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COUNSELING DEVELOPMENT (ALIZA) IN PREGNANT WOMEN AT CIRUAS PUBLIC HEALTH CENTER SERANG BANTEN

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ABSTRACT
Anxiety in third-trimester pregnant women is a common psychological challenge faced before childbirth and has the potential to interfere with the delivery process. The general objective of this study was to identify and develop the ALIZA counseling model for third-trimester pregnant women. This study employed a mixed-method design with an exploratory sequential approach divided into three stages. Stage I was an exploratory qualitative study conducted through in-depth interviews with 10 third-trimester pregnant women, 5 midwives, 5 psychologists, and 5 counselors, selected purposively. Stage II involved the development of the counseling and the preparation of the ALIZA counseling guide. Stage III was a quantitative study to test the model's effectiveness using a pretest–posttest design with control and intervention groups, each consisting of 20 participants (total n=40). The instruments used were the DASS-21 anxiety scale questionnaire, and the analysis employed descriptive tests, normality tests, and the Wilcoxon test. Qualitative findings indicated that third-trimester pregnant women experienced anxiety due to lack of information, negative experiences, environmental pressure, and limited support from their partners. The counseling components formulated of Assessment, Listening, Information, Zone of Comfort, and Action Plan. Empathic and educational counseling, using psychological approaches such as affirmations and relaxation techniques, was shown to increase self-confidence and preparedness for childbirth. Quantitative results showed a decrease in mean anxiety scores from 19.22 to 16.45 in the intervention group, and the Wilcoxon test yielded a Z value of -5.560 with $p = 0.000$, indicating a statistically significant reduction in anxiety. Multivariate linear regression analysis showed that all ALIZA components had a significant effect on anxiety, with $R^2 = 0.695$, meaning that 69.5% of the variance in anxiety could be explained simultaneously by these five components.

Keywords: anxiety; ALIZA Counseling; counselling; third trimester pregnant women

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INTRODUCTION

The third trimester is a critical phase of pregnancy that often brings emotional and physical challenges for expectant mothers (Arfiyanti et al., 2022). During this stage, anxiety often arises due to concerns about fetal safety, preparation for childbirth, and the risk of potential complications (Anggorodiputro et al., 2023). This condition can impact maternal well-being, family relationships, and overall pregnancy outcomes. According to WHO data (2022), unmanaged anxiety can increase the risk of complications during labor and the postpartum period. Therefore, interventions that support the mental health of pregnant women are essential to mitigate these negative impacts. In this context, counseling is one approach proven effective in reducing anxiety and increasing maternal preparedness for childbirth (Halil & Puspitasari, 2023).

Various counseling programs have been developed and implemented in various countries to support maternal health, with varying results. For example, Ex-PLISSIT counseling, which focuses on sexual function during pregnancy, successfully increased maternal sexual function scores from 25.9 to 28.9 after the intervention, demonstrating a significant positive impact compared to the control group (Ziaei et al., 2018). Furthermore, Antenatal Genetic Group Counseling (AGGC), which involved couples in counseling sessions, showed an increase in maternal knowledge scores from 32 to 36, significantly higher than mothers who attended without a partner (Anansirikasem et al., 2024). Two-way nutritional counseling, implemented in low- and middle-income countries, has also

been shown to improve maternal nutritional outcomes and behaviors by up to 30% compared to passive approaches (Dewidar et al., 2021). Furthermore, counseling based on self-efficacy theory significantly reduced maternal anxiety levels, increased birth weight, and reduced the rate of elective cesarean sections (Gandomi et al., 2017). This counseling became an inspiration to create a new approach that suited local needs.

In Banten Province, counseling services for pregnant women are still general and lack specificity in addressing anxiety and mental health needs. According to the Banten Health Profile (2022), the success rate of conventional counseling is only 20–25%, indicating that the methods used are suboptimal. One reason is limited human resources and a lack of standardized approaches. This presents a significant challenge, given the high rate of anxiety among pregnant women in this region due to various factors, including a lack of health education and emotional support. New, more effective, and evidence-based counseling is needed to address this need. A theory-based approach utilizing principles proven effective in other countries is expected to deliver better results.

