

# Post-Menopausal Women with Pseudocyesis in Rural Areas: A Socio-Cultural Perspective

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#### Abstract

**Introduction:** Pseudocyesis originates from the Greek language, consisting of 2 syllables, namely: Pseudo (false) and Kyesis (pregnancy). Pseudocyesis is a mental health condition where the affected individual believes they are pregnant, accompanied by signs and symptoms of pregnancy. The Kei society adheres to a patrilineal kinship system and has preserved customary laws handed down through generations known as "Larvul Ngabal". These customary laws regulate several aspects of life including marriage and descent.

**Case Report:** A 60-year-old woman came to the outpatient clinic to checked her pregnancy. The patient stated that for the past 2 months, her abdomen had been growing larger and she felt fetal movements inside. Obstetric examination and supporting tests did not reveal the presence of a fetus. The patient was educated that she was not pregnant, but she remained convinced that she was pregnant.

**Case Discussion:** This patient has already entered post-menopausal age and has been married for the second time. The patient and her husband desire to have a male child. The Kei society adheres to a patrilineal system, where a male child is hoped to continue or strengthen the paternal lineage. However, the patient currently does not have any offspring. Therefore, this situation may have an impact on her condition. **Conclusion:** Pseudocyesis reflects somatization disorder in the patient due to the unfulfilled desire to have offspring. This condition can be influenced by several factors including socio-cultural ones.

Keywords: Pseudocyesis, Biopsychosocial, Socio-cultural.

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#### Introduction

Pseudocyesis, or false pregnancy, is a condition where a non-pregnant woman believes that she is pregnant, accompanied by signs and symptoms of pregnancy. The most common signs and symptoms of pregnancy are amenorrhea, morning sickness, enlarged abdomen and breasts, lordotic posture, enlarged hips, and fetal movement.<sup>1</sup> Based on the guidelines of the DSM-V, pseudocyesis is included in other specified somatic symptoms and related disorders, which are conditions with somatic symptoms that cause distress and disturbance.<sup>1</sup> Pseudocyesis is a relatively rare disease with multifactorial causes. The incidence of pseudocyesis in the United States is 1 in 22,000 pregnancies, in Nigeria it is 1 in 344 pregnancies, and in Sudan the incidence is 1 in 160 pregnancies.<sup>2</sup> Data related to pseudocyesis in Asia, especially Indonesia, is still limited. Biopsychosocial factors are believed to be closely related to the incidence of pseudocyesis.<sup>2</sup>

Limited access to health facilities and a lack of socialization regarding mental health problems mean that cases of pseudocyesis are more often found in rural areas. It is not uncommon for pseudocyesis to result from the existence of rooted mystical beliefs in the community, such as the abduction of the fetus by a genie or the use of black magic.<sup>3</sup> These local beliefs may influence the patient's perception about obtaining a pregnancy examination at the nearest health facility, thus strengthening the patient's erroneous beliefs regarding her pregnancy.<sup>2,3</sup>

Sociocultural factors also play a role in the emergence of pseudocyesis. In African countries, giving birth to children is considered a symbol of status and social achievement. Women with good fertility and birth rates will strengthen their feminine identity in society. If they fail to fulfill this, then the individual concerned is considered socially incompetent.<sup>4</sup> The Kei people are indigenous people from Southeast Maluku who adhere to a patrilineal kinship system based on the father's lineage. The spirit of kinship and family relations in Kei is bound by a customary law that has been preserved for a long time, called "Larvur Ngabal". The customary law talks about lineage and inheritance, which highlighted the importance of an offspring or child in a Kei family. Therefore, this case report will discuss post-menopausal women with pseudocyesis in rural areas, focusing on sociocultural perspectives.<sup>5</sup>

### **Case Presentation**

A 60-year-old female patient came to the outpatient clinic with her husband for a pregnancy check. The patient said that she was pregnant and wanted an ultrasound examination. The patient's appearance looked neat, wearing a red t-shirt and trousers. During the history-taking process, the patient appeared to talk less and repeatedly said she wanted to check on her pregnancy. She felt the fetus moving in her stomach two months ago. The patient forgets the history of the last menstruation.

