

## Research Article

# A Qualitative Study on the Implementation of Preconception Care in Preparation for Parenthood for Prospective Married Couples at Tanjung Tiram Community Health Center

Siti Nurul Fadhillah Sari<sup>1\*</sup>, Santi Widya Purba<sup>2</sup>, Martaulina Sinaga<sup>3</sup><sup>1</sup> Mitra Sejati College of Health Sciences, Medan, Indonesia; e-mail: [sitinurulfadhillah533@gmail.com](mailto:sitinurulfadhillah533@gmail.com)<sup>2</sup> Universitas Efarina, Indonesia; e-mail: [santiwidya.07@gmail.com](mailto:santiwidya.07@gmail.com)<sup>3</sup> Mitra Sejati College of Health Sciences, Medan, Indonesia; e-mail: [martaulina78@gmail.com](mailto:martaulina78@gmail.com)

\* Corresponding Author: Siti Nurul Fadhillah Sari

**Abstract:** Preconception care is a crucial component of reproductive health services aimed at preparing couples, especially prospective brides and grooms, for a healthy pregnancy and responsible parenting. This qualitative study used a phenomenological design to explore the implementation of preconception care for parenthood preparation among engaged couples at Tanjung Tiram Public Health Center. Data were collected through in-depth interviews with 13 participants, including 3 couples and 7 individual women. Thematic analysis revealed several key themes: initial knowledge, perceived benefits, sources of information, access readiness, the role of healthcare workers, barriers and support, and expectations. The findings show that most participants understood preconception care as physical check-ups but lacked awareness of its importance in educating for psychosocial readiness and childrearing. Although healthcare workers provided basic services and some counseling, the educational aspect on parenting and emotional preparation was insufficient. This study highlights the need for comprehensive preconception education that includes mental, social, and parenting preparation. It implies that preconception services should go beyond screening to include structured and culturally relevant health promotion, especially in rural areas like Tanjung Tiram.

**Keywords:** engaged couples; parenting; preconception care; qualitative study; reproductive health

## 1. Introduction

The preconception period is a crucial period before pregnancy, marked by the meeting of the ovum and sperm. During this period, women of childbearing age are considered biologically and psychologically ready to become mothers. The preconception phase involves a complex interaction between genetic, biological, environmental, and behavioral factors. Preconception services play a strategic role in identifying and addressing health problems, unhealthy lifestyle habits, and social issues that can impact pregnancy and childcare. The World Health Organization (WHO) confirms that good preconception care can reduce maternal and perinatal mortality, particularly those caused by malnutrition, anemia, and other pregnancy complications.

Global awareness of the importance of preconception care continues to grow. Interventions provided during the preconception period—whether biomedical, behavioral, or social—can prepare individuals and couples to plan a healthy pregnancy and become physically and psychologically prepared parents. In Indonesia, the Early Childhood Profile report (2021) states that 4 out of 100 young children have experienced inadequate care. Government efforts, such as those undertaken by the Ministry of Women's Empowerment and Child Protection (PPPA) and the National Population and Family Planning Board (BKKBN), are encouraging the optimization of preconception services as part of a strategy to improve the quality of childcare.

Previous research has shown that premarital education and preconception care guidance have a significant impact on a couple's readiness to become parents. Participation in these educational programs is welcomed by prospective brides and grooms, as they are perceived

Received: February 28, 2025

Revised: March 14, 2025

Accepted: March 28, 2025

Published: March 31, 2025

Curr. Ver.: March 31, 2025



Copyright: © 2025 by the authors.

Submitted for possible open

access publication under the

terms and conditions of the

Creative Commons Attribution

(CC BY SA) license

[\(https://creativecommons.org/licenses/by-sa/4.0/\)](https://creativecommons.org/licenses/by-sa/4.0/)[censes/by-sa/4.0/](https://creativecommons.org/licenses/by-sa/4.0/)

to provide new insights into effective parenting. Law Number 4 of 2019 concerning Midwifery states that providing preconception care is one of the responsibilities of midwives, encompassing health education, pregnancy planning, and preparation for parenthood. These services are expected to reduce health risks, support mother-child well-being, and strengthen family structures.

However, literature studies indicate that not all prospective couples have comprehensive knowledge about the importance of mutual support between partners in parenting. Challenges such as limited information, inadequate education by health professionals, and a lack of mental and financial readiness often hinder the implementation of preconception care. Therefore, comprehensive, high-quality interventions are needed to ensure that prospective couples are not only prepared for pregnancy but also psychosocially prepared to become parents capable of implementing positive parenting practices for their child's development.

