

## **Effectiveness of WDEP-Based Reality Counseling on the Knowledge, Attitudes, and Behavior of Pregnant Women Regarding Exclusive Breastfeeding at Air Dingin Public Health Center, Padang, Indonesia**

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### **Abstract**

Exclusive breastfeeding (EBF) is defined as providing only breast milk without any additional food or drink for the first six months of life. Despite its proven benefits for infant growth, development, and disease prevention, global coverage of EBF remains suboptimal. In Indonesia, although coverage has reached 68.6%, this figure still falls short of the national target. Limited family support, particularly from husbands, as well as suboptimal maternal knowledge, attitudes, and behavior, contribute to this issue. Therefore, a family-based counseling approach, such as WDEP-based reality counseling, is needed. This study aimed to evaluate the effectiveness of WDEP-based reality counseling in improving the knowledge, attitudes, and behavior of pregnant women regarding exclusive breastfeeding. A quasi-experimental study with a pretest–posttest control group design was conducted at Air Dingin Public Health Center, Padang, Indonesia, from December 2024 to February 2025. A total of 50 third-trimester pregnant women were selected using purposive sampling and divided into an intervention group and a control group. The intervention group received WDEP-based reality counseling involving family members, while the control group received standard antenatal counseling. Data were collected using validated and reliable questionnaires measuring knowledge, attitudes, and behavior. Data were analyzed using independent t-tests with a significance level of  $p < 0.05$ . There were no significant differences between the groups at baseline ( $p > 0.05$ ). After the intervention, the intervention group showed significantly higher scores in knowledge, attitudes, and behavior compared to the control group ( $p < 0.05$ ). WDEP-based reality counseling is effective in improving pregnant women's knowledge, attitudes, and behavior regarding exclusive breastfeeding. Integrating family-based counseling into antenatal care programs is recommended to improve breastfeeding outcomes.

**Keywords:** Exclusive Breastfeeding, Reality Counseling, WDEP, Knowledge, Attitudes, Behavior.

## 1.0 Introduction

According to the World Health Organization (WHO), exclusive breastfeeding (EBF) is defined as providing only breast milk without any additional food or drink, including water, from birth until the infant reaches six months of age (Alayón *et al.*, 2022). WHO recommends exclusive breastfeeding for the first six months of life, followed by the introduction of appropriate complementary foods while continuing breastfeeding up to two years of age or beyond to support optimal growth and development (Haider *et al.*, 2021).

Based on the Global Breastfeeding Scorecard 2023, the global rate of exclusive breastfeeding for the first six months is approximately 48%, which remains below the global target set for 2025 (UNICEF & WHO, 2023). The Global Breastfeeding Collective has set a target of achieving 50% coverage by 2025 and 70% by 2030 (Chaudhary, 2024). In the Association of Southeast Asian Nations (ASEAN), EBF coverage remains relatively low compared to WHO recommendations. For example, Myanmar and Vietnam report EBF rates of 24% and 27%, respectively, while the Philippines and Malaysia report slightly higher rates of 34% and 40.3% (Mauliddiyah, 2021). In Indonesia, the 2023 Indonesian Health Survey (SKI) reported that 68.6% of infants aged 0–6 months received EBF (BKPK Kemenkes, 2024), exceeding the 2025 global target. However, sustained efforts are still required to maintain and further improve this coverage toward the 2030 target.

The first 1,000 days of life, from conception to two years of age, represent a critical period for child growth and brain development. During this period, exclusive breastfeeding plays a vital role by providing optimal nutrition, enhancing immunity, and reducing the risk of disease. Adequate EBF during this period is essential to support optimal growth and development. In addition, EBF protects infants from infections and contributes to improved health outcomes (Terefe & Shitu, 2023). Studies have shown that infants who receive EBF have stronger immunity and are less likely to experience illness or mortality due to infectious diseases (Abdulla *et al.*, 2022).

