Journal of Medicinal and Chemical Sciences 6 (2023) 3026-3035

Journal of Medicinal and Chemical Sciences

Journal homepage: http://www.jmchemsci.com/

Case Report

Motherhood Capacity in Women with Schizophrenia

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ARTICLE INFO

Article history

Receive: 2023-07-11
Received in revised: 2023-08-09
Accepted: 2023-08-11
Manuscript ID: JMCS-2307-2160
Checked for Plagiarism: **Yes**
Language Editor:
Dr. Fatima Ramezani
Editor who approved publication:
Dr. Majid Hajifaraji

DOI:10.26655/JMCHEMSCI.2023.12.18

KEYWORDS

Pregnancy
Motherhood Capacity
Schizophrenia

ABSTRACT

Background: In comparison to the general adult female population, women afflicted by schizophrenia exhibit higher rates of unintended and undesired pregnancies. Maternal individuals grappling with severe mental health challenges face an increased susceptibility to postpartum psychosis, depression, and anxiety stemming from the presence of a child. Psychotic conditions often lead to the rejection of pregnancy, subsequently impinging upon maternal parenting capabilities. The predominant source of support for women with schizophrenia emanates from their familial networks.

Case illustration: This paper presents the case of a 41-year-old adult female diagnosed with paranoid schizophrenia that was 40 weeks pregnant and admitted for medical care. The patient received treatment for restlessness and speech slurring. Comprehensive evaluations were conducted by healthcare professionals from the obstetrics and gynecology as well as psychiatry departments, leading to a decision to proceed with a cesarean section to terminate the pregnancy.

Methods: Patients receive medical interventions and psychological assistance to stabilize their mental health conditions and avert relapses. Supportive psychotherapy and family psychoeducation, coupled with a collaborative approach involving discussions with obstetrician colleagues regarding childcare plans and supplementary psychiatric treatment, are implemented to enhance maternal well-being while attending to infant care.

Conclusion: The obstetric team extensively deliberated the advantages and disadvantages of terminating the pregnancy, considering the provision of sustained care for both the patient and her unborn child. Given that the pregnancy termination was facilitated via cesarean section due to the patient's mental health concerns and the potential adverse effects of antipsychotic medication, the patient's family plays a pivotal role in providing assistance for infant care. Consequently, breastfeeding is contraindicated concerning the patient's mental health status and the potential consequences of antipsychotic treatment.

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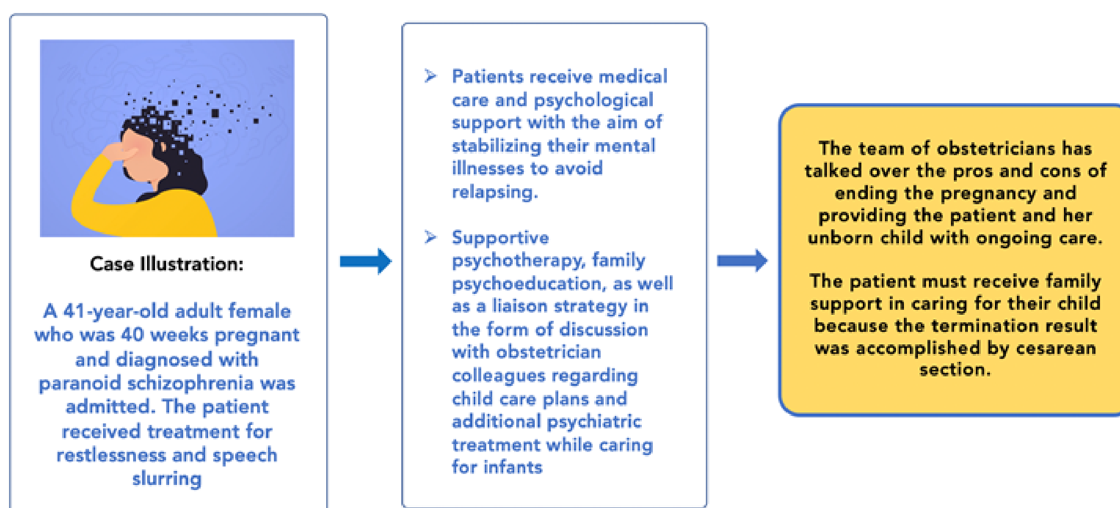