Based on the results of a preliminary study conducted at the Tanjung Tiram Community Health Center, variations in the implementation of preconception care were found. While some prospective couples have received these services, their implementation has not yet addressed broader aspects such as education on the role of parents in parenting and the importance of cooperation and emotional support between partners. This reflects a gap between the services provided and the actual needs of prospective couples in preparing for parenthood.

In line with the vision of the Master of Midwifery Study Program at Aisyiyah University Yogyakarta, which prioritizes Health Technology Assessment (HTA) as the basis for improving service quality, this study focuses on the implementation of preconception care to prepare prospective couples to become quality parents. Using a phenomenological approach in this qualitative research, it is hoped that it will explore in-depth the experiences and meanings of prospective couples regarding the preconception care they receive. This research is also expected to be able to become a basis for formulating policies and practices for midwifery services that are more responsive and humanistic in supporting the readiness of parents in the future.

## 2. Theoretical Study

Preconception care services are a crucial part of the reproductive health care cycle, playing a strategic role in preparing individuals and couples to plan a pregnancy and foster parenthood. Relevant theories for understanding the implementation of preconception care include the theory of young adult development, the theory of parenthood readiness, and the Health Promotion Model developed by Nola J. Pender. These theories help explain how individuals form attitudes, behaviors, and decisions when facing new life stages such as marriage and parenting.

According to Nola J. Pender, healthy behaviors result from the interaction between an individual's prior characteristics and their perceptions of the actions to be taken. In the context of preconception, a prospective couple's perception of the benefits of health care significantly influences their motivation to access these services. This approach underpins the importance of educating and empowering prospective couples in making decisions about reproductive health and future parenting.

Role theory is also relevant in the context of this research, explaining that each individual is expected to play a specific social role based on societal norms and expectations. When a person decides to marry, they will socially assume the role of husband or wife, as well as a parent in the future. Readiness to play this role is determined by the level of knowledge, skills, and social support gained through formal and informal education, including preconception care services. From a midwifery perspective, preconception care is part of preventive and promotive services aimed at identifying and modifying potential risks to pregnancy and childcare. These services include reproductive health education, basic health checks, and counseling on physical, psychological, and social readiness for family formation.

Several previous studies reinforce the importance of implementing preconception care. Research conducted by Ojifinni and Ibisomi (2020) showed that preconception services can improve couples' psychosocial readiness for planning pregnancy and parenthood. Ramos et al. (2023) also confirmed that marriage counseling that includes preconception aspects significantly improves prospective brides and grooms' understanding of childcare. Another study by Chutke et al. (2022) recommends integrating preconception services into the primary health care system as a strategy to reduce unplanned pregnancies and improve overall maternal and child health.

In Indonesia, the implementation of preconception care still faces challenges, such as low levels of reproductive health literacy, limited access to information, and a lack of comprehensive counseling from health professionals. A study by Utami et al. (2022) showed that parental knowledge and readiness to carry out parenting roles significantly influence a child's character development. Research by Neve et al. (2019) also underscored the importance of parents' role in shaping a child's personality through appropriate parenting styles, which should be introduced before the child is born.

Based on these theories and empirical findings, it is clear that preconception care focuses not only on physical health aspects but also encompasses psychological, social, and educational dimensions that support parenting readiness. Therefore, this study was conducted to explore in more depth how preconception care is implemented and how these services can address the needs of prospective couples preparing to become responsible and competent parents. Although not explicitly formulated in the form of a hypothesis, the theoretical assumption underlying this study is that comprehensive preconception services contribute to the readiness to provide quality childcare in the future.

### 3. Research Methods

This study employed a qualitative approach with a phenomenological approach, aiming to understand the subjective experiences of prospective couples receiving preconception care in preparation for parenthood. This method was chosen to explore in-depth the participants' meanings and perceptions of the services they received, as well as the dynamics that occurred during the preconception care process at the Tanjung Tiram Community Health Center.

#### Population and Sample

Qualitative research does not employ the concept of a statistical population, as in quantitative research. Instead, it focuses on purposively selected informants. The informants in this study were prospective couples and brides who had received preconception care services at the Tanjung Tiram Community Health Center, Batu Bara Regency, North Sumatra. A total of 13 informants participated in this study, consisting of 3 couples (6 men) and 7 prospective brides who met the established inclusion and exclusion criteria.

