# Changes in the Mental Status of Pregnant Women with Multiple Congenital Fetal Anomaly

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# **ABSTRACT**

Background: A diagnosis of Congenital Fetal Anomaly (CFA) is an unexpected event and will cause adequate psychological distress for the woman and her family and can be associated with a severe emotional trauma. This will present a new challenge whether to continue the pregnancy or to terminate the pregnancy. Termination of pregnancy caused by a CFA will cause significant long-term psychological stress to the mother and family.

Objective: To study and determine the changes of mental status in a pregnant patient with CFA who will undergo pregnancy termination.

Methods: This is a case report of pregnant women with CFA whose pregnancy will be terminated at the Obstetrics and Gynecology Polyclinic of Prof. dr. I.G.N.G. Ngoerah Central General Hospital Denpasar. In-depth interviews were conducted to assess mental conditions before and after the termination of pregnancy was carried out.

Results and Discussion: It was reported a woman with 22 weeks of pregnancy with CFA who was undergo antenatal care in the Obstetrics and Gynecology Polyclinic Room at Prof. dr. I.G.N.G Ngoerah Central General Hospital Denpasar and the pregnancy will be terminated. There are feelings of sadness, loss of interest, and anxiety after knowing that the fetus has CFA and must be terminated. There is a feeling of guilt because she feels her actions caused the death of the patient's fetus. At the time of termination of pregnancy, the patient feels sad and cries when she sees the fetus. She feels that she already has a bond with the fetus that she carried even though it is not yet fully formed.

Conclusion: Termination of pregnancy is a difficult process for both parents. This process can cause a number of mental disorders such as anxiety disorders, depression and post-traumatic stress disorder in both parents. The decision-making process is a difficult time that can lead to feelings of guilt. In the decision-making process, the pregnancy termination team must consider all aspects, both psychological and cultural, that the patient adheres

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# I. INTRODUCTION

Pregnancy is usually a desirable transition in a woman's life, and it is associated with physical and mental changes that occur. This will change women's perception of themselves by being committed to the birth of a baby and will expect healthy children [1]. However, a pregnancy not always produce a healthy child. Prenatal screening for the presence of a congenital fetal anomaly (CFA) is a treatment service that has been recommended to all pregnant women and has become increasingly common in the last decade. Ultrasound examination and prenatal screening lead to increased early detection of CFA, and sometimes cause anxiety about the results of screening examinations and being unprepared for the diagnosis of CFA [2]. The incidence rate of CFA is 3.8% worldwide, and each year an estimated 150,000 women in the United States are diagnosed with CFA, with 47 to 90% choosing to terminate a pregnancy [3].

A diagnosis of CFA is an unexpected event and will cause adequate psychological distress for the woman and her family and can be associated with a severe emotional trauma. This will present a new challenge whether to continue the pregnancy or to terminate the pregnancy [4]. Termination of pregnancy caused by a CFA will cause a significant long-term psychological distress to the mother and family. Various studies have shown that fetal death during pregnancy and after birth triggers a prolonged sadness and is associated with levels of anxiety, depression and symptoms of post-traumatic stress disorder [5]-[7].

Social support is an important factor when a woman

experiences prolonged grief after experiencing the death of a child. Social support is a combination of functional and structural support. Functional support is emotional, instrumental, informational and assessment support from the stress experienced, while structural support consists of formal and informal support [8]. Social support serves as a buffer to a woman who has recently lost her fetus. Where support from doctors, nurses and families is effective to relieve sadness, anxiety, depression, and post-traumatic stress disorder experienced [8]. In this case report, a pregnant woman with CFA was interviewed at the Obstetrics and Gynecology Polyclinic, Prof. Dr. I. G. N. G. Ngoerah Central General Hospital Denpasar related to the mental condition experienced before and after pregnancy termination and how the social support is received by the patient.

# II. CASE REPORT

A 32-year-old woman is currently in her 3<sup>rd</sup> pregnancy of 22 weeks gestational age with fetal abnormalities in the form of multiple biventriculomegaly, dilated 3<sup>rd</sup> ventricle, aranoid cyst, suspected corpus callosum agenesis, cerebellar hypoplasia, hypertelorism, pulmonary hypoplasia, pulmonary artery dilation and ascites. The patient knew that her fetus had many abnormalities since 18 weeks of gestation. The patient was first informed by an obstetrician in a private practice and then referred to the fetomaternal section of Prof. Dr. I. G. N. G Ngoerah Central General Hospital. The patient was planned for induced termination of pregnancy. The patient said that she was currently worried about the procedure to be carried out. The patient was worried about the impact that would occur after the termination.

