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Challenges of Infant Care in Mothers With Substance Abuse: A Qualitative Research in Iran

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Abstract

Objectives: Drug abuse among mothers is an issue of utmost significance and lasting impact, as its connection to detrimental consequences for both mothers and children raises a heightened level of concern. Child protection services often refer to children with common psychosocial risk factors, making their care a significant challenge for families. Therefore, understanding and addressing the challenges mothers face in raising their children can help nurses and health science specialists develop effective programs for infant health improvement. The study aimed to identify the challenges faced by mothers with drug abuse in infant care.

Materials and Methods: The study, using conventional content analysis, was conducted from February 2022 to December 2023 and involved 20 substance-using mothers aged 18-42 with children under 12 months old. The study utilized semi-structured and in-depth interviews for data collection, and the Graneheim and Lundman method was applied through MAXQDA 2020 software for data analysis. The data collection continued until saturation was reached, and the main classes emerged.

Results: The study identified four categories, including perceived threat from social judgments, fear of losing infant custody rights, lack of maternal care knowledge, and inefficiency of support networks, discussing the difficulties faced by mothers who are addicted to drugs concerning their infant care.

Conclusions: Recognizing the willingness of drug-using mothers to provide proper care for children, along with gaps in knowledge and support systems, necessitates a well-planned health promotion program for this cohort. Specialists play a crucial role in providing health and care services, particularly for infants.

Keywords: Mother, Infant, Drug abuse, Care

Introduction

The epidemic of drug abuse remains a significant and ongoing challenge for society, individuals, families, and medical professionals worldwide (1). In the United States, the loss of approximately 200 lives occurs each day due to drug overdoses (2). Over the last decade, there has been a concerning surge in drug use among pregnant women, with drug use becoming a particularly alarming issue (3). Among women aged 15 to 44, 3.2% were found to be using illicit drugs, while the percentage increased to 6.3% among pregnant women (4). According to reports, approximately 21.6% of women in the United States are prescribed opium during pregnancy, indicating that one in every five pregnant women has received such a prescription (3). Non-medical drug use is prevalent among 8.5% of pregnant women in America (5). Iran stands out as one of the countries with the highest drug consumption globally, with an estimated 2 million drug users (6). Unofficial statistics suggest that approximately 2.2% of Iranian females are struggling with drug addiction (7).

Maternal substance abuse poses a significant and enduring challenge, as it is linked to adverse outcomes for both the mother and child, causing considerable concern (8). It stands as the primary psycho-social risk factor leading to referrals to child protection services (8). Drug-addicted mothers are more likely to face several intertwined psychological risks, which can lead to inconsistent parenting practices (8) and developmental disorders in their children (9,10).

To enhance the quality of care and provide efficient support to mothers dealing with drug abuse in the context of infant care, it is vital to focus on the mother's nurturing of the child. Caring for these children poses a significant challenge for families. Hence, by comprehending and recognizing the difficulties faced by these mothers in looking after their children, nurses and health science specialists can develop an appropriate program to enhance and foster infant health.

To enhance the comprehension of this procedure, it is imperative to employ a distinct mechanism that can effectively discern its diverse aspects clearly and comprehensively. Deep facts regarding complex human phenomena like the infant care process cannot be adequately captured through quantitative research alone.

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Therefore, employing more suitable research strategies becomes essential to delve deeper into the underlying truths. Conducting qualitative research can facilitate a more profound comprehension and awareness of this phenomenon, enabling the development of a theoretical framework that lays the foundation for generating the essential assumptions required to undertake quantitative research. The objective of this study was to ascertain the difficulties associated with caring for infants among mothers who struggle with drug abuse.

Materials and Methods

Study Design and Sampling

The study was conducted using the conventional method of qualitative content analysis. Content analysis is an appropriate and reliable research approach for generating unique knowledge and understanding by providing a thorough and coherent description of a particular occurrence. In this method, researchers refrain from relying on pre-determined texts and instead let the findings arise from the data. In this scenario, data analysis commences with several readings to ensure a thorough comprehension of the information (11). The present qualitative content analysis study was conducted after obtaining the necessary permits from Mashhad University of Medical Sciences from February 2022 to December 2023. The study was conducted in Mashhad, Iran, the second-most populous city, with a population exceeding 3 million. According to the published reports, the addiction rate stands at approximately 2.7%. To engage with the participants, the researcher visited various hospitals, health centers affiliated with Mashhad University of Medical Sciences, addiction treatment camps, and methadone distribution clinics in Mashhad. Following the examination and identification of the mothers, we sought their consent to participate in the study. Upon receiving their consent, we made the required preparations for the interview, ensuring a suitable place and time were arranged.