On the other hand, babies who do not receive EBF possess a higher risk of experiencing illness and death (Mulcahy *et al.*, 2022), stunting, growth and development disorders and respiratory tract infections (Gusti & Elsi, 2023),

The Indonesian government has implemented various policies to support EBF, including educational programs for pregnant women and the provision of lactation facilities in health service settings. In addition, EBF counseling programs have been introduced to provide education and support for breastfeeding mothers (Sabogal *et al.*, 2022). These programs should ideally begin during pregnancy, as mothers are physically and psychologically preparing for breastfeeding (Mamo *et al.*, 2020). Early preparation can enhance mothers' understanding of EBF and help them overcome potential challenges after childbirth (Gusti & Syaflindawati, 2024).

However, despite the implementation of breastfeeding counseling programs, their effectiveness remains limited due to insufficient family support, particularly from husbands, as well as the perception that formula feeding is more convenient. Furthermore, infants cared for by other family members are often introduced to foods other than breast milk. Therefore, breastfeeding counseling should involve the entire family to ensure adequate understanding and support for exclusive breastfeeding (Rhodes *et al.*, 2024).

Family support, especially from husbands and other family members, plays a crucial role in the success of exclusive breastfeeding. Involving family members in counseling can improve maternal knowledge, attitudes, and behavior, as well as increase awareness and commitment to infant health and breastfeeding practices (Gebeyehu *et al.*, 2023). The application of WDEP-based reality

counseling is expected to further enhance these outcomes and improve exclusive breastfeeding practices (Gusti & Elsi, 2025).

Reality counseling is a psychotherapy approach that emphasizes personal responsibility and behavioral change by helping individuals recognize their control over choices and actions and develop practical improvement plans. This approach identifies basic human needs, including love, power, freedom, and pleasure, which influence behavior and must be fulfilled healthily (Wubbolding, 2017).

The Wants, Doing, Evaluation, and Planning (WDEP) approach enables counselors to guide clients in identifying goals, evaluating current behaviors, and developing actionable plans for change. Through this approach, pregnant women can better understand their motivations for exclusive breastfeeding, evaluate their readiness, and plan strategies to overcome potential barriers. (Gusti & Syaflindawati, 2024) .

The WDEP approach begins with the *Wants* stage, where pregnant women identify their goals, such as providing exclusive breastfeeding. In the *Doing* stage, current behaviors and preparations are explored. The *Evaluation* stage involves assessing the consistency between goals and behaviors, while the *Planning* stage focuses on developing concrete strategies, including addressing barriers such as a lack of family support and breastfeeding techniques.(Gusti & Syaflindawati, 2024).

Implementing this approach within the family context is essential, as family members, particularly husbands, play a significant role in influencing breastfeeding practices. Many mothers experience emotional and practical challenges due to a lack of family support (Young *et al.*, 2020). By involving family members in the counseling process, the WDEP approach can enhance understanding, strengthen support systems, and reduce barriers to exclusive breastfeeding.

Air Dingin Public Health Center is one of the health facilities in Padang City that reported a low EBF coverage rate of 31.5% in 2023, which is below the average coverage of Padang City (68.21%), West Sumatra Province (72%), and the national level (68.6%) (DKK, 2023). An initial survey conducted in December 2024 revealed that most pregnant women and their families had limited knowledge about the benefits of exclusive breastfeeding and insufficient preparation, including a lack of awareness of breast care during pregnancy and proper breastfeeding techniques. Therefore, this study was conducted to address the low EBF rate by implementing WDEP-based reality counseling.

## **2.0 Methodology**

This study employed a quasi-experimental design with a pretest–posttest control group approach to evaluate the effectiveness of reality counseling using the Wants, Doing, Evaluation, and Planning (WDEP) approach on the knowledge, attitudes, and behavior of pregnant women regarding exclusive breastfeeding.

The study was conducted at Air Dingin Public Health Center, Padang, Indonesia, from December 2024 to February 2025. The study population consisted of all third-trimester pregnant women attending antenatal care services. A total of 50 respondents were selected using a purposive sampling technique and allocated into two groups: an intervention group (n = 25) and a control group (n = 25).

