



A Qualitative Study on Women's Experiences of Obesity and Weight Changes Following the Use of Injectable Contraceptives

Studi Kualitatif tentang Pengalaman Perempuan terhadap Obesitas dan Perubahan Berat Badan setelah Penggunaan Kontrasepsi Suntik

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ABSTRAK

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Latar Belakang: Kontrasepsi suntik 3 bulan merupakan salah satu metode kontrasepsi yang paling banyak digunakan di Indonesia karena dinilai praktis dan efektif. Namun, penggunaan jangka panjang sering dikaitkan dengan efek samping berupa kenaikan berat badan yang dapat memengaruhi kondisi fisik, psikologis, sosial, serta keberlanjutan penggunaan kontrasepsi. **Tujuan:** Penelitian ini bertujuan untuk mengeksplorasi pengalaman dan persepsi wanita pengguna kontrasepsi suntik 3 bulan terkait kenaikan berat badan di wilayah kerja Puskesmas Bahu, Kecamatan Malalayang, Kota Manado. **Metode:** Penelitian ini menggunakan desain kualitatif dengan pendekatan fenomenologi. Data dikumpulkan melalui wawancara mendalam terhadap 12 partisipan yang dipilih menggunakan teknik purposive sampling. Jumlah partisipan ditentukan berdasarkan prinsip saturasi data. Analisis data dilakukan untuk mengidentifikasi tema-tema yang menggambarkan pengalaman dan persepsi partisipan terkait kenaikan berat badan selama penggunaan kontrasepsi suntik 3 bulan. **Hasil:** Hasil penelitian menunjukkan bahwa sebagian besar partisipan mengalami kenaikan berat badan setelah menggunakan kontrasepsi suntik 3 bulan. Kenaikan berat badan tersebut berdampak pada perubahan aktivitas fisik, munculnya rasa tidak nyaman, penurunan kepercayaan diri, serta memengaruhi interaksi sosial. Meskipun demikian, mayoritas partisipan tetap melanjutkan penggunaan kontrasepsi suntik karena dianggap praktis, efektif, dan sesuai dengan kebutuhan mereka dalam mengatur kehamilan. **Simpulan:** Kenaikan berat badan merupakan pengalaman yang umum dialami oleh pengguna kontrasepsi suntik 3 bulan dan

memberikan dampak pada aspek fisik, psikologis, serta sosial. Namun, manfaat yang dirasakan dari metode kontrasepsi ini tetap menjadi faktor utama yang mendorong keberlanjutan penggunaannya. **Saran:** Tenaga kesehatan disarankan untuk meningkatkan konseling terkait kemungkinan efek samping kontrasepsi suntik 3 bulan, memberikan edukasi mengenai pengelolaan berat badan, serta melakukan pemantauan berat badan secara berkala guna mendukung kenyamanan dan kepuasan akseptor dalam menggunakan metode kontrasepsi tersebut.

ABSTRACT

Keywords:

Experience, Family Planning,
Injectable Contraceptives,
Obesity, Phenomenology

Background: Three-month injectable contraception is one of the most widely used contraceptive methods in Indonesia due to its practicality and effectiveness. However, long-term use is often associated with weight gain, which may affect women's physical, psychological, and social well-being, as well as the continuation of contraceptive use. **Objective:** This study aimed to explore the experiences and perceptions of women using three-month injectable contraception regarding weight gain in the working area of Bahu Public Health Center, Malalayang District, Manado City. **Methods:** This study employed a qualitative design with a phenomenological approach. Data were collected through in-depth interviews with 12 participants selected using purposive sampling. The number of participants was determined based on the principle of data saturation. Data were analyzed to identify themes related to participants' experiences and perceptions of weight gain during the use of three-month injectable contraception. **Results:** The findings revealed that most participants experienced weight gain after using three-month injectable contraception. The increase in body weight affected their physical activities, caused feelings of discomfort, reduced self-confidence, and influenced social interactions. Despite these challenges, the majority of participants chose to continue using injectable contraception because they perceived it as practical, effective, and suitable for their family planning needs. **Conclusion:** Weight gain is a common experience among users of three-month injectable contraception and has physical, psychological, and social impacts. Nevertheless, the perceived benefits of this contraceptive method remain the primary factor supporting its continued use. **Suggestion:** Healthcare providers are encouraged to strengthen counseling regarding the potential side effects of three-month injectable contraception, provide education on weight management strategies, and conduct regular weight monitoring to enhance users' comfort, satisfaction, and adherence to contraceptive use.

INTRODUCTION

Health development in Indonesia is currently facing a double burden of disease. On one hand, communicable diseases remain a significant public health problem, with many unresolved cases and the re-emergence of several infectious diseases that were previously under control (Kaba et al., 2025). These diseases can spread across regional and national boundaries. On the other hand, there has been a significant increase in non-communicable diseases (NCDs), many of which are associated with unhealthy lifestyles and degenerative conditions (Asogwa et al., 2022).