Introduction

Schizophrenia is a severe mental disorder characterized by cognitive, linguistic, perceptual, emotional, and insight anomalies. Frequently, it is accompanied by additional psychopathologies such as chronic delusions, auditory hallucinations, and impairment across various life domains. Schizophrenia affects an estimated 0.5 to 1% of the population. The Global Burden of Disease survey of 2016 approximates the prevalence of schizophrenia to be around 0.28 percent of the global population. Within a ranking of 310 diseases, schizophrenia stands as the 12th most debilitating condition. While typically manifesting in young adults, its onset tends to be delayed by approximately 5 years in women compared to men, peaking around the time of menstruation [1, 2]. In recent years, there has been a notable rise in pregnancies among women affected by schizophrenia. A study conducted in Ontario, Canada, revealed a 16% increase in the general fertility rate of women with schizophrenia between 2007 and 2009 in comparison to the years 1996 and 1998. Romantic relationships are uncommon among women with schizophrenia, and as a result, pregnancies are frequently unplanned [3]. The experience of pregnancy often exacerbates mental health challenges for these women, leading to heightened struggles with anxiety, interpersonal and socioeconomic difficulties, apprehension about childbirth, self-doubt, and concerns regarding maternal aptitude. Women with schizophrenia also tend to have higher rates of prenatal hospitalization due to conditions like hypertension and gestational diabetes. However, mothers with schizophrenia often receive suboptimal prenatal care [4, 5].

Childbirth and schizophrenia

Compared to the broader adult female population, women grappling with schizophrenia exhibit elevated rates of unintended and undesired pregnancies. However, the presence of the psychotic disorder frequently results in the rejection of pregnancy. Some individuals with schizophrenia may struggle to grasp the intricacies of the childbirth process, viewing pregnancy as a mere physical transformation [6]. While pregnancy has often been regarded as a protective factor for maintaining the stability of symptoms associated with mental disorders, it is now recognized as a critical period when these symptoms frequently become apparent in women. Mental health challenges during pregnancy are often associated with factors such as a history of poor obstetric outcomes, escalated drug utilization, inadequate antenatal care, and an increased occurrence of postpartum psychiatric symptoms.

The oversight of mental disorder indicators during the prenatal phase leads to deficient care, consequently exerting adverse effects on both the developing fetus and the well-being of the entire family unit [7]. Mothers who have recently given birth and are contending with severe mental illnesses face a significant risk of developing postpartum psychosis, depression, anxiety, and other conditions that are intricately linked to the experience of childbirth. The prevalence rate of postpartum psychosis in women with a history of schizophrenia, attributed partly to drug withdrawal during pregnancy and lactation, approaches 25% [8, 9].