When she was first told that the fetus has many abnormalities, the patient feels sad for a week. This feeling of sadness makes her lazy to do activities at home such as cooking and caring for their children. The patient also experienced sleep disturbances and decreased appetite.

The patient felt disappointed, especially since the fetus she was carrying was a male fetus. According to Balinese culture, boys are the successors of tradition in the family so that patients feel happy. The patient said that this pregnancy was not planned but the patient was happy when she found out that she was pregnant and hoped that she could have a son. According to the patient, the abnormality experienced by the fetus was because there was a family who sent black magic by touching the fetus. This, according to the patient, makes the ancestral spirit that will be reincarnated into the fetus cancels the reincarnation. The patient also consults with spiritual leaders during the decision-making process to terminate the pregnancy to make the best decision.

At the time of termination of pregnancy, the patient said that she felt sad and cried when she saw the fetus. Even though the doctor said there was no need to be sad and this was the best decision. The patient feels that she already has a bond with the fetus she is carrying even though it is not yet fully formed. The patient feels sad especially when remembering the fetus is moving in the womb even though its movements are felt to be weaker than the first and second children. The patient said she was traumatized by this incident and did not plan to get pregnant again. The patient is afraid that the same thing will happen if she gets pregnant

again. After terminating the pregnancy, the patient will carry out a tradition of Balinese culture, which is coming to the grave of the fetus to apologize with her husband.

# III. DISCUSSION

According to data released by the World Health Organization (WHO) in 2017, there were 280,000 fetal deaths in the world caused by congenital malformations. The development of prenatal diagnostic tools and the improvement of prenatal services have led to an increase in the detection rate of fetal abnormalities [8], [9].

In some previous studies it was said that fetal abnormalities were a traumatic event that could lead to a life crisis and could lead to mental disorders. Mental disorders can occur in both parents, although it can be more severe for the mother. Mental disorders that often arise due to fetal abnormalities in both parents include anxiety disorders, depression, post-traumatic stress disorder and prolonged bereavement reactions to the most severe symptom, the emergence of suicidal ideation [2].

It was said that during the decision-making process to terminate the pregnancy was a difficult process and both parents would take steps to justify the termination. This termination action will also cause feelings of grief and anxiety that will last for a long time, about two to three years. In the process of providing information about the presence of congenital anomalies to decision making and pregnancy termination procedures, psychological assistance should be given to both parents [10].

In the case described above, the mental disorder that occurred in the patient was an adjustment disorder with mixed reactions of anxiety and depression because the patient had mild symptoms of depression and anxiety but did not meet one of the criteria for a depressive episode or generalized anxiety disorder. This mental disorder can occur due to a stressful situation, or a life crisis experienced by the patient, such as a congenital abnormality experienced by the fetus it contains. This mental disorder can develop into a depressive episode in pregnancy but thanks to the support of the husband and family, the patient does not fall into a depressed state. For both the patient and the husband, the decision-making process is a difficult one to go through. The patient and her husband receive support from spiritual leaders so that patients feel that their decision making, even though it is considered not in accordance with the norm, has strong reasons. The patient and her husband consider cultural factors to be inseparable in the decision-making process for termination of pregnancy. This is based on Balinese culture that humans do not only consist of body, mind but also spirit which is known as "mind, body and spirit". By considering all aspects, both from the scientific side of medicine and Balinese cultural traditions, it is considered that it can reduce the idea of guilt arising from making the decision to terminate pregnancy. By performing rituals of Balinese cultural traditions in consultation with spiritual leaders according to the patient, it helps her to feel sincere with the reality that must be accepted.

In the case of termination of pregnancy, psychological assistance is required during the provision of information, the decision-making process, and the process of termination of pregnancy. Health workers are required to have empathy and take the time to listen and provide adequate information about

pregnancy termination procedures. Psychological aspects in the process of termination of pregnancy must be considered important because various mental disorders can arise during the process of termination of pregnancy. The need for psychological counselling is from the beginning to provide information about the presence of congenital abnormalities in the fetus being conceived. This counseling is needed to prevent the onset of mental disorders that can arise and to carry out early detection of the onset of mental disorders.

