**Title:** Pregnancy and schizophrenia: confounding ethical doctrines

**Running Title:** Ethical issues in pregnant women with schizophrenia

**Abstract**

Pregnancy for some woman brings joy and excitement, but may be very distressing in those who suffer from severe mental illnesses like schizophrenia. Women with schizophrenia may have difficulty in planning of pregnancy and deciding to continue to viability and thence to term. Once pregnant, dilemmas also surround the pharmacotherapy in this population as the non-/treatment is associated with its own challenges. The psychiatrist may be posed with such arduous questions which require decision making based on the ethical principles of autonomy, beneficence and relational ethics. Furthermore, inherent to the nature of schizophrenia or its non-treatment or various psycho-social factors that could impact the parenting in such mothers are also laden with ethical controversies. Likewise, the limited provision of family planning services in conjunction to mental health services, and effective usage of methods of contraception is often the forerunner of various aforementioned problems. In the backdrop of sparse literature on this topic, an attempt has been made to highlight various ethical dilemmas posed to a psychiatrist during management of pregnant women with schizophrenia.

**Keywords:** Pregnancy, Perinatal, Schizophrenia, Psychosis, Ethics

**Introduction**

Ethical issues and psychiatry practice are the two sides of a see-saw, often difficult to balance with pregnancy adding further disturbance to this intricate equilibrium. Wellbeing of the pregnant woman is affected by the underlying mental pathology, plethora of pregnancy associated psychiatric disorders and various psychosocial etiological factors. The child on the other hand is a sufferer at hands of genetic predisposition, pharmaco-treatment and disrupted parental relationship. The psychiatrist in these situations needs to cater to the woman and her fetus considering the severity of mental illness, respect of autonomy, other ethical issues and legal clauses. Advances in treatment and improved affability of specialist have led to better patient compliance, improved marital life and increased willingness to family planning. However, most of pregnancies among women with mental illnesses are still unplanned. (1). In a country like India, psychiatrist is often called for providing consultations for ante-/post-natal mothers with mental health problems, post-partum blues being the commonest indication, but occasionally the problems are severe and sometime creates dilemma for the treating team. He is put on difficult platform where locus of decision making is solely put on him (2). With the following case vignette, certain pertinent questions related to peri-natal mental health problems are cited and possible solutions have been discussed.

**Case Vignette**

A 25-year old married woman on antiepileptics from the age of seven, who came for antenatal check-up, was referred to the department of psychiatry with symptoms pertaining to paranoia, lack of self-care and muttering to herself. Her condition started deteriorating since her initial marriage days of two years. At the time of first presentation, she was taking carbamazepine 600 mg/day in divided doses without consulting a doctor. She was diagnosed with schizophrenia and epilepsy (resolved). She was started on olanzapine following consent and carbamazepine was tapered and stopped. However, despite counselling of patient and family she dropped out of psychiatry care after two visits, and did not consult psychiatrist elsewhere too. Furthermore, withstanding the ongoing symptoms of paranoia, she took care of self, observed precautions for the well-being of yet to be born child and did not have much socio-occupational dysfunction. At term, she delivered a healthy baby girl. Her psychosis worsened 5-6 months postpartum, and therefore her family brought her back for psychiatry consultation. They cited the movement of patient to another catchment area as the reason for her drop-out, but none for leaving psychiatry care. At the time of second presentation, she had florid delusions of infidelity, reference and persecution along with auditory hallucinations, agitation, poor self-care, marked socio-occupational dysfunction, impaired sleep and refusal to eat. She also threatened to commit suicide in view of the delusions. Her child was being taken care of her mother and sister. In view of the severity of the illness and lack of mental capacity by patient [and non-availability of full provisions of Mental Health Care Act, 2017 (3)], she was admitted under supported admission and consent of her husband and father was obtained. Her routine hematological and biochemistries were normal and she was initially treated with intravenous haloperidol and promethazine as she refused oral treatment. In view of non-availability of any advanced directive, we initiated treatment with modified bi-temporal electroconvulsive therapy (refusal to eat, severe psychosis and suicidal threats being the indications) with appropriate education and surrogate consent. Further, she was lactating and her date of last menstrual period was not elicitable. But during the course of therapy, on further investigations that included a pelvic ultrasound for some other indication, she was found to be pregnant with 12 -week gestation. At the time of this revelation, she lacked a mental capacity to understand this and therefore, the spouse and her family was told about her pregnancy and revised consent for continuation of ECT and pharmacotherapy was obtained. Her brief psychiatric rating score reduced from 56 to 22 at the end of four sessions of ECT and she regained her mental capacity to decide for herself. After the information of her being pregnant for second time, she was ambivalent about continuing it. Further, she was also worried about transmission of her illness to her children, and the adverse effects of the medications she was taking on the unborn child. On further follow-ups she almost remitted with only random ideas of infidelity, but the ambivalence for continuation of pregnancy continued.