Case report

The patient under consideration is a 41-year-old unmarried woman who is currently in the midst of her first pregnancy. Upon her arrival at the emergency hospital, the patient reported an incident where she had inflicted injury upon her father using a knife. This occurrence took place when the patient was 38 weeks pregnant. Preceding her arrival, the patient had exhibited episodes of aimless wandering, agitation, and speech impairments characterized by slurring. Having received a diagnosis of schizophrenia in 2004, the patient's medical history reveals a lack of consistent monitoring. Over the course of time, she has been admitted to a mental hospital on three occasions due to recurrent episodes of uncontrollable rage, impaired speech, and instances of causing harm to others. Upon her admission to a mental healthcare facility in November 2021, it was revealed that the patient was approximately 22 weeks pregnant. Details regarding the sequence of events leading up to her pregnancy are elusive. In light of both her mental health and gynecological needs, the patient was subsequently referred to a public hospital. Following a week of treatment, she was discharged and permitted to return home. The patient's ability to adhere to her prescribed medication regimen is hampered by her father's concurrent illness (stroke), thus rendering supervision a challenging task for the family. In the aftermath of a violent incident involving her father and the use of a knife, the patient was admitted to Dr. Soetomo Public Academic Hospital. Collaborative efforts between the obstetrics and gynecology as well as psychiatry departments culminated in the termination of the patient's pregnancy at 40 weeks via cesarean section. During the course of her treatment, the patient was administered Antipsychotic Clozapine at a dosage of 2x25 mg, leading to a relatively stable condition. Continued administration of antipsychotic medication remained an integral component of the patient's ongoing treatment regimen. In line with medical recommendations, breastfeeding was discouraged. As communicated by the patient's family, it is anticipated that the patient will consistently adhere to her prescribed medications while engaging in therapeutic activities at home, with the family providing assistance in caring for the infant. The patient has opted not to pursue nursing for facilitating her continued use of antipsychotic medication.

Case management methods

Upon physical examination, the patient's vital signs and eye examination revealed normal findings. Psychopathological observations encompassed a suspicious affective mood, delusional thought content with pervasive suspicions of medical personnel intending harm, perceptual disturbances manifested through auditory hallucinations urging avoidance of strangers, and psychomotor anxiety. The patient's mental diagnoses included paranoid schizophrenia and non-adherence to treatment.

In terms of pharmacological intervention, the patient received two doses of 25 mg clozapine alongside calcium and sulfas ferrosus tablets provided by the obstetrics and gynecologics. Complementary to psychopharmacological therapy, non-psychopharmacological approaches such as catharsis were employed to facilitate the patient's expression of concerns. Reassurance played a pivotal role in instilling the patient's confidence in regular medication intake for symptom management and emphasizing the benefits of a healthy lifestyle in mitigating symptoms and preventing recurrence. Fostering an understanding of the patient's mental

disorder, considered a medical condition, extended to providing psychoeducation to their family members. The scope of education encompassed the medical management plan, treatment specifics, anticipated duration of hospital stay, adherence imperatives, consequences of non-adherence, and post-hospital follow-up strategies involving family participation. Family education extended to proactive management of medication storage and adherence to guidelines. Vigilance toward potential side effects, such as fatigue and bodily stiffness, was underscored. Should such symptoms arise, the patient's family was instructed to promptly communicate with the hospital for appropriate intervention. Family vigilance was also pivotal in recognizing recurring symptoms, prompting timely medical attention, and fostering effective parenting for the patient's infant. Families capable of providing home care for their children are encouraged to do so, and patients who can safely and responsibly interact with their children may engage in supervised visits. To facilitate supervision and child care, families are advised to seek guidance from healthcare professionals at the health center. Furthermore, patients undergo occupational therapy and mental rehabilitation to identify and harness their latent potential, equipping them with skills for both basic daily tasks and gainful employment, thus enhancing their quality of life and sustained community engagement. Environmental modifications and stressor manipulation are undertaken to cultivate a supportive environment, minimize stressors, and align with the patient's current adaptive capacity.

Social support

Managers overseeing medication adherence receive social counseling to ensure consistent treatment and access to essential necessities.

Liaison communication

Liaison communication is established with obstetric and gynecological experts to address caregiving needs beyond the patient's capacity. The family is entrusted as the primary caregiver. Given the patient's ongoing mental stabilization and the necessity for prompt symptom relief through antipsychotic therapy, breastfeeding is advised for the patient to maintain her own well-being and expedited recovery.