The study involved 20 mothers, aged between 18 and 42 years, who were using drugs. These mothers had children under 12 months and were purposefully selected (Table 1). To be eligible for this study, participants had to meet the criteria, including being a mother who uses drugs, having an infant under 12 months, being fluent in Persian, and demonstrating a willingness to cooperate and actively participate in the interview.

Data Analysis

The first author conducted all the interviews, collecting data through face-to-face and in-depth, semi-structured interviews. The duration of each interview ranged from 30 to 90 minutes. The researcher commenced each interview by introducing himself and the research group to the mothers while also providing them with the necessary permissions for conducting the study. Furthermore, comprehensive explanations were provided concerning the study's goals, the necessity of recording audio for interview analysis, ensuring the confidentiality of shared information, conducting anonymous data analysis, and granting individuals the choice to participate or abstain from the study. Mothers who agreed to participate in the study were provided with an informed consent form to sign. The interview began with an introduction: "Please introduce yourself."

Then, based on the purpose of the study, the following main questions were asked:

- "Tell me about your experience of caring for your child."
- "What were your main problems and/or concerns in caring for your child?"

Exploratory questions included:

- "Can you explain more?"
- "Please explain this to me by mentioning one of your experiences".

Additionally, to enhance the interview data, the participants were allowed to discuss the matters that held significance from their perspective. After each interview session, the researcher listened to the recorded conversations multiple times. The researcher carefully observed and documented the verbal interview text and nonverbal indicators such as tone, emphasis, pauses, and interruptions. The content was initially typed and saved in the Word file format. Later on, the texts were inputted into the MAXQDA 2020 software for analysis, following the Graneheim and Lundman 2020 method. The text analysis method involves conducting interviews and thoroughly reviewing them to gain a deep understanding of the data. The next step is extracting meaningful units and labeling them as semantic compact units. Finally, these units are categorized and given appropriate titles. Employing a higher level of abstraction, the codes were sorted by comparing the similarities and differences in the subclasses. Subsequently, a suitable title was selected to encompass the derived subclasses under the main class. Following this, the analysis units, comprising interviews, notes, and word observations, were meticulously examined word by word to obtain a holistic comprehension. The semantic units associated with the data's components and parts were then summarized. Afterward, appropriate codes were assigned to label these summarized semantic units. The codes obtained were evaluated by continuously comparing their similarities and differences. Consequently, codes that exhibited similarity were grouped into corresponding subcategories. The relationship between the subclasses was ultimately determined, and the key topics were extracted to form the main class (12). Interviews were conducted until complete data saturation and the emergence of the main categories.

Data Integrity

To ensure the precision and reliability of qualitative data,

Table 1. Participants' Characteristics

Row	Interview Duration (min)	Mothers' Age	Child's Age	Marital Status	Drug's Consumption	Job	Education
1	45	35	7-day old baby	Married	Opium	Manual worker	Diploma
2	40	33	12-months-old baby	Married	Heroin and amphetamine	Housewife	Cycle
3	30	41	12-months-old baby	Married	Heroin	Manual worker	Elementary
4	35	41	12-months-old baby	Married	Amphetamine & opium	Manual worker	Cycle
5	60	32	1-months-old-baby	Married	Heroin	Manual worker	Elementary
6	45	28	2-week-old baby	Married	Amphetamine	Housewife	Diploma
7	90	37	3-months-old-baby	Married	Opium & amphetamine	Housewife	Cycle
8	45	22	8-months-old-baby	Married	Amphetamine & morphine	Housewife	Diploma
9	30	37	12-months-old-baby	Married	Amphetamine & opium	Chef	Cycle
10	40	39	12-months-old-baby	Married	Amphetamine & opium	Manual worker	Diploma
11	40	38	8-months-old-baby	Married	Amphetamine & opium	Housewife	Cycle
12	45	17	5-months-old-baby	Married	Opium & methadone	Housewife	Elementary
13	50	35	8-months-old-baby	Divorced	Amphetamine & opium	Housewife	Cycle
14	30	26	12-months-old-baby	Married	Amphetamine & opium	Housewife	Cycle
15	45	17	10-months-old-baby	Married	Cannabis & amphetamine	Housewife	Illiterate
16	50	30	2-months-old-baby	Single	Amphetamine & opium	Free	Diploma
17	40	39	10-months-old-baby	Married	Methadone & opium	Housewife	Cycle
18	30	28	8-months-old-baby	Married	Amphetamine, opium & methadone	Housewife	Illiterate
19	30	28	7-months-old-baby	Married	Heroin & amphetamine	Housewife	Illiterate
20	45	23	3-months-old-baby	Single	Amphetamine & methadone	Housewife	Diploma