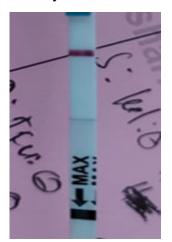


Figure 1. Negative hCG Test Using Test Pack

The patient was in elementary school, and this was the patient's second marriage. The patient was previously married and had four sons. Currently, the patient's son is working outside the island. The patient's first husband died in 2016 due to complications from diabetes. In 2018, the patient remarried, but until now, the patient does not have children from her second marriage. The patient's second husband also has four sons who currently work outside the island. The wife of the patient's second husband died in 2015 due to complications from a stomach disease. At this time, the patient and her husband wanted to have a male child. The patient comes from a family with low socioeconomic conditions. There was no history of medical or psychiatric illness in the patient. Physical examination revealed no abnormalities. On obstetric examination, the abdomen was found to be distended (not hanging); the umbilicus did not protrude; percussion resulted in tympanic sound throughout the abdominal area; no linea nigra; the height of the uterine fundus is not palpable; there are no palpable fetal parts; no fetal heartbeat when examined using the fetal doppler; negative hCG test using a test pack (see Figure 1); and no gestatsional sac in transabdominal ultrasound examination (see Figure 2).



Figure 2. The results of the transabdominal ultrasound examination of the patient showed that there was no enlargement of the uterus, no amniotic fluid, no fetal parts, and no fetal heart rate.

The mental status examination revealed that the patient's self-care was quite good: the patient was cooperative enough to answer several questions from the examiner; orientation to time, place, and person is not disturbed; the patient spoke briefly at a low volume; the patient's gaze appeared glazed with unfocused eye contact with the examiner; mood appeared hypothymic with narrowed affect; there is an impression of harmony between mood and affect. Delusions were found, and the patient had a preoccupation with pregnancy; no hallucinations or illusions were found. The patient's concentration and calculation are good. Impulse control is not impaired. The patient feels that her stomach was getting bigger and the baby was moving, even though the physical and supporting examinations showed no signs of pregnancy. The patient and her husband were informed about the current condition, but the patient remained firm that she was pregnant and still felt the baby's movement in her stomach. Therefore, patients are advised to get further treatment from a psychiatrist.

## Discussion

Pseudocyesis generally occurs in women aged 20-40 who are married, have long-standing fertility problems, are in deep grief due to the death of their child, and are in post menopause.<sup>4,6,7</sup> Cases of pseudocyesis in the postmenopausal period are rare. The case report made by Pratap, et al.<sup>4</sup> showed that a 56-year-old woman had pseudocyesis. Apart from that, Dubravako,<sup>6</sup> also discussed a case of pseudocyesis in a 59-year-old woman. Pseudocyesis in the postmenopausal period can be caused by a defense mechanism against unbearable reality. The mismatch between expectations and reality will give rise to internal and emotional conflict, so it is not uncommon for pseudocyesis to be a stress-coping mechanism that ends after a long time with no way out of the conflict or situation.<sup>7</sup>

In this case report, the patient did not have any children from her second marriage. This couple wanted a boy in their family. This deep desire to give birth to offspring in the second marriage created psychological problems considering the condition of the patient who has entered the postmenopausal period.<sup>7</sup>

Patients with pseudocyesis generally have low levels dopamine activity in the brain. Low dopamine activity in the brain can caused by several psychological conditions, such as depression, anxiety, and emotional stress due to emotional conflict in this case, a strong desire to get pregnant. Low dopamine levels will increase the levels of the hormones Gonadotropin Releasing Hormone (GnRH), Luteinizing Hormone (LH), Prolactin (PRL), and Follicle Stimulating Hormone (FSH). These hormonal changes can cause amenorrhea, galactorrhea, and hyperprolactinemia. Decreased dopamine activity causes increased activity of the sympathetic nervous system.<sup>2,6</sup>