Results and Discussion

Pregnant women with schizophrenia necessitate comprehensive support to address their diverse needs, encompassing both prenatal and postnatal care. The employment of most psychiatric medications during pregnancy carries a potential risk of congenital abnormalities that demands careful consideration [6]. Historically, schizophrenia has been recognized as a challenging and persistent form of mental illness, often complicating the attainment of effective parenting. Mothers grappling with schizophrenia are frequently denied opportunities for parenting improvement due to prevailing pessimism, resulting in custodial relinquishment. Various child welfare organizations often resort to the immediate separation of children and mothers afflicted by schizophrenia, raising concerns of neglect and potential maltreatment. This dynamic is disadvantageous for mothers, heightening the risk of relapse due to increased vulnerability, social isolation, economic disadvantage, and separation from their offspring [10, 11]. The presence of self-observation disorder inherent in schizophrenia obscures the patient's awareness of their condition. Mothers, particularly those on active medication, may cease antipsychotic treatment upon becoming parents due to an association between medication and illness. In addition, the side effects of antipsychotic drugs present a distinct impediment. Sleep-deprived new mothers may discontinue sedative medications to remain attentive to their infants, inadvertently contributing to therapy noncompliance and elevated custody jeopardy [10]. The reciprocal mother-child bond hinges on the involvement of both parties. Comparative assessments of mother-infant pairs involving women with psychosis have revealed descriptors such as "distant, insensitive, intrusive, and self-centered," yielding impoverished quality of interactions. Such findings raise concerns not

only about the child's developmental trajectory, but also, more crucially, their safety [12]. The potential transference of mental health challenges to offspring is an additional source of apprehension. Historical attempts to prevent the transmission of the "schizophrenia gene" led certain Western and Asian nations to enact sterilization laws during the mid-twentieth century. Current safety considerations encompass therapeutic assurance, child well-being, and the impact of treatment symptoms and side effects on the overall condition. Effective parenting is intrinsically tied to the mother's ability to create a nurturing environment; one that is responsive and available when needed while allowing for independence. A key element of this framework is attentiveness to the child's needs (attunement). Responsive parenting involves timely and suitable responses aligned with the child's developmental stage, engagement in child-focused activities, open communication, minimal criticism, abundant warmth and affirmation, consistency, and the establishment of reasonable boundaries. Assessment of care adequacy for young children often encompasses the absence of neglect and maltreatment, with additional dimensions becoming increasingly significant as children mature [10]. Parenting challenges can be heightened by schizophrenic symptoms encompassing disorganized speech or behavior, delusions, and hallucinations. Interpersonal and social functioning frequently encounter disruptions. Neurocognitive deficits affecting attention, working memory, and executive functions exert a more substantial impact on independent living capabilities compared to symptomatology.

Persistent negative symptoms of schizophrenia, such as affective blunting, may wield greater influence over the quality of the mother-child relationship than positive symptoms [13]. Relative to offspring of parents unaffected by mental health issues, children born to parents with schizophrenia exhibit an elevated likelihood of developing mental disorders in adulthood. Estimates suggest a risk of 7-16% for these children to experience mental health disorders. Moreover, their progeny demonstrate a heightened susceptibility to encountering additional mental health challenges [4]. Hereditary vulnerabilities may be inherent in children of parents grappling with schizophrenia. Early experiences and genetic predisposition intricately shape neurotransmitters and brain circuits, collectively impacting developmental trajectories. Children born to mothers diagnosed with schizophrenia face an array of hurdles, compounded by potential economic hardship, and social isolation accompanying major illnesses. Inadequate prenatal care, maternal nutritional deficiencies during pregnancy, and maternal use of alcohol, tobacco, and caffeine further amplify vulnerability in the child's early development [9]. Comparing interactions between mother and infant across individuals with and without mental disorders unveils the far-reaching impact of maternal mental health on children and families. Observable outcomes encompass diminished eye contact, reduced stimulation, and an inability to interpret the infant's cues, all constituting disruptions in mother-infant interaction, particularly pronounced when maternal schizophrenia is present [12]. These issues underscore challenges within the mother-infant dynamic, epitomized by unresponsiveness, inadequate stimulation, attention deficits, and disorganized parenting. The impact of this condition on the mother-child relationship is undeniable. Attachment disorders, marked by low self-esteem, diminished cognitive and problem-solving abilities, and reduced empathy for others' suffering can affect children as young as 12 months. However, secure attachment bonds established during infancy, which strike a balance between closeness and autonomy, offer enduring protection against psychological distress. The caregiver-patient bond, referred to as attachment, signifies that a close and nurturing relationship is instinctively sought in times of risk. Infants born to schizophrenic or depressed mothers tend to exhibit less stable attachments within the first year of life, with children of mothers with schizophrenia displaying higher rates of attachment anxiety at the age of one [14]. Poor parenting among women with schizophrenia can be influenced by multiple factors, including social circumstances, prenatal exposure, and fathers'