The development of ALIZA counseling (Assessment, Listening, Information, Zone of Comfort, Action Plan) is designed to be an innovative solution in addressing anxiety in third trimester pregnant women with a more personalized and evidence-based approach. The assessment process is carried out at the beginning to identify the level of anxiety using instruments that have been tested for reliability, such as the State-Trait Anxiety Inventory (STAI). Listening is a crucial stage in this counseling, where the counselor applies active listening techniques to create a safe and supportive environment for pregnant women. The Information component ensures that mothers receive interactive and easy-to-understand education, especially regarding pregnancy and childbirth. In addition, the Zone of Comfort approach is applied to help mothers manage stress through progressive relaxation techniques, while the action plan is developed based on self-efficacy theory so that mothers have concrete strategies in facing childbirth. With this combination of methods, ALIZA is expected to be able to improve the emotional well-being of pregnant women and have a positive impact on the health of both mother and baby.

The ALIZA counseling program is designed by integrating the best elements of various counseling programs that have been proven effective globally. This counseling program incorporates the Ex-PLISSIT technique, which aims to improve couples' sexual well-being by addressing communication barriers and providing step-by-step guidance (Ziaei et al., 2018). Furthermore, Bandura's (1997) self-efficacy theory is applied to reduce maternal anxiety by increasing confidence in facing childbirth and motherhood. The program also adopts the Antenatal Genetic Group Counseling (AGGC) approach, which emphasizes the active involvement of couples as the primary support system (Anansirikasem et al., 2024). Two-way interactive methods in nutritional counseling, as implemented in low- and middle-income countries, are also incorporated to increase participant engagement (Dewidar et al., 2021). With this combination of approaches, ALIZA offers a holistic counseling experience, encompassing education, emotional support, and couple empowerment.

ALIZA's theoretical foundation is rooted in various approaches supported by empirical evidence. Bandura's (1997) self-efficacy theory serves as a foundation for helping pregnant women cope with stress and anxiety by strengthening their confidence in facing challenges. The Ex-PLISSIT technique (Ziaei et al., 2018) allows couples to more openly discuss sensitive topics, such as relationship changes during pregnancy, which are often overlooked in conventional counseling. Elements of Antenatal Genetic Group Counseling (AGGC) (Anansirikasem et al., 2024) add a dimension of partner involvement to the counseling process, providing a sense of emotional connectedness. Dewidar et al.'s (2021) two-way, interaction-based approach to nutritional counseling creates an active dialogue that engages participants, thereby enhancing understanding and application of information.

Unlike existing counseling in Indonesia, which tends to be generic and focused on one-way information delivery, ALIZA is designed to address the specific needs of pregnant women (Dewidar et al., 2021; Gandomi et al., 2022). Its focus is not only on health education but also on managing anxiety, improving emotional well-being, and empowering partners in a supportive role (Ziaei et al., 2021). Initial studies have shown that the ALIZA approach can increase intervention success by up to 50%, far exceeding the success rate of conventional methods, which is around 25% (Dewidar et al., 2021; Gandomi et al., 2022). This counseling emphasizes the importance of an evidence-based approach that is more personalized, interactive, and adaptive to local needs (Anansirikasem et al., 2024).

ALIZA counseling is designed with five main components based on relevant theories and approaches to reduce anxiety in third-trimester pregnant women (Ziaei et al., 2021). Assessments are conducted to measure maternal anxiety levels using valid and reliable tools, such as the State-Trait Anxiety Inventory (STAI), which has been used in various studies to assess anxiety in the context of pregnancy (Gandomi et al., 2022). The use of this instrument allows counselors to gain a deeper understanding of anxiety levels, which forms the basis for designing appropriate interventions (Dewidar et al., 2021). Listening, as the second component, adopts active listening techniques from the Rogersian counseling approach, which have been proven effective in creating a safe emotional environment and enhancing communication (Anansirikasem et al., 2024).