Obesity is defined as an abnormal or excessive accumulation of body fat that may impair health. A person is generally considered obese when their body weight exceeds 20% of the normal body weight standard (Imai et al., 2019). Obesity results from an imbalance between energy intake and energy expenditure, leading to excess fat storage. Multiple factors contribute to obesity, including genetics, nutrition, environmental influences, dietary habits, psychological factors, hormonal conditions, neurological factors, and socioeconomic status (Ghosh et al., 2023; Mansoor et al., 2022; Verde et al., 2023; Vijayan et al., 2025).

Women of reproductive age often participate in family planning programs to delay or space pregnancies through various contraceptive methods, including oral contraceptive pills, injectable contraceptives, intrauterine devices (IUDs), implants, and female sterilization procedures (Belay et al., 2024; Dehesh et al., 2020). Among these methods, the three-month injectable contraceptive is widely used because of its convenience and effectiveness. However, studies have reported that women using three-month injectable contraceptives may experience weight gain ranging from 1 to 5 kilograms during the first year of use, which may contribute to increased body fat accumulation (Subiyatin et al., 2024). Weight gain associated with contraceptive use may affect women's physical health, body image, self-confidence, daily activities, and overall quality of life (Bass et al., 2025; Keogh et al., 2021). Individuals with obesity are often perceived as having lower levels of physical activity, despite sometimes exhibiting higher metabolic rates than individuals with normal body weight (Jonas et al., 2022). Furthermore, limited physical activity and socioeconomic factors have been linked to an increased prevalence of obesity and related health risks (Caldwell et al., 2020).

Based on the observation data the number of reproductive-age women actively attending family planning services and using contraceptives fluctuated across different months, although overall utilization remained consistently present. One of the most frequently reported concerns among contraceptive users is weight gain after using contraceptive methods, particularly injectable contraceptives, which is an important issue as it may affect users' comfort, adherence, and continued use of family planning services. Therefore, exploring these experiences is important to gain a deeper understanding of how women perceive the physical and psychosocial impacts of weight changes associated with contraceptive use. Therefore, this study aims to explore the experiences and perceptions of women using three-month injectable contraceptives regarding weight gain associated with three-month injectable contraceptive use in the working area of Bahu Community Health Center, Malalayang District, Manado City.

METHOD

Research Design and Approach. This study employed a qualitative research design with a phenomenological approach. The phenomenological approach was chosen because it allows researchers to explore and understand the lived experiences and perceptions of women regarding weight gain following the use of three-month injectable contraceptives. This approach was considered appropriate for addressing the study objective, which was to gain an in-depth understanding of how women experience and interpret body weight changes associated with contraceptive use.

Research Setting and Period. The study was conducted in the working area of Bahu Community Health Center, Malalayang District, Manado City, Indonesia. Data collection was carried out during October 2025. This research setting was selected because weight gain had been identified as one of the most frequently reported complaints among women using injectable contraceptives in the area.

Population and Sample. The study participants consisted of women of reproductive age who were active users of three-month injectable contraceptives. Participants were selected using a purposive sampling technique to ensure that they had direct experience with the phenomenon being investigated. A total of 12 participants were recruited and interviewed. Participant recruitment continued until data saturation was achieved, indicated by the absence of new information or emerging themes from subsequent interviews. The inclusion criteria were women aged 18–49 years, active users of three-month injectable contraceptives for at least one year, having experienced weight gain after contraceptive use, able to communicate effectively in Indonesian, and willing to participate in the study. Women diagnosed with chronic diseases that could influence body weight, such as thyroid disorders or malignancies, those with communication difficulties, and those who withdrew during the study were excluded. To maintain confidentiality, participants were assigned identification codes ranging from P01 to P12.

Study Focus. The focus of this study was to explore women's experiences and perceptions regarding weight gain and obesity associated with the use of three-month injectable contraceptives. Particular attention was given to participants' perceptions of body weight changes, perceived causes of weight gain, physical and psychological impacts, social experiences, coping strategies, and perspectives on continuing contraceptive use despite experiencing weight gain.

Data Collection Methods and Instruments. Data were collected through in-depth semi-structured interviews using an interview guide developed based on the study objectives and relevant literature. The interview guide explored participants' experiences after using injectable contraceptives, perceptions of body weight changes, physical and emotional impacts, social responses, weight management strategies, and opinions regarding the continuation of contraceptive use. Interviews were conducted face-to-face in a private setting either at the health center or another location preferred by participants. Each interview lasted approximately 30–60 minutes and was audio-recorded with participants' permission. Field notes were also taken during the interviews to document non-verbal expressions and contextual information that could support data interpretation.