mental health and substance use issues. Compounding this, aspects linked to the mother's illness, such as her hospitalization-related absence, potential parenting lapses, and additional responsibilities placed on her children, may exacerbate the challenge. Research predominantly suggests that a mother's diagnosis of schizophrenia has a lesser impact on her parenting style compared to these interconnected factors [15]. Inadequate parenting can precipitate an array of effects on older children, including abuse, neglect, loneliness, guilt, loyalty dilemmas, lack of access to mental health resources and support, and social isolation [11]. Children within this context often experience feelings of abandonment and maltreatment by their fathers. Their sense of isolation extends to friends, extended family, and the community. Many lack an understanding of their mother's condition and hesitate to invite friends over due to their mother's peculiar behavior. Moreover, they grapple with guilt and may attribute their birth to their mother's illness. Children raised in orphanages or under the care of their fathers may carry remorse for "abandoning" their mothers. A significant portion of these children believe their mothers were mistreated during hospitalization and experience guilt for having played a role in their mother's admission. They often perceive medical professionals as inadequately informed about the condition. Despite these challenges, some remain steadfastly committed to caring for their mothers. Collectively, these narratives delineate complex and often difficult relationships between the children and their mothers [16]. Attachment issues among adults raised by schizophrenic parents were examined by Duncan and Browning, shedding light on a range of challenges associated with cultivating secure relationships, particularly those characterized by closeness and trustworthiness [13].

Intervention

Research indicates that the mother-child bond tends to strengthen as the mother's symptoms diminish. Various interventions can be employed, including parenting classes, personalized coaching for mothers, facilitation of participation in support groups tailored for parents with similar backgrounds, and temporary co-parenting assistance. Local community-focused programs serve as viable vehicles for delivering these services. In the event of a maternal relapse, interventions may also be extended within inpatient facilities, ensuring vigilant oversight by medical professionals. In such scenarios, immediate evaluations of the mother's caregiving capabilities can guide decision-making, and appropriate guidance can be provided by healthcare experts and other relevant authorities [17]. Additional family-based therapies are available [18]. These encompass family case management, round-the-clock crisis support, essential liaison services, and advocacy. Such care models adopt a family-centered, emotionally supportive, and comprehensive approach. The successful service implementation hinges on the delivery of family-focused care that bridges the gap between adult and pediatric mental health. This requires a well-structured interagency collaboration framework and adherence to standards in accordance with legal, administrative, and funding considerations [19]. Family-driven systems of care prioritize the needs of parents, children, and extended families. Capacity-building, ongoing assessment, and accountability form the bedrock of this approach. It emphasizes agency coordination, inter-professional collaboration, specialized service provision across diverse domains, and cultural sensitivity to cater to differences. Cultural sensitivity refers to staff members' capability to comprehend, value, and integrate a family's perspective into service delivery, preferably in the family's preferred language. These services should also remain cognizant of the stigma associated with mental health conditions while maintaining transparency and empathy [20]. However, this study has limitations. Some potential study limitations that could be overcome, the case study presented in this article involved one patient, which limits the generalizability of the findings.