we utilized the criteria outlined by Guba and Lincoln, which encompass credibility, dependability, transferability, and confirmability. To enhance the credibility and acceptability of the data, the researcher dedicated significant time to collecting data and conducting in-depth interviews with mothers in the present study. To ensure accuracy, the research team carefully re-examined the data to verify that the classes corresponded with the participants' statements. To include differing opinions, researchers gathered the viewpoints of all individuals. The research team then reevaluated the codes, subclasses, and classes and shared them with external observers for further review. The process carried on until a mutual agreement was reached among all individuals. Additionally, once the codes, sub-classes, and classes were finalized, the participants employed the review method to ensure the accuracy of the extracted data and codes, rectifying any errors. For this purpose, four participants were provided with a printout including quotes, codes, subclasses, and classes and asked to share their opinions. The research team subsequently examined their feedback and made the required corrections accordingly. The researcher employed various techniques, including ensuring the original data availability, clarified coding, and incorporating evidence-based writing (including quotations) to enhance trustworthiness. To ensure the findings' reliability, three experts in qualitative research analysis who were not participating in the study were provided with the text of various interviews, codes, subcategories, and categories (13). The experts thoroughly reviewed and implemented the corrections until they confirmed the accuracy of the coding process.

Results

The study involved a purposeful selection of 20 drug-abusing mothers aged 18 to 42 years, whose children were less than 12 months old (Table 1). The data analysis revealed four primary categories (Table 2): "perceived threat resulting from social judgments," "clear fear associated with losing custody of the baby," "insufficient knowledge and care information for the mother," and "ineffectiveness of the support network."

The Perceived Threat Caused by Social Judgments

Mothers who struggle with drug abuse not only face the consequences of addiction, physical health issues, and mental strain but also endure constant judgment from those around them and society as a whole. These individuals grasped the significance of these social assessments and stigmas, and they were genuinely concerned about how people judged others concerning addiction and infant care. Mothers with drug abuse experience a deep understanding of the taboo surrounding addiction, as well as a fear of the stigma and social isolation that comes with it. The perceived threat they face is shaped by the social judgments they receive.

Understanding the Taboo of Addiction

Mothers who struggle with drug abuse encounter a multitude of challenges and criticisms within the realm of addiction. Mothers encountered various challenges, including the difficulty of overcoming addiction, criticism from their families, issues related to addiction, and society's negative perception of women struggling with drug abuse.

"I wanted to quit because I knew that when my child grows up, he will be bullied. When he returns to school in a few days, all his friends will likely bully him. Individuals with a substance use disorder are typically rejected by others, including their own children." (Participant No. 10)

Fear of the Stigma of Addiction

Many mothers who struggle with drug abuse often face the stigma associated with addiction. The judgmental attitudes, actions, and words of those involved in their treatment, as well as the accusations from people around them regarding their child's issues and illnesses, instill a deep fear of addiction stigma in these mothers.

"When my daughter was born, she was admitted to the neonatal ward. She was put in an incubator; she cried a lot, grabbing her face, and she couldn't calm down no matter what I did. I asked the nurse to help. She told me that if you hadn't taken drugs, this child wouldn't be like this." (Participant No. 1)

Fear of Social Isolation

Many mothers who struggle with drug abuse often experience the distressing emotions of fear, rejection, and social isolation as a result. Various factors contributed to the formation of a fear of rejection and social isolation within this particular group of mothers. These factors encompassed being rejected by their families due to addiction, experiencing familial rejection after the devastating loss of a child, facing rejection from friends and family upon admission to the camp, and being shunned by their families following the hospitalization of their child.