Research Procedures. The research procedure began with obtaining ethical clearance and permission from the relevant authorities. Potential participants who met the inclusion criteria were identified with the assistance of healthcare personnel at Bahu Community Health Center. Eligible participants were informed about the purpose and procedures of the study and were invited to participate voluntarily. Written informed consent was obtained before data collection commenced. All interviews were transcribed verbatim immediately after completion. To enhance the trustworthiness of the data, credibility was enhanced through member checking and prolonged engagement with participants. Dependability and confirmability were supported through peer debriefing and maintaining an audit trail. Transferability was facilitated by providing detailed descriptions of the study context and participants.

Data Analysis. Data were analyzed using thematic analysis following the framework proposed by Braun and Clarke. The analysis began with repeated reading of interview transcripts to achieve data familiarization. Subsequently, meaningful statements were identified and assigned initial codes. Examples of codes generated during the analysis included weight gain (WG), appetite changes (AC), body confidence (BC), physical discomfort (PD), social perception (SP), emotional changes (EC), physical activity (PA), dietary strategies (DS), continued contraceptive use (CU), and health concerns (HC). Similar codes were then grouped into categories and organized into broader themes that reflected participants' experiences and perceptions regarding weight gain associated with injectable contraceptive use. Themes were reviewed, refined, and defined before the final interpretation and reporting of findings.

Ethical Considerations. This study received ethical approval from the authorized Health Research Ethics Committee prior to data collection (Approval Number:112/KEPK/STIKES-BTH/IV/2025). All participants provided written informed consent before participating in the study. Participant confidentiality and anonymity were strictly maintained by replacing personal identities with participant codes (P01–P12). All interview recordings, transcripts, and research documents

were stored securely and were accessible only to the research team. Throughout the study, participants were informed of their right to withdraw at any stage without any consequences.

RESULTS AND DISCUSSION

Results

This study explored the experiences of women using three-month injectable contraceptives regarding weight gain in the working area of Bahu Community Health Center, Malalayang District, Manado City. Data were collected from 12 participants (P01–P12) through in-depth interviews and analyzed using thematic analysis. The analysis generated four main themes: perceived weight changes, physical and psychological impacts, social responses, and coping strategies.

Table 1. Characteristics of Participants

Code	Age	Duration of Injectable Use	Weight Change Experience
P01	24	2 years	Increased
P02	31	3 years	Increased
P03	27	1.5 years	Increased
P04	35	4 years	Increased
P05	29	2 years	Increased
P06	33	3 years	Increased
P07	26	1 year	Increased
P08	38	5 years	Increased
P09	30	2 years	Increased
P10	28	1.5 years	Increased
P11	34	3 years	Increased
P12	32	2 years	Increased

The study identified five main themes—perceived weight changes, physical and psychological impacts, social responses, coping strategies, and continuation of contraceptive use—derived from participants’ experiences of increased appetite and weight gain, fatigue and reduced confidence, family comments and stigma, dietary control and physical activity efforts, and continued contraceptive use despite weight gain.

Table 2. Themes and Codes Generated from Analysis

Theme	Sub-Themes	Codes
Perceived weight changes	Increased appetite, gradual weight gain	WG, AC
Physical and psychological impact	Fatigue, reduced confidence	PD, BC, EC
Social responses	Family comments, stigma	SP
Coping strategies	Diet control, physical activity	DS, PA
Continuation of contraceptive use	Acceptance despite weight gain	CU

Discussion

Perceived Weight Changes After Injectable Contraceptive Use

These findings are consistent with Hartanto (2014), who reported that injectable contraceptive users may experience weight gain between 1–5 kg in the first year of use due to hormonal effects that influence appetite and fat storage. Similar findings were that obesity is influenced by hormonal and nutritional factors, including changes in appetite regulation (Gebrye et al., 2024). In addition, increased body weight is closely related to reduced physical activity and energy imbalance, which may be exacerbated by lifestyle factors and metabolic changes (Chomiuk et al., 2024). Furthermore, the hormonal contraceptive methods, particularly injectable forms, may contribute to modest weight gain in some users, although individual responses vary depending on genetic, dietary, and environmental factors (Cipriani et al., 2020). The hormonal contraceptives can influence appetite regulation and body composition, leading to gradual weight changes in long-term users (Cagnacci & Biasioli, 2021).