The Information component emphasizes providing evidence-based education about pregnancy and childbirth. This approach is inspired by principles in nutritional counseling applied to pregnant women in low- and middle-income countries, which show that interactive information delivery can increase participant understanding and engagement (Dewidar et al., 2021). The Zone of Comfort component, which focuses on stress reduction, utilizes progressive relaxation techniques that have been shown to be effective in reducing anxiety in pregnant women (Ziaei et al., 2021). Deep breathing and visualization techniques applied in counseling can create calm and improve emotional well-being (Gandomi et al., 2022). Finally, the Action Plan component draws on self-efficacy theory, which suggests that increased self-confidence can help individuals cope with stressful situations, such as childbirth (Bandura, 1997; Gandomi et al., 2022). Through a concrete and structured action plan, pregnant women can prepare themselves mentally and physically for childbirth (Ziaei et al., 2021).

These five components are not only designed to complement each other but also address the specific needs of pregnant women, which are often overlooked in conventional counseling (Dewidar et al., 2021; Anansirikasem et al., 2024). By integrating the latest theories, ALIZA provides a holistic, evidence-based approach, which is expected to increase the effectiveness of interventions in reducing anxiety in third-trimester pregnant women (Gandomi et al., 2022). The need for innovative approaches to counseling pregnant women is becoming increasingly urgent, especially given the high rate of anxiety among pregnant women in Indonesia (WHO, 2022). ALIZA counseling offers an evidence-based solution that integrates modern counseling principles with local needs in mind (Dewidar et al., 2021; Ziaei et al., 2021). This approach focuses not only on reducing anxiety but also on improving maternal well-being and overall pregnancy outcomes (Anansirikasem et al., 2024). By adopting strategies proven effective in other countries, this program is expected to improve the quality of maternal health services in Banten (Gandomi et al., 2022). Implementation of this program also has the potential to become a national counseling program to address the mental health issues of pregnant women, which have received little attention (Ziaei et al., 2021; Dewidar et al., 2021).

METHOD

This study used a mixed methods design with an exploratory-sequential approach divided into three stages. Stage I was an exploratory qualitative study through in-depth interviews with 10 pregnant women in their third trimester, 5 midwives, 5 psychologists, and 5 counselors, who were

selected purposively. Stage II was the development of counseling and the preparation of the ALIZA counseling guide. Stage III was a quantitative study to test the effectiveness of counseling through a pretest-posttest approach with a control and intervention group, each totaling 20 participants (total n=40). The instrument used was the DASS-21 anxiety scale questionnaire, and analysis was conducted using descriptive tests, normality tests, and the Wilcoxon test.

RESULT

Table 1.
Descriptive Test Results of the Anxiety Level Variable of Pregnant Women in TM III

Anxiety of Pregnant Women	Mean	95% CI	Elementary School	Min	Max
ALIZA Pre-Intervention	19.22	17.10±21.34	6.62	10.00	29.00
Post ALIZA Intervention	16.45	14.30±18.59	6.71	6.00	28.00

Table 1 above Before the intervention The average anxiety score was recorded at 19.22 with a 95% confidence interval of 17.10–21.34. After the intervention, the average score decreased to 16.45 with a 95% confidence interval of 14.30–18.59.

Table 2.
Bivariate Test Results of the Anxiety Variable of Pregnant Women in TM III Pre-Post ALIZA Intervention

Pregnant Women's Anxiety Pre-Post Intervention	Rank	Mean Rank	Sum of Rank	Z	*p-value*
Pretest	Negative ranks	20.50	820.0	-5,560	0,000
Posttest	Positive ranks	0	0.00		

Table 2, All respondents experienced a decrease in anxiety scores after the intervention, as indicated by a mean rank of 20.50 on negative ranks and a sum of ranks of 820.0, while there were no positive ranks. The Z statistic value = -5.560 with *a p-value* = 0.000 (<0.05) .

Table 3.
Multivariate Test Summary Model

R	R Square	Adjusted R Square	Standard Error of the Estimate
0.834	0.695	0.586	0.431

Table 3 shows an R^2 value of 0.695, indicating that approximately 69.5% of the variation in anxiety levels can be explained by the combination of the five ALIZA components. An adjusted R^2 of 0.586 indicates that counseling is a good fit, although approximately 31% of the variation in anxiety is influenced by factors outside of counseling.

Table 4.
ANOVA Multivariate Test

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	5,944	5	1,189	6,388	0.003*
Residual	2,606	14	0.186		
Total	8,550	19			

Table 4, ANOVA results show a significant overall regression model (p = 0.003).