The inclusion criteria were third-trimester pregnant women, willingness to participate, ability to communicate effectively, and being accompanied by a family member (husband or immediate

family). The exclusion criteria included pregnant women with severe complications, those who did not complete the intervention sessions, or those who withdrew during the study.

The intervention group received reality counseling based on the WDEP approach involving family members. The counseling was delivered in structured sessions covering four stages: Wants (identifying goals and expectations regarding exclusive breastfeeding), Doing (exploring current behaviors and practices), Evaluation (assessing the consistency between goals and current behavior), and Planning (developing actionable plans to support exclusive breastfeeding). Family members, particularly husbands, were actively involved in each session to strengthen support, motivation, and commitment.

The control group received standard antenatal counseling routinely provided at the health center, which included general education on maternal and child health and basic information about breastfeeding without the structured WDEP approach or active family involvement.

Data were collected using a structured questionnaire measuring knowledge, attitudes, and behavior related to exclusive breastfeeding, administered before (pretest) and after (posttest) the intervention in both groups. Knowledge was assessed using closed-ended questions, while attitudes and behavior were measured using a Likert scale. Negative items were reverse-coded, and results were categorized into good, moderate, and poor based on score distribution. The instrument was tested for content validity by experts and demonstrated good reliability based on Cronbach's alpha.

This study was approved by the Ethics Committee of the Faculty of Medicine, Universitas Baiturrahmah (Ethical Approval No: 153/ETIK-FKUNBRAH/03/11/2025). Written informed consent was obtained from all participants prior to data collection.

Data analysis was performed using descriptive statistics to summarize respondent characteristics and an independent t-test to compare differences in knowledge, attitudes, and behavior between the intervention and control groups after the intervention. Statistical significance was set at  $p < 0.05$ .

### 3.0 Results

#### 3.1 Demographic Characteristics

The demographic characteristics of the respondents are presented in Table 1. No statistically significant differences were observed between the groups at baseline ( $p > 0.05$ ).

Table 1  
Demographic Characteristics of Respondents (n = 50)

Characteristics	Intervention (n=25)	Control (n=25)	Total (n=50)	p-value
Age (years)				0.58
- Mean ± SD	28.5 ± 3.6	29.1 ± 3.8	28.8 ± 3.7	
- Min–Max	18 – 35	19 – 35	18 – 35	
Education				0.79
Junior High School	4 (20%)	6 (24%)	11 (22%)	
Senior High School	14 (56%)	12 (48%)	26 (52%)	
College	6 (24%)	7 (28%)	13 (26%)	
Occupation			29 (58%)	0.77
- Working	15 (60%)	14 (56%)	21 (42%)	
- Not Working	10 (40%)	11 (44%)		

Pregnancy Status	Health				0.55
- Healthy		24 (96%)	23 (92%)	47 (94%)	
Mild Complications		1 (4%)	2 (8%)	3 (6%)	
Parity					0.57
- Primipara		10 (40%)	12 (48%)	22 (44%)	
- Multipara		15 (60%)	13 (52%)	28 (56%)	

### 3.2 Knowledge, Attitudes, and Behavior of Pregnant Women

The knowledge, attitudes, and behavior of pregnant women regarding exclusive breastfeeding were assessed to evaluate their readiness for breastfeeding. The comparison between the intervention and control groups is presented in Table 2. No statistically significant differences were observed at baseline ( $p > 0.05$ ), indicating comparable initial conditions. After the intervention, the intervention group showed significantly higher scores compared to the control group ( $p < 0.05$ ).

Table 2  
Comparison of Knowledge, Attitudes, and Behavior of Pregnant Women Before and After Intervention Between Intervention and Control Groups

Variable	Group	Pretest (Mean ± SD)	Posttest (Mean ± SD)	p-value
Knowledge	Intervention	65.4 ± 10.3	85.2 ± 6.5	0.01*
	Control	65.4 ± 10.3	67.5 ± 10.2	
Attitude	Intervention	70.1 ± 7.4	82.3 ± 5.2	0.03*
	Control	71.3 ± 6.9	73.2 ± 8.1	
Behavior	Intervention	60.5 ± 8.7	80.6 ± 5.9	< 0.001
	Control	61.3 ± 9.1	62.8 ± 7.3	

\*Significant difference between the treatment and control group

### 4.0 Discussion

The results in Table 1 show no statistically significant differences in baseline characteristics between the intervention and control groups ( $p > 0.05$ ), indicating that the two groups were comparable before the intervention. This homogeneity strengthens the internal validity of the study, as the observed effects can be attributed to the intervention and not to differences in respondent characteristics.