Physical and Psychological Impacts

Participants reported several physical complaints such as fatigue, reduced mobility, and discomfort due to increased body weight, along with psychological impacts such as reduced self-confidence. One participant stated, “I feel tired more easily now, and I don’t feel as confident as before because my body shape has changed” (P05), while another added, “Sometimes I avoid social gatherings because I feel embarrassed about my body” (P08). These findings align with a previous study that obesity is often associated with reduced physical activity and psychosocial burden, including lower self-esteem, and excessive body fat accumulation can negatively affect both physical and psychological health (Robinson et al., 2020). In addition, weight gain associated with three-month injectable contraceptive use are frequently associated with decreased physical functioning, increased fatigue, and limitations in daily activities, while individuals with higher body mass index often experience psychological distress, including body dissatisfaction and reduced self-confidence that may lead to social withdrawal (Hysi & Dervishi, 2024; Zadoń et al., 2023). Furthermore, the obesity not only impacts physical health but also contributes to mental health challenges such as anxiety, stigma, and reduced quality of life (Abiri et al., 2022).

Social Responses Toward Weight Gain

Participants reported receiving comments from family members and peers regarding their weight gain, where some comments were perceived as neutral while others were considered stigmatizing. One participant stated, “My family sometimes jokes about my weight, saying I have become bigger after using the injection” (P02), while another explained, “People around me notice my weight gain, and it makes me uncomfortable sometimes” (P10). These findings are in line with a study that social environment and socioeconomic conditions can influence both the perception and experience of obesity (Fuentes et al., 2020). In addition, the individuals with higher body weight often experience weight stigma from family, peers, and society, which may affect psychological well-being and self-image. The social reactions to weight gain frequently include teasing and subtle discrimination that can contribute to emotional distress (Anastasiadou et al., 2025). Furthermore, weight-related stigma is a common social experience among individuals with obesity and may reinforce negative body perception and social discomfort (Puhl et al., 2020).

Coping Strategies in Managing Weight Gain

Participants described various efforts to manage their weight, including dietary control and increasing physical activity. One participant stated, “I try to reduce rice portions and exercise by walking in the morning” (P06), while another mentioned, “I try to eat less and avoid snacks, but it is difficult because my appetite has increased” (P11). The lifestyle modification, including diet and physical activity, plays a crucial role in managing obesity, although hormonal influences may complicate weight control among injectable contraceptive users. Increased physical activity and



dietary regulation are key components in weight management interventions, but adherence is often challenged by appetite dysregulation and behavioral factors (Cipriani et al., 2020; Sulthonah et al., 2023). Long-term weight control requires sustained lifestyle changes, including consistent dietary restriction and regular physical activity, which can be difficult to maintain in everyday life (Vijayan et al., 2025). Successful weight management often depends on the balance between energy intake and expenditure, which may be disrupted in individuals experiencing hormonal or metabolic changes (Gorecki et al., 2019).

Continuation of Contraceptive Use Despite Weight Gain

Despite experiencing weight gain, most participants chose to continue using injectable contraceptives due to their effectiveness and convenience. One participant stated, “Even though I gained weight, I still use the injection because it is practical and I don’t want to get pregnant right now” (P01), while another explained, “Weight gain is a concern, but this method is still the easiest for me” (P12). This finding suggests that perceived benefits of contraceptive effectiveness outweigh concerns about weight gain, which convenience and reliability are major factors influencing contraceptive choice (D’Souza et al., 2022). In addition, the contraceptive continuation is strongly influenced by effectiveness, ease of use, and user satisfaction, even when side effects such as weight gain are experienced (Keogh et al., 2021). Many women continue hormonal contraceptive methods despite adverse effects because of their high efficacy in preventing unintended pregnancy (Genazzani et al., 2023; Teal & Edelman, 2021). Furthermore, perceived benefits and practicality often outweigh side effects in determining long-term contraceptive adherence, particularly in settings where access to alternative methods may be limited (Mack et al., 2019).

The study identified four main themes: perceived weight changes, physical and psychological impacts, social responses, and coping strategies. Although weight gain was widely experienced and acknowledged, most participants continued using injectable contraceptives due to practical considerations and reproductive needs.

CONCLUSION

This study found that weight gain was a common experience among women using three-month injectable contraceptives and was perceived as a multidimensional issue affecting physical comfort, psychological well-being, and social interactions. Participants described experiencing fatigue, reduced self-confidence, and negative social responses related to changes in body weight. Despite these challenges, most participants chose to continue using injectable contraception because its perceived effectiveness, convenience, and practicality outweighed concerns about weight gain. These findings suggest that women actively negotiate the benefits and disadvantages of contraceptive use when making decisions regarding its continuation.

RECOMMENDATIONS

Healthcare providers should strengthen comprehensive counseling for women using three-month injectable contraceptives by addressing not only the potential causes of weight gain but also its physical, psychological, and social consequences. Counseling should include guidance on healthy dietary practices, regular physical activity, body image concerns, and strategies for managing emotional responses related to weight changes. Routine weight monitoring should be integrated into family planning services to facilitate early identification of significant weight changes and provide timely support. Such efforts may improve informed decision-making, enhance user satisfaction, and promote the continued and appropriate use of contraceptive methods.

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