Table 1: Potential Issues and Intervention Techniques [21]

Group Target	Potential Issue	Intervention Technique
Child	Relationship issues in childhood and adolescence are caused by attachment issues.	Offering opportunities for more intimate, enduring, wholesome, and sustaining connections with family (siblings, parents, and other extended family), as well as with others (peers, relatives, and neighbors).
	When the mother is hospitalized, there may be issues with access to transportation, lodging, and other basic necessities.	Providing family-friendly hospital facilities, support for domestic and travel needs, and housing accommodations.
	Maladaptive coping mechanisms	Providing opportunities to learn and practice adaptive problem-solving strategies
	Misconceptions about maternal mental disorders.	Giving children a chance to express their understanding of maternal disease and to learn about mental disorders in general, as well as knowledge pertaining to certain conditions based on their age.
	Adolescents who are in charge of looking after ailing parents or siblings.	Informing caregivers of the need for restful breaks.
Mothers with mental disorders	Managing mental disorders.	Providing routine control, including ensuring the compatibility of drugs with current conditions, participating in rehabilitation programs, and ensuring rehabilitation, including education about childcare and the role of parents.
	Taking on parental obligations.	Giving concrete examples of how to behave as parents, demonstrate your understanding of the connection, connectivity, and other unique parenting concerns, and make sure there is assistance available, such as daycare, in the event that your parents relapse and need to receive hospital treatment.
	Accepting the necessity of emotional and social support.	Involving family and community networks in support and rehabilitation efforts as necessary.
Other family members	Family stress caused by the difficulty of caring for mothers with mental illnesses.	Providing emotional support, educating people about mental illnesses, and making sure caregivers get breaks.
	Distant relationships and poor communication.	Programs for family-based interventions and attachment.
Institutions that offer mental health	Inadequate coordination and	Building commitment to

services	incomplete services.	information sharing among institutions and to creating policies that take clients' and families' needs into consideration.
	Unskilled staff members lack the necessary skills and the police are unresponsive and reactive.	Providing instruction and training on family support for people with mental illnesses.
Social community	There are stigmas and prejudices for people with mental disorders and their families, as well as social, political, and economic restrictions that prevent families from having a fair quality of life.	In addition to provide continuing psycho-education and community initiatives to combat stigma and stereotypes in society and the media, government policies are required to control and assist communities and families with mental disorders.

The unique circumstances of this case may not accurately represent the wider population of pregnant women with schizophrenia. Further studies with larger and more diverse samples are needed to draw stronger conclusions. In addition, information presented in case studies may be subject to recall bias or inaccuracy due to the retrospective nature of data collection. Prospective studies with real-time data collection can provide more accurate and reliable information about the experiences and challenges faced by pregnant women with schizophrenia.

Conclusion

Schizophrenia poses challenges for women striving to fulfill their roles as mothers, impacting their well-being and causing biological and psychological issues to their offspring. While various interventions exist to mitigate risks for patients and their families, successful implementation hinges on the coordinated efforts across multiple sectors. Ensuring effective childcare support for women with schizophrenia and nurturing mentally and physically healthy future generations necessitates a collaborative approach. Adequate support for both mother and child can counterbalance the challenges posed by schizophrenia, demonstrating that effective parenting is achievable with the right assistance.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Authors' Contributions

All authors contributed to data analysis, drafting, and revising of the paper and agreed to be responsible for all the aspects of this work.

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HOW TO CITE THIS ARTICLE
Embun Kumalaratih*, Erikavitri Yulianti. Motherhood Capacity in Women with Schizophrenia. *J. Med. Chem. Sci*., 2023, 6(12) 3026-3035.
DOI: https://doi.org/10.26655/JMCHEMSCI.2023.12.18
URL: https://www.jmchemsci.com/article_177263.html