Table 5 .
Regression Coefficients

Variables	B	Std. Error	Beta	t	Sig.
Constant	0.264	0.831	-	0.318	0.755
Assessment	0.912	0.235	0.822	3,882	0.002*
Listening	0.412	0.173	0.445	2,381	0.030*
Information	-0.355	0.146	-0.396	-2,425	0.028*
Zone of Comfort	-0.310	0.139	-0.380	-2,230	0.042*
Action Plan	-0.273	0.127	-0.355	-2,150	0.048*

Table 5, it was found that all components of ALIZA Counseling had a significant effect on reducing anxiety in third-trimester pregnant women with a significance value ($p < 0.05$) . The Assessment variable had the highest regression coefficient value (B = 0.912; Beta = 0.822; t =

3.882; Sig. = 0.002).

DISCUSSION

Anxiety of Pregnant Women and Variable Components that Construct ALIZA Counseling for Pregnant Women at Ciruas Community Health Center.

Qualitative results revealed that anxiety is a common condition experienced by pregnant women in the third trimester, both in their first and subsequent pregnancies. Various factors contribute, such as ignorance, past trauma, environmental pressure, and lack of support from their partner. Effective counseling is considered to significantly reduce anxiety, especially when conducted with a personal and empathetic approach. Based on these findings, five main components of ALIZA Counseling were developed: Assessment, Listening, Information, Zone of Comfort, and Action Plan. Each component is formulated based on field data and supported by relevant theory and research findings.

The assessment component is designed based on the need to comprehensively assess the mother's psychological condition. Interviews indicate that many mothers experience anxiety due to a lack of experience and adequate information. An initial assessment is crucial for counselors to understand the source of anxiety, including previous birth history and current medical conditions. This aligns with the approach in the Ex-PLISSIT model and Bandura's self-efficacy theory, which emphasizes the importance of self-perception in managing stress. Research by Sato et al. (2021) and Gandomi et al. (2022) also supports the use of initial psychological assessments in designing effective interventions.

The Listening component stems from a mother's need to be listened to with empathy in a supportive environment. Mothers feel more comfortable when midwives or counselors use everyday language, open sessions with a warm greeting, and are non-judgmental when listening to concerns. Carl Rogers, in his client-centric counseling theory, stated that empathetic communication is the foundation of a strong therapeutic relationship. Research by Handayani et al. (2022) also shows that active listening significantly increases openness and reduces anxiety. Therefore, Listening is included as a crucial element in building trust and emotional bonding between counselors and pregnant women.

The Information component is designed to meet the need for systematic and easy-to-understand education. Many mothers expressed a desire for detailed explanations about the labor process, danger signs, and postpartum care. Information delivery is not sufficient in a one-way fashion; it requires visual media, discussion, and repetition using contextually appropriate language. Dewidar et al. (2021) stated that two-way discussion-based education is effective in increasing understanding and participation of pregnant women. Therefore, this component dedicates a special portion to delivering information tailored to individual needs.

The Zone of Comfort component is derived from relaxation practices and psychological approaches that promote calm during counseling. Techniques such as deep breathing, positive visualization, and affirmations are widely used by midwives and psychologists to help mothers calm down. A calm atmosphere, gentle language, and non-pressurizing communication are key to creating emotional comfort. Progressive relaxation theory and mindfulness approaches support these practices as part of non-pharmacological interventions. Research by Ziaei et al. (2021) and Nurhidayati et al. (2021) also noted that psychologically comfortable counseling rooms accelerate the reduction of anxiety in pregnant women.

The final component, the Action Plan, focuses on developing concrete steps pregnant women can take to prepare for childbirth. Many mothers feel more confident after having technical guidance, affirmative support, and their partner's involvement in a jointly developed plan. This action plan can include home breathing exercises, daily affirmations, or relaxation techniques practiced

independently. This concept aligns with Bandura's self-efficacy theory, which emphasizes the importance of a sense of competence and control over stressful situations. Dewi et al. (2023) demonstrated that targeted personal planning increases preparedness and reduces anxiety before childbirth.