"Since they took my children away, my mother's family has annoyed me even more. I have been running away from home for a year now; I am tired; I want to do something to bring my children back; if my children return, I will be proud of my family, and I will get out of this situation." (Participant No. 5)

The Evident Fear of Losing the Right to Custody of the Infant

Mothers who have struggled with drug abuse after giving birth and welcoming their child into the world often harbor an "undeniable fear of losing their right to care for their infant," which becomes a significant source of concern for them. Motherhood is widely acknowledged as one of life's most momentous occasions for countless women. Since their early years, this experience has held great value and remains ingrained in their thoughts. Nevertheless, for mothers battling drug abuse, this role has evolved into a distressing and challenging journey filled with tension, pressure, and conflicts. Consequently, they find themselves torn between embracing motherhood and continuing their drug use. On the contrary, there exist policies and laws within society that serve to shield children from mothers who battle substance abuse, and these mothers are fully aware of this concern. Most mothers experience apprehension regarding the potential loss of custody over their children, which can be attributed to a range of familial and financial problems.

Fear and Conflict Associated with Disclosure of Addiction due to the Abdication of Responsibility for Caring for the Infant

Many mothers have expressed their concerns and fears regarding the disclosure of addiction, which leads to neglecting their responsibility to take care of their infants. Many of the mothers who participated in our research expressed apprehension about admitting their addiction in front of the healthcare team. Even though their child exhibited signs of withdrawal syndrome and required hospitalization, there was still a reluctance to accept the addiction.

"I didn't tell the gynecologist about my addiction because I was afraid that the baby would be taken away from me. The nurse at the hospital told me that the baby's symptoms are similar to those of children whose mothers use drugs. I firmly said that I only used multivitamins during pregnancy." (Participant No.16)

The mother's concern about losing her child was so significant that she would avoid seeking medical assistance, even when severe symptoms and life-threatening issues endangered the child's life.

"My child was crying a lot. I gave my child some methadone syrup, and he fell asleep. He was sleeping for three days. He didn't urinate. He wasn't breastfed, he didn't move, he didn't wake up (the mother complained),

Table 2. Major Themes Identified From the Data

Theme	Sub-theme
The perceived threat from social judgments	Understanding the taboo of addiction
	Fear of the stigma of addiction
	Fear of social isolation
The evident fear of losing the right to custody of the infant	Feeling threatened and fearful of entrusting the custody of a child to welfare
	Fear of the wife's/family's threats to remove custody of the infant
	Fear and conflict associated with disclosing addiction due to an abdication of responsibility for infant care
Lack of knowledge and information on maternal care	Lack of sufficient knowledge of infantile deprivation syndrome
	Being at the crossroads of breastfeeding and formula feeding

he was only breathing. We were afraid if we took the child to the hospital, they would take him away from us." (Participant No. 8)

The Fear of the Spouse's/Family's Threats to Remove the Custody of the Infant

In certain situations, the fear of losing their child was connected to the spouse and family gaining custody. This concern became more significant when the spouse did not have any addiction issues, leading to the implementation of custody arrangements in some instances. Regardless of whether the husband was sent to a camp for addiction or imprisoned for drug selling, the mother experienced a constant sense of fear and worry. She feared losing custody of her child, either after her husband's release or due to the influence of his family.

"My husband has been arrested and in prison for several months. He called me several times and threatened to take my child if he got out of prison. I am most stressed about losing him. I am worried about my husband's family or the well-being of the child. I will take it." (Participant No. 15)

The Feeling of Threat and Fear of Entrusting the Custody of the Child to Welfare

The most distressing and paramount concern for mothers is the prospect of welfare agencies obtaining custody of their children. Mothers who engage in drug abuse possess a certain level of awareness regarding the societal laws and regulations implemented to protect children. Consequently, they harbor apprehensions about the welfare system assuming custody of their child.

Furthermore, mothers lacked knowledge about certain decisions regarding their children and had limited information about these procedures. In certain instances, the mother remained unaware of any details regarding her child's welfare, and sometimes, her husband's family prevented her from meeting her child. Consequently, mothers experienced feelings of frustration and hopelessness as they were unable to be involved in decisions that directly impacted their lives.