At the time of termination of pregnancy, supportive support from the pregnancy termination team is needed. Understanding the concept of fetal loss for a mother is very necessary so that the pregnancy termination team can empathize. Providing time for mourning for mothers during pregnancy termination such as crying and expressing feelings of sadness is very necessary. This is important so that there is no repression of stressors to the subconscious which will lead to post-traumatic stress disorder in the future. The pregnancy termination team can offer the patient to see the fetus that has been delivered if the patient is willing to. The pregnancy termination team can ask the patient for support or assistance after the termination process is carried out. The supervision process during termination is not only limited to physical conditions but also psychological conditions.

In the above case, cultural factors also greatly influence the patient's point of view in dealing with the life crisis they are experiencing. The pregnancy termination team should listen to the patient's point of view from a cultural point of view and give the patient the freedom to carry out traditions related to termination of pregnancy if it does not endanger the safety of the mother. After termination of pregnancy, psychological assistance is still needed so as to prevent the occurrence of long-term mental disorders such as depressive episodes and post-traumatic stress disorders. For future pregnancies, the termination of pregnancy team should be able to provide education about the prognosis and the possibility of recurrent complications and prevention strategies. Psychological assistance is also needed to prepare for future pregnancies.

# IV. CONCLUSION

Termination of pregnancy is a difficult process for both parents. This process can cause a number of mental disorders such as anxiety disorders, depression and post-traumatic stress disorder in both parents. The decision-making process is a difficult time that can lead to feelings of guilt. In the decision-making process, the pregnancy termination team must consider all aspects, both psychological and cultural, that the patient adheres to. The termination of pregnancy team must also have empathy during this process and provide opportunities for patients and families to make decisions. The pregnancy termination team is expected to be able to provide psychological support during the pregnancy termination process because the patient can experience sadness because of the loss of bonding with the fetus they are carrying. Allowing the patient to express his sad feelings will prevent the repression of sadness to the subconscious which can lead to mental disorders in the future.

So it is important to provide assistance from Consultation Liaison Psychiatry (CLP) for pregnant women diagnosed with CFA, to increase the mental strength of the patient until

termination of pregnancy is carried out so that the patient does not fall into a more severe mental disorder.

# CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

# REFERENCES

- [1] Kamranpour B, Noroozi M, Bahrami M. Supportive needs of women who have experienced pregnancy termination due to fetal abnormalities: A qualitative study from the perspective of women, men and healthcare providers in Iran. BMC Public Health. 2019: 19.
- Nekah AS, Irani M, Khadivzadeh T, Asghari Nekah M, Ebrahimipour SH, Tara F. Emotional and Cognitive Experiences of Pregnant Women Following Prenatal Diagnosis of Fetal Anomalies: A Qualitative Study in Iran. IJCBNM. 2019; 7: 22-31.
- Darmayasa IM, Friska, Anggakusuma. Cognitive, Emotion and Behavioral Reactions in Pregnant Women Who Have Termination of Pregnancy due to Congenital Fetal Anomaly. European Journal of Medical and Health Sciences, 2022; 4: 1-2.
- Hanschmidt F, Treml J, Klingner J, Stepan H, Kersting A. Stigma in the context of pregnancy termination after diagnosis of fetal anomaly: associations with grief, trauma, and depression. Arch Womens Ment Health. 2018; 21: 391-399
- Jacob L, Kostev K, Gerhard C, Kalder M. Relationship between induced abortion and the incidence of depression, anxiety disorder, adjustment disorder, and somatoform disorder in Germany. J Psychiatr Res. 2019; 114: 75-79.
- Qin C, Chen WT, Deng Y, Li Y, Mi C, Sun L, et al. Cognition, emotion, and behaviour in women undergoing pregnancy termination for foetal anomaly: A grounded theory analysis. Midwifery. 2019; 68: 84-90.
- Sun S, Li J, Ma Y, Bu H, Luo Q, Yu X. Effects of a family-support programme for pregnant women with foetal abnormalities requiring pregnancy termination: A randomized controlled trial in China. Int J Nurs Pract. 2018: 24.
- Sun S, Yang M, Zhang J, Zhou X, Jia G, Yu X. Family support for pregnant women with foetal abnormality requiring pregnancy termination in China. Health Soc Care Community. 2020; 28: 1020-1029
- Kamranpour B, Noroozi M, Bahrami M. Psychological experiences of women with pregnancy termination due to fetal anomalies: A qualitative study from the perspective of women, their spouses, and healthcare providers in Iran. Reprod Health. 2020: 17.
- [10] Asplin N, Wessel H, Marions L, Ohman SG. Pregnant women's perspectives on decision-making when a fetal malformation is detected by ultrasound examination. Sexual and Reproductive Healthcare. 2013; 4: 79-84.