This case has put forth various pertinent questions from the viewpoint of a mother vis a vis her child and the unborn fetus. However, for the treating team, it brought to their door certain dilemmas which are mentioned below.

1. Whether this patient should continue or terminate the pregnancy?
2. Can we pharmaco-treat against the woman's wishes considering the effects of harmful untreated psychotic symptoms?
3. Parenting risks in mothers with schizophrenia.
4. Family planning in women with schizophrenia.

The aforementioned questions are often linked to each other, and thus the answers to them shall not be addressed in exclusion, rather, an integrated approach must be followed. In the following sections, an attempt has been made to address these important aspects of perinatal mental health issues.

1. **Decision to continue the pregnancy**

Women with a severe mental illness are more likely to terminate their pregnancies in comparison to non-psychiatrically ill mothers (4, 5). Various factors which may motivate a mother with schizophrenia to give up her pregnancy are lack of social support, inadequate finances to rear the child, fear of obstetrical complications, fear of parenting in view of mental illness, and the fact that her child may be at increased risk of mental illness (6). Research on this aspect of medical ethics dealing with the decision making in pregnant females with severe mental illnesses has been sparse. However, in past 2-3 decades, clinical guidelines and recommendations concerning identification and management of the risk of unwanted pregnancies and the management of pregnancies in patients with severe mental illness have been put forth (7, 8, 9). Further, only few groups of researchers have been active in this arena of medical ethics, and frameworks or guidelines from eminent societies or associations from psychiatry or obstetrics have been insufficient.

McCollough and others, (10), had proposed an ethical framework for decision-making in pregnant females with schizophrenia, comprising of five components namely, chronically and variably impaired autonomy, assisted decision making, surrogate decision making, strategies for dealing with the physician's feelings in response to these patients, and the concept of the foetus as a patient. The authors had aptly tried to balance the principles of beneficence and patient’s autonomy in the process of decision making. However, ethical dilemma arises when autonomy of the patient is to be respected whose decision making capacity is impaired and acting with beneficence. As stated by McCullough et al., (10), ‘respect for autonomy is an ethical principle that obligates the physician to empower the patient’s decision-making capacity by providing information about medically reasonable alternatives for the management of the patient’s condition.’ Beneficence is defined as an ‘ethical principle that obligates the physician to seek the greater balance of clinical goods over clinical harms in the outcomes of patient care.’ Beneficence-based clinical judgment should be evidence-based. In simpler words, we need to make sure to keep patient’s right to choose intact and simultaneously take the course of action most benefiting to the patient.

Some authors have given more weightage to the patient’s autonomy in deciding for continuation of pre-viable pregnancy to the viable and later on to birth. Like, Dudzinski (11), emphasized that predominant ethical framework for addressing reproductive decisions in the maternal-foetal relationship is respect for the woman's autonomy. Therefore, this model proposes that the prime decision is to be taken by the woman herself, that is, whether to continue or terminate the pregnancy.

A shared decision making model was described by McCullough and Chervenak (12) in which the patient, surrogate and psychiatrist interact throughout this decision-making process. At first, patient’s belief about her condition, diagnosis, prognosis, alternative management protocols should be obtained. Following, the psychiatrist must correct factual errors of the patient, and simultaneously supplementing the patient’s and surrogate’s knowledge. Then, he must provide and explain his clinical judgement about all available management protocols including wait and see approach. Patient and her surrogate must develop a holistic approach of the patient’s mental condition and treatment protocols with the assistance of the psychiatrist. At the final step, a mutual decision is reached and implemented. A recently published international position paper (13), has laid down detailed guidelines for various aspects of peri-natal mental health. It recommends formation of a multi-disciplinary team of professionals from various streams and the patients with their family members on board, which then decide on various aspects of pregnancy related issues in persons with mental illnesses.

In the index case, at the time of second presentation, patient had impaired autonomy in view of acute psychosis, and attempts were made to reinstate her mental capacity with the help of pharmacotherapy and biological treatment (both of which were administered in keeping mind minimal impact on the fetus and according to the available evidence; 14-16).