One of the mothers, who had three children and was being treated in the forced labor camp, while crying and insisting on being informed about her child's condition, said:

"I was sitting next to the shrine, and I was breastfeeding my 5-month-old son. The officers grabbed my hand and said, "Get up, lady, why are you sitting here?! As I had come from Zahedan, I didn't know the rules of this city. They took my 5-month-old baby and told me if I stopped using drugs, I could take the child. I haven't heard from my child for several months now." (Participant No. 12)

"When my daughter was born, I felt so good. I was working outside the house so that my children wouldn't starve, but they took my child. They took my hope." (Participant No. 5).

Lack of Mother's Knowledge and Care Information

Lack of Information about Neonatal Abstinence Syndrome

The absence of vital knowledge and awareness about neonatal abstinence syndrome (NAS) posed another challenge for these mothers. Newborns who have been exposed to drugs while in the womb are in danger of developing NAS, which can manifest through a variety of signs and symptoms such as restlessness, tremors, seizures, and difficulty breathing. In a few cases, the mothers were unaware of what was causing their infant's restlessness, and they were not given any instruction regarding the symptoms of abstinence syndrome after giving birth.

"My son was crying a lot after birth. I didn't know why he was restless. I took him to the health center, and he was diagnosed with fever." (Participant No.18)

"My daughter was restless; I didn't know what to do. I was petting her, hugging her. Due to financial problems, I couldn't bring a nurse to check the child to find out what's wrong." (Participant No.16)

Being at the Crossroads of Breastfeeding and Formula Feeding

Extensive research has confirmed the advantages of breastfeeding. The unique composition of breast milk can greatly enhance the immune system of infants. Unfortunately, the mothers involved in this study did not prioritize exclusive breastfeeding. There were instances where the mother herself wished to breastfeed, but she faced a dilemma of uncertainty. This was because she was well aware of the advantages of mother's milk and had heard that breastfeeding while using methadone or opium could potentially lead to the baby becoming addicted.

"I wanted to give my own milk to my daughter, but my spouse did not allow it, saying that my addiction to methadone is not good for the baby. We gave her boiled water with sugar until my spouse bought formula." (Participant No. 8)

Due to the fear of drug transmission through breast milk, there were instances where breastfeeding was avoided to prevent infant addiction. The mother, observing the calming effects of breast milk, became anxious about the possibility of her baby developing an addiction.

"Because I was addicted, I gave my baby formula. At first, I gave my milk, then I saw that the baby was passing out, so I stopped giving her my milk." (Participant No. 9)

In most instances, the decision to continue breastfeeding is influenced by the information that is received. The information received by the mother plays a crucial role in determining the method of feeding the infant. The mothers' statements regarding breastfeeding were occasionally accurate and occasionally inaccurate.

"I used to give my own milk and formula as a supplement. My husband told me to give less of my own milk because of my addiction so that the child does not become addicted." (Participant No. 11)

"My mother-in-law and my father wanted the baby to

be healthy. They said, "Do not breastfeed your child. Use a formula to keep your baby healthy and potentially have a future." (Participant No. 12)

"I breastfed him for a month, but my child was vomiting, so I started formula milk. I was worried about this, so I took my child to the doctor. The doctor said that to keep my child safe from drug effects, it is better to feed him formula milk" (participant No. 14)

A few mothers shared that they opted for breastfeeding as they were aware it could alleviate their little one's pain.

"I mostly gave my baby formula, but sometimes, when he was restless due to pain, I gave him my milk. When he drank my milk, he calmed down." (Participant No. 18)

Mothers often receive both accurate and inaccurate information from different sources, such as healthcare professionals, family members, and the media.

"In the beginning, I used to give my milk, but they told me that the child would get addicted. My cousin said to give him formula. Then my spouse bought him formula." (Participant No. 19)

Lack of Compatibility of Complementary/Substitute Infant Feeding with the Correct Procedure

Mothers lacked accurate knowledge regarding complementary feeding, resulting in many initiating it either prematurely or later than recommended. Furthermore, certain instances revealed the utilization of ingredients that lacked sufficient nutritional value for infants.