#### Data Collection Techniques and Instruments

Primary data were obtained through face-to-face in-depth interviews using a semi-structured interview guide. The researcher served as the primary instrument (human instrument) in the data collection process, assisted by a voice recorder and field notes. In addition, a documentation study was conducted on supporting documents related to the implementation of preconception services at the Community Health Center (Puskesmas).

#### Data Analysis Tools

Data analysis was conducted using the Collaizi model of thematic analysis, which includes thoroughly reading interview transcripts, extracting significant statements, organizing meaning, grouping them into themes and subthemes, and compiling a comprehensive description of the phenomenon under study. Data validity was tested through source triangulation and member checking techniques, while dependability and confirmability were maintained through recording an audit trail and recording the researcher's reflections during the data collection process.

#### Research Model

The conceptual model in this study refers to the relationship between the implementation of preconception care and the readiness of prospective couples to assume the role of parents. Preconception care provided by health workers includes education, physical examinations, counseling, and the delivery of health information. Factors influencing the effectiveness of these services include participants' prior knowledge, sources of information, barriers, social support, and perceptions of the role of health workers.

The model illustrates the functional relationships between the thematic variables found in the field data, namely:

1. Preconception care services (**education, screening, counseling**)
2. Readiness to become a parent (**physical, mental, emotional, and social readiness**)
3. Supporting factors (**information, family support, media, health workers**)

The relationships between the elements in this model are analyzed descriptively based on the interpretation of qualitative data obtained from the participants' subjective experiences.

## 4. Result & Discussion

This section presents the results of the data collection and analysis process, conducted using a qualitative approach with a phenomenological design. The research was conducted at the Tanjung Tiram Community Health Center, Batu Bara Regency, North Sumatra Province, from May to June 2024. Data collection was conducted through in-depth interviews with 13 participants, consisting of prospective brides and grooms.

The following presents descriptive results of participant characteristics and key findings based on thematic analysis.

### 1 Participant Characteristics

Participant characteristics included age, gender, education level, height/weight, and residential address. Most participants were female (n=10), aged 19–38, and had a high school or bachelor's degree. Table 4.1 below presents complete participant characteristics:

Table 4.1 shows participant characteristics, including participant code, age, gender, education level, height and weight (H/B), and residential address. This data was obtained from interviews with 13 informants who had received preconception care at the Tanjung Tiram Community Health Center.

Code	Age	Gender	Education	Height	Address
P.1	25	P	SMA	144/65	Jl. Budi dusun II
P.2	19	P	-	158/60	Dusun sejahte
P.3	23	P	SMA	152/56	Dsn I jl. Merdeka
P.4	28	L	SMP	165/55	Jl. Nyirih dusun IV
P.5	26	P	SMA	153/53	Dsn III desa guntung
P.6	27	P	S1	148/60	Jl. Pesisir dusun. Iv
P.7	23	P	S1	159/55	Dusun xi jl. Solo
P.8	38	L	S1	170/60	Dsn IV gg. Sejahtera
P.9	21	P	SMA	153/54	Jl. Kenangan
P.10	25	P	SMP	153/53	Jl. Sei tengar
P.11	33	P	SMA	161/65	Jl. Istana dusun v
P.12	20	P	SMA	153/55	Dusun x jl. Jogja
P.13	29	L	SMP	165/50	Jl. Solo gg. Baru

### 2 Thematic Analysis Results

Data analysis was conducted using the Collaizi method, which yielded several main themes: pre-knowledge, benefits of preconception care, sources of information, readiness for access, the role of health workers, barriers and support, and participant expectations.

#### • Pre-Knowledge

Participants generally understood that preconception care includes physical and laboratory examinations. However, most did not understand that preconception care should also include parenting education and emotional support for partners. This indicates a gap between participants' initial perceptions and the ideal services that should be provided.

#### • Benefits of Preconception Care

Preconception care was perceived as beneficial in preparing for a healthy pregnancy, physically and mentally preparing for parenthood, and developing infant care skills. This finding aligns with the findings of Chutke et al. (2022), who stated that preconception interventions play a significant role in shaping new family readiness.

#### • Information Sources

Participants obtained information from their social environment, social media, and health workers. This suggests that interpersonal and digital communication play a crucial role

in delivering preconception education. These findings align with research by Jeong et al. (2021) who stated that the knowledge of prospective parents is greatly influenced by social interactions and online media.