Increased sympathetic nervous system activity and LH levels cause chronic contractions of the diaphragm muscle accompanied by contraction or relaxation of the anterior abdominal and internal oblique muscles, known as abdominal-phrenic dyssynergia. This condition can manifest as fetal movements, pregnancy pain, and abdominal enlargement.<sup>2,6</sup> Unlike normal pregnancy, abdominal enlargement in patients with pseudocyesis is usually even and round (not hanging), the abdominal wall appears springy, the umbilicus does not protrude, and there is tympanic percussion. Therefore, the enlargement of the abdomen and fetal movements caused by chronic contractions of the diaphragm muscle.<sup>2</sup>

Cases of pseudocyesis are more common in developing countries, rural areas, and environments with social pressures that require women to have children. Research conducted in Africa showed that the incidence of pseudocyesis is related to a woman's ability to produce offspring; women with good fertility status are considered to have more value in social status. In Igbo culture in Southeastern Nigeria, married women hope to be able to have children soon; this can increase the value of femininity and a secure position in a man's family, while some African-American women are under social pressure to have children, so it often causes psychological disorders in these women.<sup>2,4</sup>

The social demand to have children after marriage also occurs in several countries, including Indonesia. This is influenced by sociocultural factors, so women are motivated to have children and fulfill the hope of becoming mothers.<sup>8</sup> In developing countries, women's social values are related to the offspring they give birth to; this belief is called pronatalism. Infertility can be a burden for married couples; this can be the cause of divorce or polygamy, the practice of marrying another woman in addition to the current wife to seek a more fertile partner who can bear offspring.<sup>8</sup>

Often, infertility is attributed to women, but in reality, men also play a role in this condition.<sup>9</sup> This condition can cause rejection by the husband and his family, resulting in a psychological impact on women.<sup>9</sup> In some traditional societies, the pressure to have children does not only comes from the surrounding family but is also believed to come from deceased ancestors, who may feel disadvantaged by their descendants and hence plotting revenge.<sup>9</sup>

The Kei tribe is a native population of Southeast Maluku that has very strong kinship values based on blood lineage and marriage. They have a view of the values of life, including marriage, which aims to build a happy and lasting family and strengthen and maintain extended family relationships. The "Larvul Ngabal" customary law is a guideline held by the Kei community. "Larvul" means red blood, and "Ngabal" means Balinese spear. Based on the Tom-Tad (oral history) of the Kei community, Larvul Ngabal was initiated by the children of two brothers from Bali, namely Kasdeu and Jangra. This law regulates almost the entire social system on Kei Island, such as politics, business, marriage, religion, and conflicts between religious communities.<sup>5</sup>

In the Statute No. 1 of 1974 that regulates marriage practices in Indonesia, there was no regulation over the form, method, and ceremony of marriage. This allows customary law to remain sustainable and people can use their customary marriage laws in their weddings. In Kei Islands, marriages have a customary value as an event for the living ones as well as for the deceased. During the celebration, the couple will receive blessings from the spirits of the ancestors of both parties.<sup>5</sup>

There are three levels of caste or social strata in the Kei tribe based on customary law, namely: Mel (noble), Ren (native), and Iri (low class). Marriages can only be performed between the same strata; different stratas are forbidden to be married. If this is violated, then sanctions will be imposed in the form of the individual being expelled from the clan. Kei society adheres to a patrilineal system so that the position of sons is given priority over daughters. Boys will be the successors of their parents (fathers), while girls will later strengthen other people's offspring or clans. If you do not have male children or do not have children, it is considered to have broken the line of descent. Children obtained outside of marriage are considered only related to their mother's relatives, not as heirs or biological successors of their father's descendants.<sup>5,10</sup>