"My sister started giving supplementary food to my son when he was four months old. For supplementary food, I would give him the Mother's biscuits." (Participant No. 15)

There are situations where mothers unintentionally adjust the thickness of powdered milk, either making it too thin or too thick or expressing their lack of knowledge in preparing it properly.

"I used to boil water for 60 cc and make 1.5 cups of formula." (Participant No.15)

"To make the formula, I first dissolved it in boiling water in the jar, shook it, let it cool, and then gave it to her. I poured 3 cups for every 1 number on the container (30 cc); it was getting thick." (Participant No. 18)

Lack of Information on Infant Growth and Development

Mothers possessed restricted knowledge regarding their child's growth and development. Their understanding primarily revolved around the aspects of infant growth, such as weight and height, rather than overall development. They had considerably restricted awareness of fine and gross movements, personal-social abilities, and speaking. The majority of individuals held the belief that if their offspring possessed a favorable weight or resembled their other children, they were deemed to be in good health. Certain individuals attributed the favorable conditions for the infant's development to its ability to imitate sounds and crawl on all fours. Among the mothers, one believed that engaging in playtime with the infant promotes growth. However, due to her hectic schedule and the influence of drugs, she was unable to allocate time for such activities.

"My daughter is now one year old. She conveys her meaning to us by pointing. It is not too late for her to speak because her older sister could speak at the age of 2 or 3." (Participant No. 7)

"He wanted me to play with him, but I couldn't. He's a very happy child and is very funny. He wakes up laughing and wants me to play with him. But I quickly gave him these sleeping drops to sleep because I was hungover. I gave him drops to make him sleep so that I could use drugs." (Participant No. 8)

Inefficiency of the Support Network

In the current study, the mothers encountered a notable absence of support from society and their families. These mothers realized that they were not receiving the support they needed from their families and society, leading to feelings of solitude and a lack of assistance while tending to their children. A particular incident had a detrimental effect on the mother's ability to effectively handle the obstacles involved in caring for her child. The participants in drug addiction camps often encountered an ineffective support network due to their perception of not meeting their mother's expectations, a lack of informational support, and inadequate support from their families.

Ignoring the Mother's Expectations in Addiction Treatment Camps

The mothers' foremost struggle during their time at the drug addiction camp was to keep a distance from their children and avoid any form of communication with them. The camp lacked an appropriate area for the child to be present, causing the parents to feel concerned about their child's well-being and longing for their presence. Furthermore, there were no adequate educational programs accessible to meet these mothers' parenting skills and educational requirements.

"I miss my child now. I cry for him every day (the mother cried). My mother-in-law brought my child here for a visit, but they didn't let me hug my child. They only let me see him from behind the window. My mother-in-law says that the prison is worse. He only recognized my sound from behind the door and was waving at me. That's why I cried a lot." (Participant No. 8)

"I miss my baby. My breasts are full of milk. Once, when they brought my baby to meet him after he left, he had a fever at night and couldn't sleep. He saw me and wanted to hug me, but they didn't let me hug him. (Mother cries)" (Participant No. 11)

One of the camp psychologists mentioned, "To clarify, we currently do not have a specific program for these mothers. In other words, we lack an educational program. It would be wonderful if we could implement something that allows their children to stay with them."

Lack of Informational Support from Official Caregivers

According to the mothers' accounts, the official caregivers did not provide proper support. This led to a lack of adequate information regarding infant care and problems from the care personnel at the hospital and health center.

"He could breastfeed him once in the hospital. Doctors and nurses said that I should stop breastfeeding him because of my addiction." (Participant No. 15)

"The health center personnel recommended that the child be given formula instead of breast milk, as the child may develop an addiction." (Participant No. 13)

Receiving Insufficient Emotional and Financial Support from the Family

The absence of a supportive spouse was deeply felt by the mother, especially when they were in prison for drug-related offenses or other crimes. Even when husbands were present, they failed to assist the mother in caring for the child and neglected her emotional and financial well-being. The wife's absence in caring for the children resulted in a lack of companionship, causing the mother to feel lonely and empty. Consequently, some mothers resorted to increasing their drug intake as a means to alleviate the pain and suffering caused by their problems. Insufficient financial support from the family side was frequently perceived. The family's fatigue with providing financial assistance and their failure to aid in meeting the nutritional requirements of the mother and child contributed to the perception of inadequate financial support for the family.