1. **Pharmacotherapy of pregnant women with psychosis/schizophrenia**

Pregnancy often motivates patients to give up prescribed medications out of concern for the yet to be born child (17). The decision of stopping or continuing the pharmacotherapy during pregnancy is difficult for a woman with additional psychotic symptoms impairing her judgement. It is also a conglomerate of education, severity of symptoms, societal pressure and cultural values. Further, it is often advocated that motherhood is synonymous to keeping the child above oneself. The refusal may also be consequent to the underlying psychopathology like delusions or hallucinations, catatonia or a lack of insight. Paranoia and agitation with add on personal neglect and non-compliance to medication often impairs the ability of the patient to comply with psychiatric/obstetric recommendations. Moreover, pregnant women with acute psychosis may be at risk of harming self, others, and thus it may warrant involuntary treatment. The situations may further get complicated in such cases in view of exploitation, victimization, lack of social support as well as compartmentalised delivery of medical health services (9). Although, patients with severe mental disorders have normal pregnancies and deliveries, the risk of adverse obstetric outcomes increases in them (18). Hence, question arises like- Can treatment be ethically imposed against the woman's wishes considering the effects of harmful untreated psychotic symptoms?

Firstly, akin to other decision making, the general principle states that patient shall be able to decide if she wants to seek treatment and the nature of treatment. Further, the clinician has ethical obligation to act with beneficence. The situation gets complicated when a patient with psychosis refuses the treatment which the clinician believes is essential (19, 20). These ethical concerns are further exacerbated when the principles of relational ethics are also applied that state that the patient’s well-being and her baby’s well-being are intertwined (21). For the information of reader, relational ethics is defined as “moral responsibility within the context of human relations, and recognizes the human interdependency and reciprocity within which personal autonomy is embedded (22)”. However, application of this principle is recommended without undue coercion or medical paternalism with respect of autonomy of pregnant woman except in situations where it is evident that the benefits of proposed treatment are clear and overwhelmingly beneficial for the fetus (5, 19). But the literature is replete with ethical and legal cases where the pre-viable fetus is not considered a person/patient and the patient’s autonomy only has been given highest accord (10 Moreover, in most of countries, India included, the onus of establishing that the patient lacks mental capacity to accept antipsychotic treatment lies with the psychiatrist (3). And it must be stated that in the absence of treatment there would have been a possible worsening of illness or serious harm to self or others. The Mental Health Care Act of 2017 (3), has various provisions for admission under different categories, though, it is yet to come into complete effect.

Secondly, pharmacotherapy of pregnant women is another grey area as none of the anti-psychotics have been approved by US Food and Drug Administration (USFDA) or the Central Drugs Standard Control Organization (CDSCO) for India. The limited data for safety of various psychotropic medications (anti-psychotics included) is available from case reports/series and retrospective studies. Also, research in this population has various ethical and legal issues which beyond the scope of discussion. Literature supports that second-generation antipsychotics like olanzapine as well as utilization of ECT in pregnant women does not increase the risk to fetus in comparison to the healthy pregnant women (14-16). Furthermore, various professional bodies involved in this field including the American Congress of Obstetricians and Gynecologists, recommend that pharmacotherapy for severe mental illnesses during pregnancy shall be continued for the betterment of the woman with psychosis as well as her fetus (23).

In the case described above, despite education of the patient and family about her mental condition, mutually decided course of action; follow up and medication were discontinued during the first pregnancy. At second presentation, patient lacked a mental capacity to decide for taking treatment, and the patient presented in a state which was harmful for her as well as the fetus. So, she was treated after consent of family and when she regained mental capacity, her consent was sought. However, a big task ahead for us will be to keep her in the treatment and deal with ethical issues pertaining to further treatment, as and when they arise.

1. **Parenting risks in mothers with psychosis**

A mother with severe mental illness, who has newly delivered, is at increased risk of developing postpartum psychosis, depression, anxiety and other child related disorders. There is nearly 25% prevalence of postpartum psychosis in women with prior history of schizophrenia (24) and this is mainly due to discontinuation of prescription medication during pregnancy or lactation (25). Hence, a mother with psychosis/schizophrenia elicits various biases during the assessment of their parenting capacities by the physicians. Certain research had shown that mothers with schizophrenia have impaired capacity of parenting in view of their psychopathology (26, 27) and that the infant-mother interactions are also deficient (24, 28, 29). In a review of literature (30), the predictors for requirement of social service intervention or mother- infant separation included a diagnosis of schizophrenia in mother, low socio-economic status, a psychiatric illness in the partner as well as poor quality relationship with partner and ethnicity. Certain other risk factors were neonatal complications, other severe mental illnesses in mother, previous child/children, single marital status and legal problems. Moreover, an acute onset of psychosis in comparison to schizophrenia has been shown to be a predictor of better mother-infant interactions and less risk of displacement (31). Despite the evidence that most of the mentally ill mothers do not abuse their children, but it remains a significant variable in the history of children who had been maltreated (32, 33). Apart from the parental mental illness, the inherent genetic predisposition to suffer from a mental illness is a double whammy.

