: 1119-1124.
- 12. Tapia ND VM. Legal issues regarding medical care for pregnant inmates. The Prison Journal. 2010; 90(4): 417-446.
- 13. Froggé GM. Supporting Pregnant Incarcerated Through Childbirth Women: Educational Perspectives. International Journal of Childbirth Education. 2019; 34(2).
- 14. Maruschak LM, Berzofsky M, Unangst J. Medical problems of state and federal prisoners and jail inmates. Bureau of Justice Statistics Special Report NCJ. 2011; 248491.
- 15. Friedman SH KA, Kauffman S. The realities of pregnancy and mothering while incarcerated. American Academy of Psychiatry and the Law Journal. 2020; 48(3): 365-375.
- 16. Bjørngaard JH, Rustad Å-B, Kjelsberg E. The prisoner as patient-a health services satisfaction survey. BMC Health Services Research. 2009;

- 9(1): 1-9.
- 17. Plugge E, Douglas N, Fitzpatrick R. Patients, prisoners, or people? Women prisoners' experiences of primary care in prison: a qualitative study. The British journal of general practice: the journal of the Royal College of General Practitioners. 2008; 58(554): 630-636.
- 18. Pendleton V, Saunders JB, Shlafer R. Corrections officers' knowledge and perspectives of maternal and child health policies and programs for pregnant women in prison. Health & Justice. 2020 ; 8(1): 1-2.
- 19. Alirezaei S, Latifnejad Roudsari R. Promoting Health Care for Pregnant Women in Prison: A Review of International Guidelines. Iranian Journal of Nursing and Midwifery Research. 2020; 25(2): 91.
- 20. Van Manen M. Researching Lived Experience: Human Science for an Action Sensitive Pedagogy. 2nd Edition ed. London: Althouse Press; 1997.
- 21. Crawley E. Institutional thoughtlessness in prisons and its impacts on the day-to-day prison lives of elderly men. Journal of Contemporary Criminal Justice. 2005; 21(4): 350-363.
- 22. Goffman, E. On the Characteristics of Total Institutions: The Inmate World in'The Prison-Studies in Institutional Organisation and Change. Diss. ed. D. Cressey New York: Holt, Rinehart & Winston, Inc, 1961.
- 23. Abbott L. Becoming a mother in prison. The Practicing Midwife. 2016 Oct 1.
- 24. Niveau G. Relevance and limits of the principle of "equivalence of care" in prison medicine. Journal of medical ethics. 2007; 33(10): 610-613.
- 25. Ross M. Health and health promotion in prisons. Routledge; 2012 Nov 12.
- 26. Rogan M. Human rights and correctional health policy: a view from Europe. International journal of prisoner health. 2017 Mar 13.
- 27. Sykes GM. The society of captives. Princeton University Press; 2021 Feb 11.
- 28. Abbott L. The incarcerated pregnancy: an ethnographic study of perinatal women in English prisons. 2018.
- 29. Alirezaei S, Latifnejad Roudsari R. The Needs of Incarcerated Pregnant Women: A Systematic Review of Literature International Journal of Community-Based Nursing and Midwifery. 2020; 10(1): 2-17.
- 30. Abbott L. The pregnant woman in prison. Howard Journal of Criminal Justice. 2014; 25(2):91.
- 31. Crewe B, Liebling A, Hulley S. Staff-prisoner relationships, staff professionalism, and the use of authority in public-and private-sector prisons. Law & Social Inquiry. 2015; 40(2): 309-344.
- 32. Crewe B, Hulley S, Wright S. The gendered pains of life imprisonment. British Journal of



- Criminology. 2017; 57(6): 1359-1378.
- 33. Abel-Smith B, Titmuss RM. The Cost of the National Health Service in England and Wales. The Cost of the National Health Service in England and Wales. 1956; 28;267(6909):198-200.
- 34. Abbott L. What is the experience of being
- pregnant in prison. Early Career Academics Network Bulletin. 2018: 9.
- 35. Holly G. Canada: Court affirms that prisoner health information must be treated as private and personal. Canadian HIV/AIDS policy & law review. 2004; 9(1): 49-50.