"My husband cheats on me. He treats me and the children very poorly. He makes me feel out of place; he doesn't love me much. A woman needs love. My husband has not remarried, but he is in a relationship with another woman." (Participant No. 7)

"My family doesn't help me. It's been a year now that my family and my husband abandoned me because I use drugs, and because of that, I hit the street." (Participant No. 5)

Discussion

The challenges encountered by mothers dealing with drug abuse in providing adequate care for their infants were examined through a qualitative study. Continuous and comparative analysis of the data obtained from this study revealed that the main challenges of these mothers were classified into four categories: "perceived threat from social judgments," "obvious fear related to losing the right of custody of the infant," "lack of knowledge and "lack of mother's knowledge and caring information," and "inefficiency of the support network."

Pregnant women or those caring for their children who engage in drug use constitute a particularly vulnerable group as they must manage the challenges of drug dependency, pregnancy, and motherhood (14). Social judgments posed a notable challenge for this particular group of mothers, a phenomenon that has also been observed and documented in previous studies. Mothers who struggle with drug abuse often face such a profound stigma that they may choose to forgo seeking healthcare altogether. And when they do seek care, they are confronted with biased attitudes rooted in stereotypes associated with drug use (15,16). The presence of stigma significantly influences a person's emotional, mental, and physical health, resulting in unfavorable outcomes, including limited treatment availability, disability, decreased belief in one's abilities, compromised quality of life, and reluctance to seek healthcare (17).

Infants born to these mothers will undoubtedly encounter numerous challenges. Consequently, the mother must seek help from healthcare providers to resolve specific problems. Nevertheless, in this particular situation, there is a prevailing fear and conflict associated with the consequences of exposure and addiction, which arise due to the abandonment of the infant's care responsibilities. Reports from various studies have highlighted the apprehension towards government interference and healthcare workers' involvement. Mothers, while participating in treatment, encounter intricate situations due to their caregiving responsibilities and fear of legal implications imposed by the government (18). Furthermore, within a qualitative investigation, a notable theme that emerged was the "impact of trauma and the loss of child custody" (19). The heightened surveillance and societal stigma imposed by healthcare professionals and law enforcement agencies further hinder the provision of adequate care for infants belonging to these mothers (20).

The consequences of losing custody of a child are profound. Being branded as a "bad mother" leads to elevated levels of stress, denial, depression, anger, and profound emotional distress (21). The emotional suffering intensifies for a mother when she is deprived of custody of her child, making it more apparent (22). The mother's hope diminishes significantly, and she becomes anxious about the possibility of never being reunited with her child (23). Mothers find inner strength to make challenging decisions through the experience of having children. Consequently, their healing process is further propelled by the presence of their children (24). Mothers who lose custody face a significant setback in their journey to overcome drug addiction. Research indicates that these mothers are eager to care for their children personally and be acknowledged as nurturing mothers. The qualitative study revealed that every woman interviewed had a strong desire for the baby and fully embraced the role of motherhood. The phrase "I am a mother here!" emerged as a prominent theme among the participants (25).

Mothers also struggled with a lack of understanding and information about NAS and the proper care needed for infants. The main objective of parent education,

as indicated by the findings of this study, was to gain a thorough understanding of NAS (26). Furthermore, during a qualitative investigation, a significant finding emerged regarding the "insufficient training and resources offered to both employees and mothers (27)." Previous studies have shown that mothers with babies at risk of developing NAS have lower breastfeeding rates compared to the general population (28). Evidence is mounting that breastfeeding infants born to mothers who use drugs can be advantageous in reducing the severity and intensity of NAS symptoms (29). Healthcare professionals play a vital role in supporting and encouraging mothers who use drugs to breastfeed their babies. Therefore, healthcare professionals must offer their support and maintain a positive approach to help these women successfully breastfeed their infants.

Breastfeeding in the substance abuse population presents several obstacles, such as limited knowledge, a negative perception of breastfeeding, a lack of support from the social environment, and a lack of motivation to initiate and sustain breastfeeding (29,30). In the ongoing research, it was found that there is insufficient knowledge and a pessimistic perception of breast milk, even though breastfeeding is vital for the child's overall health. Breastfeeding is essential for enhancing and strengthening the physical and emotional bond between mothers and their children. However, for these mothers, exclusive breastfeeding with breast milk is seen as both necessary and demanding. As a result, both drug-abusing mothers and the staff who care for them require specialized intervention and training to improve breastfeeding rates.