However, ethical principles dictate that one cannot hold women with a mental illness to a different standard of parenting as compared to those who do not suffer from a mental illness. Laura Miller (34) highlighted a dilemma for physician if he is obliged to the “not yet conceived child” whom he believes to be at high risk of maltreatment in hands of a mother with psychotic illness. As per her, a physician shall attempt at counselling the women about the risks posed by her mental illness that could impact the mother-infant relationship. Moreover, treatment in forms of psychosocial rehabilitation, parenting skills teaching, enhancing one’s social support and other relevant measures for such women must be undertaken in case they conceive. Brockington and others (13) recommend multi-disciplinary intervention which should be tailor made according to the available resources and may include the general practitioner, representative of obstetric and mental health teams, social workers apart from the expectant mother and her family. This team is supposed to address the issues of pharmacotherapy, antenatal care, early signs of a relapse, puerperial management, care of the infant and protection of the child.

In the index patient, the concerns cited by her put the treating team in dilemma too. It was very difficult to help her making a decision about the continuation of current pregnancy in view of issues related to the risk of transmission of her illness in her children as well as the burden of parenting two young children. However, in view of her achievement of near complete remission, presence of good insight into her illness, her adaptive skills, the availability of family support, financial abilities and commitment to engage in further treatment appeared to favor her capability to rear her children. But after education about her illness, the risk of transmission of illness in her children, availability of various positive factors helped the patient to decide for herself and continue the present pregnancy to term.

1. **Family planning in mothers with psychosis/schizophrenia**

The area of family planning in this population group has been an underserved area and very little research has been undertaken on this topic. It was believed that persons with schizophrenia, due to a range of factors namely the illness, psychotropic medications, and institutionalization; would engage less in sexual activity and had less fertility as compared to the general population (34). However, with the de-instutionalization, provision of community psychiatry services, innovation of newer neuroleptics and change in attitudes of society have led to increased marriages of persons with schizophrenia and thus higher chances of pregnancies. One of the earliest studies from China, which in 1980s directed its people to follow one child norm, reported that the rates of birth control was poor in patients with schizophrenia (females more than males) as compared to the healthy controls and the author suggested sterilization as the foremost method of birth control in females with schizophrenia (35). Some other surveys also revealed that women with severe mental illnesses did not want to become pregnant, but did not use methods of contraception (36, 37). In a recent study (38), it was found that women with mental disorders had on an average three pregnancies and two of them were unplanned. Further, less effective methods of contraception were used by them. Despite a clear need for family planning counselling in psychiatric settings, it is rarely provided in conjunction with mental health services. One of the Indian study from Bengaluru (1) stated that only 18% of the 135 women registered for mother-child psychiatry service were referred for pre-pregnancy counselling and the reasons for it were discordant psychiatrist-patient ratio, male psychiatrist, lesser control of the women in contraception.

Although, many a times the treating psychiatrists avoid prescribing potentially teratogenic psychotropics to the women in reproductive age group, but the provision of family planning counselling or even referral to an obstetrician for this purpose is missed. Coverdale and others (39), recommend strategies for prevention of unwanted pregnancies in persons with mental illness. These include education regarding resistance of unwanted sexual advances, contraception, possible benefits and risks of pregnancy, advocacy of condom use among male partners. Few studies undertaken nearly 50 years ago in few psychiatric hospitals in the US (40, 41), emphasized the acquisition of informed consent for contraception, highlighted the importance of voluntarism and underlined the usage of reversible methods of contraception. Although, the presently available long-term and reversible means of contraceptives may prove to be very successful in such populations, but, their non-removal on request of patients, or utilizing coercion or manipulation in view of the principle of beneficence may be outweighed by respect for patient’s autonomy despite an impaired decision-making (7). Further, role of preventive ethics (not addressed in detail here) comes into play when a woman in her reproductive years is enrolled for clinical trials (42, 43).

**Conclusion**

Pregnancy in women with mental illness poses a challenge for both the patient and the psychiatrist. Amalgamation of underlying psychopathology, pregnancy induced mental illnesses, pharmacotherapy and other psychosocial factors make gestation arduous for the patient. On the other hand, respect of autonomy and beneficence with add on numerous ethical and legal issues create hurdles at different levels for the psychiatrist in patient treatment. Understanding and assessing the patient’s decision-making capacity and her involvement along with a family member in decision making throughout pregnancy and intrapartum is the most crucial step in treatment. Thus, understanding the patient’s notions, explaining the available management strategies and her condition must be undertaken to reach a mutual decision. This must also be applied postpartum to improve mother-child relationship and parenting skills. Further, pregnancies in this study group are often unplanned. Hence, the psychiatrist must educate the patient as well as the partner on risks involving both mother and child, of being pregnant while on medication. Furthermore, awareness about different contraceptive methods must be created in these patients. With an increased focus on ethics and rights- based provision of mental health services, more research is required on perinatal mental health issues. Further, the integration of various services which caters to this population is the need of hour.

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