Most respondents were within the reproductive age range, had a high school education, were employed, had a healthy pregnancy, and were multiparous. These characteristics are consistent with previous research showing that maternal age, education, and prior experience can influence knowledge and behaviors related to exclusive breastfeeding. However, because no significant differences were observed between the groups, these factors are unlikely to have biased the study results.

The findings of this study indicate that the WDEP-based reality counseling intervention significantly improved the knowledge, attitudes, and behavior of pregnant women regarding

exclusive breastfeeding compared to the control group ( $p < 0.05$ ). Since no significant differences were observed at baseline, these improvements can be attributed to the effectiveness of the intervention.

The increase in knowledge in the intervention group can be explained by the structured and interactive counseling process, which enhances participants' understanding. According to the health behavior theory proposed by, knowledge is a predisposing factor that influences the formation of attitudes and behaviors. This finding is consistent with previous studies by Dewanti *et al.* (2024), which state that improved knowledge through health education can lead to positive behavioral changes, including exclusive breastfeeding practices.

Furthermore, the improvement in attitudes suggests that the WDEP approach not only provides information but also promotes self-reflection and internal motivation. In reality therapy, developed by William Glasser, individuals are encouraged to take responsibility for their choices and behaviors (Aziz *et al.*, 2022). The evaluation stage in WDEP allows mothers to assess the alignment between their current behaviors and desired goals, thereby strengthening positive attitudes toward exclusive breastfeeding. Previous studies have also demonstrated that positive attitudes are associated with a higher likelihood of successful exclusive breastfeeding (Gusti & Elsi, 2025).

The significant improvement in behavior indicates that the intervention effectively translates knowledge and attitudes into practice. The planning stage of the WDEP approach plays a crucial role by helping mothers develop realistic and actionable strategies. In addition, the involvement of family members, particularly husbands, provides emotional and practical support, which is essential for successful breastfeeding (AÇIKGÖZ & Yoruk, 2022). This finding aligns with recommendations from the World Health Organization, which emphasize the importance of family support in improving exclusive breastfeeding rates (UNICEF & WHO, 2023).

Compared to standard antenatal counseling provided to the control group, the WDEP-based intervention appears to be more effective due to its participatory, goal-oriented, and behavior-focused approach. Conventional counseling often emphasizes information delivery, whereas WDEP encourages self-awareness, decision-making, and commitment to behavioral change. These findings are consistent with previous international studies demonstrating that structured and family-based counseling significantly improves exclusive breastfeeding practices.

However, this study has several limitations. The relatively small sample size and single-center design may limit the generalizability of the findings. In addition, the use of self-reported questionnaires may introduce response bias. Future studies are recommended to include larger samples, multiple settings, and more objective measurement methods to strengthen the evidence.

## **Conclusion**

This study demonstrates that reality counseling using the Wants, Doing, Evaluation, and Planning (WDEP) approach is effective in improving the knowledge, attitudes, and behavior of pregnant women regarding exclusive breastfeeding. The significant differences observed between the intervention and control groups after the intervention indicate that the WDEP approach provides added value compared to standard antenatal counseling. The involvement of family members, particularly husbands, further strengthens the effectiveness of the intervention by enhancing support, motivation, and commitment to exclusive breastfeeding. Therefore, the WDEP-based counseling approach is recommended to be integrated into antenatal care programs in health facilities by involving family members as part of the educational strategy. Future studies are

recommended to include larger sample sizes, diverse settings, and longer follow-up periods to assess the sustainability of behavioral changes.

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