The results of this study are then discussed in the context of previous theory and research.

### 1. Relationship of Results to Role Theory and Pender's Theory

#### • Role Theory

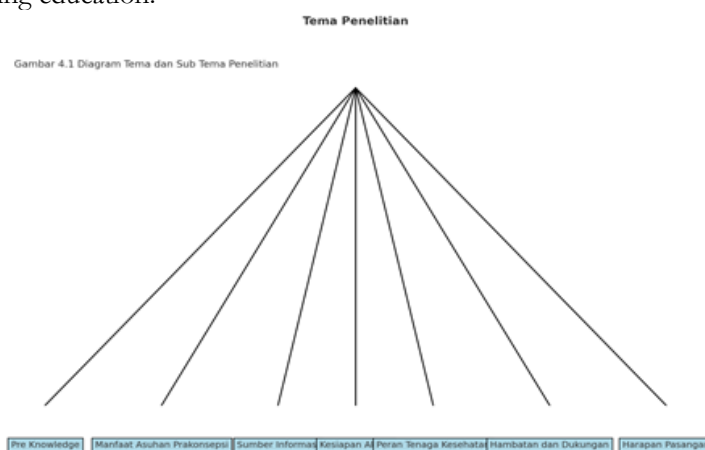
In the context of role theory, prospective brides and grooms are expected to take on new roles as parents. However, findings indicate that most participants do not fully understand the responsibilities of this role, especially in terms of psychosocial aspects and long-term caregiving.

#### • Health Promotion Model (Nola Pender)

This finding is also consistent with Nola Pender's health promotion model, where perceptions of the benefits of an action significantly determine an individual's motivation to act. Participants who receive comprehensive information tend to be better prepared to assume the role of parents.

### 2. Theoretical and Applied Implications

Theoretically, this study emphasizes the importance of integrating preconception services into a health promotion framework that emphasizes not only physical aspects but also mental and social readiness. Applied, the results of this study can provide input for the development of more comprehensive preconception service standard operating procedures (SOPs) at community health centers (Puskesmas), including training health workers in providing parenting education.



**Figure 1.** Diagram of Research Themes and Sub-Themes

Figure 1 shows the main themes and subthemes derived from the thematic analysis using the Collaizi method. This diagram illustrates how topics such as pre-knowledge, benefits of preconception care, sources of information, readiness for access, the role of health workers, barriers and support, and the expectations of prospective couples are interrelated in shaping understanding of the implementation of preconception care at the Tanjung Tiram Community Health Center.

In terms of age distribution, participants were in the productive age range, namely 19 to 38 years. The largest age group was 20–29 years, which is the fertile age group and socially represents the initial phase of starting a family. This age range is relevant because it is a crucial period in determining physical and psychological readiness for parenthood. This aligns with the opinion of Welshman et al. (2023), who stated that the preconception period is a strategic phase for reproductive health interventions. In terms of gender, the majority of participants were women (10 participants (76.9%)), while only 3 were men (23.1%). The predominance of women in this study reflects the reality that women often have greater responsibility and attention for pregnancy planning and childcare. However, the minimal participation of men also indicates a gap in male involvement in the preconception care process, which should be partner-centered. This is an important finding in developing a more inclusive, partner-centered approach to preconception care, as recommended by WHO (2022).

Participants' educational levels varied, ranging from junior high school graduates to undergraduate degrees. Most participants had secondary (SMA) and higher (S1) education, which theoretically allows them to more easily understand the health information provided. However, formal education does not always guarantee good health literacy, especially if

preconception education is not provided comprehensively and continuously by health workers. This is evident from field findings, which indicate that many participants do not yet understand the importance of parenting and emotional support in childrearing. Based on height/weight data, participants were generally within the normal range, indicating that they were relatively physically healthy to prepare for pregnancy. However, this indicator does not reflect psychological and social readiness, which are also important aspects of the parenting role. Height and weight are only one dimension of readiness; other dimensions, such as mental, emotional, and economic readiness, also require special attention in providing preconception care.