Additionally, there was insufficient guidance on initiating and sustaining feeding practices. Most mothers introduced complementary feeding before four months, while a few delayed it until after eight months of age. From a physiological perspective, exclusive breastfeeding is recommended until the age of six months. Subsequently, introducing complementary foods becomes essential to ensure the child's optimal growth and development (31). When a child reaches six months old, their nutritional requirements increase significantly due to their rapid growth. At this stage, relying solely on mother's milk is no longer sufficient to meet their needs. As children grow older, their bodies become more capable of handling different types of food. Therefore, it is advisable to start introducing semi-solid foods to their diet in addition to breastfeeding (32).

In the current research, mothers initiated the introduction of complementary foods by offering porridge or rice glaze, biscuits, and even regular table food. Meanwhile, the most prevalent dietary groups for babies in South Asian high-income countries are fruits and vegetables, meat, and dairy products (33). Malnutrition can be avoided by eating complementary foods and following proper feeding procedures (34).

Improper nutrition can also cause irreversible cognitive damage in children and harm their physical and mental health (35). Given the lack of specific guidelines on the composition and quality of supplementary food, it becomes crucial to enhance mothers' understanding of this matter, considering its significance.

A mobile application for breastfeeding education was developed to cater to women with substance abuse and their supporters, offering a viable solution for training this group of mothers in certain studies. Mobile applications are the most effective means of connecting with individuals in today's society, specifically designed to educate and provide support to this particular group of mothers. Second, women who have recovered from substance addiction can serve as community health workers, connecting women with their support systems (36).

Furthermore, the findings of this study indicate that mothers who engage in drug abuse lack adequate understanding of the significance and understanding of growth and development. Other investigations have shown similar results (37,38). The study revealed that most mothers utilized a comparative approach, comparing their child's behaviors and activities with those of other children, to evaluate their child's growth and development. According to the study conducted by Habibi and Glascoe, parents often rely on comparing children as a source of information (37,39). Hence, in this scenario, it is imperative to elevate and enhance the understanding of mothers.

Many of the mothers and participants in the study expressed their disappointment with the limited support they received from society and their families. The study conducted by Silva et al. revealed a greater amount of reported support (40). Nevertheless, our study yielded findings similar to Rahimi and colleagues' study (41). Mothers struggling with drug abuse require various forms of social support, encompassing spiritual, emotional, and material assistance such as housing, financial aid, and food. The encouragement they receive from their families plays a significant role in motivating them to overcome addiction (42).

Strengths and Implications

Considering the aspirations of mothers who engage in drug use to ensure the well-being of their children while acknowledging the shortcomings in care knowledge and support systems, it is imperative to formulate a meticulous plan to direct health promotion programs for this unique group of infants. Professionals play a crucial role in delivering essential health and care services. Moreover, enhancing social support for mothers struggling with substance abuse can significantly impact their mental well-being and social functioning. Therefore, it is imperative to prioritize the needs and social support network of mothers dealing with drug abuse during macro-planning.

The findings of the present study revealed the

experiences and challenges of mothers with drug abuse in the field of caring for infants. Healthcare professionals can use these experiences to plan care for these children.

One of the strengths of the present study is that, for the first time in Iran, the challenges faced by these mothers in infant care were investigated.

Limitations and Future Directions

Similar to other studies, our study has limitations. First, our sample included all women who lived in Khorasan province, and only three participants were from other provinces of Iran, such as Sistan and Baluchistan, and Kerman. We tried to have maximum diversity among the participants in terms of children's age and sex and mothers' economic status. It was suggested that cross-sectional studies should be conducted in Iran.

Authors' Contribution

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Conflict of Interests

Authors declare that they have no conflict of interests.

Ethical Issues

Ethics approval and consent to participate in the study were conducted in accordance with the Declaration of Helsinki and approved by the ethics committee of Mashhad University of Medical Sciences with code IR.MUMS.NURSE.REC.1401.083. Participants were given a thorough explanation of the research team members, study objectives, confidentiality of information, and the freedom to choose whether or not to participate. Moreover, they were required to complete the informed consent form to participate in the study.

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