This couple wanted to conceive a boy, but the woman had entered the postmenopausal period, where this condition affected fertility.<sup>6</sup> The patient's emotional and mental condition may have resulted from biopsychosocial-cultural factors, which include: biological factors related to hormonal changes after menopausethough this had not been can be ascertained due to limited diagnostic modalities and infrastructure in the rural area, psychological factors related to the stressors experienced by the patient, as well as socio-cultural factors related to the pressure experienced by the patient if the patient cannot produce offspring and breaks the clan lineage. The relationship between these three factors will give rise to a cause-and-effect relationship, and in the end can cause pseudocyesis.<sup>1</sup>

The patient was planned to be referred to a psychiatrist on Ambon Island for further

examination and treatment, due to the absence of a mental health expert in Kei Islands. In the end, the patient refused to be referred, so the patient and her husband were informed regarding the condition. Patient was advised to re-visit to monitor her health.<sup>11</sup>

# Conclusion

Pseudocyesis is often found in married women of reproductive age, but in some cases, it can be found in women who have gone through menopause. Dopamine hypoactivity in the brain, stressors experienced by the patient, environmental and socio-cultural conditions can be factors related to pseudocyesis. In the end, pseudocyesis reflects the patient's somatization disorder because the patient's desire to have a child does not come true.

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## References

- 1. Azizi M, Elyasi F. Biopsychosocial view to pseudocyesis: A narrative review. Int J Reprod Biomed. 2017;15(9):535-42. doi:10.29252/ijrm.15.9.535
- Tarín JJ, Hermenegildo C, García-Pérez MA, Cano A. Endocrinology and physiology of pseudocyesis. Reprod Biol Endocrinol. 2013;11(1). doi:10.1186/1477-7827-11-39
- 3. Yanti L. Tanda Gejala Fisik dan Psikologis Serta Presepsi Ibu dengan Kehamilan Palsu (Pseudocyesis). In: Sumarni S, Khosidah A, Pantiawati I, editors. Seminar Nasional dan Presentasi Hasil-hasil Pengabdian Masyarakat Bidang Kesehatan: "Optimalisasi Deteksi Dini Kanker Leher Rahim serta Kesehatan Kulit pada Masa Kehamilan dan Menyusui": conference proceedings [Internet]; 2017 Sep 23; Akbid YLPP, Purwokerto, Indonesia. Purwokerto: Penerbit Akademi Kebidanan Yayasan Lembaga Pendidikan Prada Prurwokerto, 2017 [cited 2023 Nov 11]. p. 150-6. Available from: https://ojs.stikesylpp.ac.id/index.php/JBP/ issue/view/27/7
- 4. Pratap D, Foliaki S, Hackett M. Phantom Pregnancy in A Postmenopausal Tongan Traditional Healer in New Zealand : A Case Report. Published online 2022:115-116. doi:10.34297/AJBSR.2022.17.002321

- 5. Subekti P, Budiana H, Yusup P. The Role of the Kinship System in Social Conflict Resolvment in Indigenous People of KEI. Published online 2019. doi:10.4108/eai.8-12-2018.2283948
- Dubravko H. Pseudocyesis in peri- and postmenopausal women. Cent Eur J Med. 2010;5(3):372-374. doi:10.2478/s11536-009-0084-8.
- Ierodiakonou-benou I. ISSN 0216-3438 (Print). ISSN 2621-1122 (Online) Jurnal Profesi Medika : Jurnal Kedokteran dan Kesehatan. 2020;14(1):82-5.
- 8. Putri GR, Ambarini TK. Jurnal Psikologi

Klinis dan Kesehatan Mental. J Psikol Klin dan Kesehat Ment Tahun. 2018;Vol. 7:84-96.

- Seeman M V. Pseudocyesis, delusional pregnancy, and psychosis: The birth of a delusion. World J Clin Cases. 2014;2(8):338. doi:10.12998/wjcc.v2.i8.338
- Sakina AI, A. Šiti DH. Menyoroti budaya patriarki di indonesia. Share : Social Work Journal. 2017;7(1):71-80.
- 11. Nicholson LA. Rural mental health. Adv Psychiatr Treat. 2008;14(4):302-11. doi:10.1192/apt.bp.107.005009