Participants' addresses were spread across the Tanjung Tiram Community Health Center (Puskesmas) work area. Most resided in hamlets or on roads, indicating that the study was conducted in a semi-rural setting. Geographical conditions and access to health facilities in this area are factors that influence participation rates and understanding of preconception services. This underpins the need to strengthen community-based health promotion and health cadres who actively reach communities in areas with limited access. Overall, the characteristics of these participants suggest that although demographically they are of a suitable age and condition for pregnancy and parenthood, gaps in overall understanding and preparedness remain. These findings reinforce the importance of implementing comprehensive preconception care, based not only on physical examinations but also on comprehensive education about the roles and responsibilities of parenting, including aspects of parenting, partner communication, and mental and emotional readiness for family formation.

## 5. Conclusion & Suggestions

This study concluded that the implementation of preconception care at the Tanjung Tiram Community Health Center (Puskesmas) makes a significant contribution to preparing prospective couples for parenthood. Most participants had limited initial understanding of preconception services, which generally only covered physical examinations and pregnancy preparation, without a comprehensive understanding of childcare and the psychosocial role of parents. Nevertheless, participants stated that they felt significant benefits from receiving these services, particularly in terms of physical and mental readiness for marriage and pregnancy. The sources of information they obtained were primarily from social media, digital media, and health professionals, but the depth of the material provided was uneven. The role of health professionals, particularly midwives, was considered positive in providing information and services, but the education provided did not comprehensively address aspects of parenting and emotional readiness.

The implications of these results suggest that preconception care should not only focus on physical health examinations but should also include comprehensive education about parenting, including the importance of partner communication, parenting styles, and mental and social readiness. Therefore, it is recommended that health professionals, particularly midwives, receive training to increase their capacity to provide comprehensive preconception counseling. Furthermore, a standard premarital education module addressing the parenting and psychosocial dimensions is needed and can be used nationally in primary health care facilities. Collaboration between community health centers (Puskesmas) and the Office of Religious Affairs (KUA) or educational institutions should also be explored to expand the scope and effectiveness of preconception services. This study has limitations because it was conducted at a single community health center and with a limited number of informants. Therefore, the results cannot be broadly generalized, but they still provide a meaningful picture within the local context. For future research, it is recommended to conduct studies with a broader scope and a mixed-methods approach to gain a more comprehensive understanding of the effectiveness of preconception care services and the contextual factors that influence them.

## References

- [1] Afrizal, *Metode Penelitian Kualitatif: Sebuah Upaya Mendukung Penggunaan Penelitian Kualitatif dalam Berbagai Disiplin Ilmu*. Jakarta: RajaGrafindo Persada, 2020.
- [2] S. W. Astuti, A. D. Kurniasari, and M. Hidayat, "Parenting style dan perkembangan karakter anak usia dini," *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, vol. 5, no. 2, pp. 1087–1094, 2021. [Online]. Available: <https://doi.org/10.31004/obsesi.v5i2.831>