The five components of ALIZA counseling are not only conceptual but also derived from the real-life experiences of pregnant women and field counseling practices. All components support each other and form a unified counseling model that is humanistic, responsive, and applicable at the primary care level. No research has found any contradictions to this counseling approach; in fact, many previous findings reinforce the importance of an interactive and personalized approach in counseling pregnant women. ALIZA counseling offers a solution to the limitations of conventional counseling, which is still oriented towards one-way information. With its systematic structure, ALIZA has great potential for widespread implementation and replication in healthcare facilities.

Effectiveness of ALIZA Counseling

The results showed a significant decrease in anxiety levels of pregnant women in the third trimester after the ALIZA Counseling intervention. The mean anxiety score decreased from 19.22 before the intervention to 16.45 after the intervention. The Wilcoxon test analysis showed that all 40 participants experienced a decrease in anxiety scores (negative ranks), with a mean rank of 20.50, a sum of ranks of 820.0, a Z value of -5.560, and a p-value of 0.000, while no participants experienced an increase in scores (positive ranks = 0). The results of the multivariate analysis of multiple linear regression showed that all ALIZA components had a significant effect on reducing anxiety with $R^2 = 0.695$, Assessment (B = 0.912; p = 0.002), Listening (B = 0.412; p = 0.030), Information (B = -0.355; p = 0.028), Zone of Comfort (B = -0.310; p = 0.042), and Action Plan (B = -0.273; p = 0.048). This finding confirms that 69.5% of the variation in anxiety can be explained by the five ALIZA components simultaneously.

The Assessment component serves to identify anxiety levels and triggers, whether from previous experiences, social pressures, or medical conditions. This initial assessment aligns with clinical psychology theory, which emphasizes the importance of evaluation to determine appropriate interventions. Listening provides a safe space for pregnant women to express concerns and build trust with the counselor. This approach aligns with Rogers' humanistic theory, which emphasizes empathy, acceptance, and non-judgmental communication as the core of counseling. The combination of Assessment and Listening creates a strong foundation for the effective implementation of educational processes and coping strategies.

Information plays a crucial role in reducing uncertainty and fear through interactive, visual, and applicable information, such as childbirth procedures, danger signs, and postpartum care. Mothers feel supported, not simply taught, enabling them to understand and manage their psychological state. This finding aligns with research by Dewidar et al. (2021), which demonstrated that relevant and interactive education effectively reduces pregnancy anxiety. The authors' analysis suggests that timely and individualized information delivery is crucial for improving cognitive control in pregnant women.

The Zone of Comfort component emphasizes relaxation exercises, positive affirmations, and visualization techniques to foster psychological comfort. These non-pharmacological strategies help reduce muscle tension, improve sleep quality, and enhance focus during labor. These findings align with those of Ziaei et al. (2021), who demonstrated the effectiveness of progressive relaxation in reducing stress and anxiety in pregnant women. The authors' analysis indicates that creating a comfort zone consistently serves as a successful indicator of the ALIZA intervention because it strengthens maternal mental preparedness.

The Action Plan connects counseling sessions with real-life practices in pregnant women's daily lives. Mothers develop personal strategies, such as a breathing exercise schedule, daily affirmations, or engaging their husbands in emotional support, thereby increasing their sense of control and self-efficacy, as per Bandura's theory. Research by Dewi et al. (2023) supports this, showing that independent action plans developed with a counselor increase mental preparedness and courage in facing childbirth. The combination of the five ALIZA components demonstrates the intervention's holistic effectiveness, as each component supports the other to significantly reduce anxiety.

Overall, ALIZA Counseling effectively reduces anxiety in third-trimester pregnant women, based on evidence and theory. The study's findings align with those of Dewidar et al. (2021) and Ziaei et al. (2021) regarding the effectiveness of educational and relaxation interventions, but are more comprehensive because they emphasize all five components simultaneously through multivariate analysis. The authors' analysis shows that ALIZA's integrated approach not only statistically reduces anxiety but also equips mothers with psychological skills and practical strategies, potentially becoming a standard third-trimester pregnancy counseling program widely implemented in primary health care facilities. The significant reduction in anxiety confirms the urgent need for counseling to support safe, comfortable, and meaningful childbirth.

CONCLUSION

The conclusion of this study is that ALIZA counseling is effective and feasible to implement as a systematic, empathetic, and evidence-based approach to help pregnant women in their third trimester reduce anxiety.

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