- [3] M. Chutke, M. Kabir, P. Sharma, and R. Singh, "Assessing the quality of preconception care services in primary healthcare," *Journal of Family Medicine and Primary Care*, vol. 11, no. 3, pp. 1231–1237, 2022. [Online]. Available: [https://doi.org/10.4103/jfmpe.jfmpe\\_1320\\_21](https://doi.org/10.4103/jfmpe.jfmpe_1320_21)
- [4] J. W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. Thousand Oaks, CA: SAGE Publications, 2019.
- [5] R. D. Day, S. M. Gavazzi, and A. C. Acock, "Family education and parenting interventions: A review of outcomes," *Journal of Child and Family Studies*, vol. 31, no. 2, pp. 245–258, 2022. [Online]. Available: <https://doi.org/10.1007/s10826-021-02080-z>
- [6] F. F. Dieny, P. R. Ayu, and D. M. Kurniawati, "Prakonsepsi sebagai titik awal program 1000 hari pertama kehidupan," *Jurnal Gizi Indonesia*, vol. 8, no. 1, pp. 45–54, 2019.
- [7] J. Gunawan, "Data analysis in qualitative research," *Nursing & Health Sciences Journal (NHSJ)*, vol. 1, no. 1, pp. 17–20, 2021. [Online]. Available: <https://doi.org/10.53713/nhsj.v1i1.12>
- [8] M. N. Herviana, "Peran orang tua dalam pembentukan karakter anak," *Jurnal Pendidikan Anak*, vol. 6, no. 1, pp. 43–51, 2019.
- [9] J. Jeong, E. E. Franchett, and N. A. Fox, "The role of parenting in early child development: A global perspective," *Annual Review of Psychology*, vol. 72, pp. 119–147, 2021. [Online]. Available: <https://doi.org/10.1146/annurev-psych-010419-050748>
- [10] Kementerian Pemberdayaan Perempuan dan Perlindungan Anak Republik Indonesia, *Indeks Perlindungan Anak Indonesia Tahun 2021*. Jakarta: KemenPPPA, 2021.
- [11] M. A. A. Majid, M. Othman, S. F. Mohamad, S. A. H. Lim, and A. Yusof, "Piloting for interviews in qualitative research: Operationalizing reflexivity and interviewer bias," *The Qualitative Report*, vol. 22, no. 12, pp. 2457–2471, 2017. [Online]. Available: <https://doi.org/10.46743/2160-3715/2017.3196>
- [12] A. Mayasari, E. Hellen, and P. R. Inggit, "Kesiapan menjadi orang tua dalam pendidikan pranikah," *Jurnal Ilmu Keluarga dan Konsumen*, vol. 14, no. 3, pp. 212–221, 2021. [Online]. Available: <https://doi.org/10.24156/jikk.2021.14.3.212>
- [13] D. P. Narendra, D. F. Simbolon, and E. Lubis, "Peran prakonsepsi dalam meningkatkan kesiapan calon pengantin," *Jurnal Kesehatan Reproduksi Indonesia*, vol. 14, no. 2, pp. 91–98, 2023.
- [14] H. Neve, R. D. Wiggins, and J. Ball, "Parental involvement and child development outcomes: A systematic review," *Child: Care, Health and Development*, vol. 45, no. 5, pp. 706–721, 2019. [Online]. Available: <https://doi.org/10.1111/cch.12695>
- [15] N. Nitsche and S. R. Hayford, "Marriage preparation programs and fertility behavior," *Demography*, vol. 57, no. 1, pp. 45–69, 2020. [Online]. Available: <https://doi.org/10.1007/s13524-019-00829-4>
- [16] O. O. Ojifinni and L. Ibisomi, "A narrative synthesis of preconception care policies, guidelines and recommendations in Sub-Saharan Africa," *BMC Health Services Research*, vol. 20, p. 141, 2020. [Online]. Available: <https://doi.org/10.1186/s12913-020-4964-6>
- [17] G. Ramos, M. S. Velasco, and L. Reyes, "Marriage education and parenting confidence among young couples," *Journal of Family Issues*, vol. 44, no. 6, pp. 1452–1470, 2023. [Online]. Available: <https://doi.org/10.1177/0192513X221140679>
- [18] E. Salman, N. Kaya, and S. Demir, "Premarital education and parenting expectations: Turkish adolescents' perspectives," *Journal of Pediatric Nursing*, vol. 62, pp. e98–e104, 2022. [Online]. Available: <https://doi.org/10.1016/j.pedn.2021.10.009>
- [19] M. Shibata, M. Kobayashi, and M. Oda, "Parenting style and adolescent behavioral problems: A study in urban settings," *Child Psychiatry and Human Development*, vol. 54, no. 1, pp. 111–122, 2023. [Online]. Available: <https://doi.org/10.1007/s10578-022-01341-z>
- [20] Sugiyono, *Metode Penelitian Kualitatif, Kuantitatif dan R&D*. Bandung: Alfabeta, 2020.
- [21] E. P. Ukoha and N. G. Mtshali, "Preconception care knowledge and uptake among women of reproductive age: A qualitative study," *African Journal of Reproductive Health*, vol. 26, no. 1, pp. 77–85, 2022. [Online]. Available: <https://doi.org/10.29063/ajrh2022/v26i1.8>
- [22] W. Utami, L. Sari, and N. Hasibuan, "Peran orang tua dalam membentuk karakter anak usia dini," *Jurnal Ilmiah Pendidikan Anak*, vol. 7, no. 1, pp. 38–46, 2022.
- [23] A. Welshna, T. Irwanto, and R. Meilani, "Konsep prakonsepsi dalam pembangunan kesehatan keluarga," *Jurnal Kebidanan dan Keperawatan Aisyiyah*, vol. 19, no. 1, pp. 13–21, 2023. [Online]. Available: <https://doi.org/10.31101/jkk.3043>
- [24] World Health Organization, *Preconception Care: Maximizing the Gains for Maternal and Child Health*, 2022. [Online]. Available: <https://www.who.int/publications/i/item/9789241505002>
- [25] A. Yuliani, *Validitas dan Reliabilitas dalam Penelitian Kualitatif*. Yogyakarta: Deepublish, 2018.