

# Effect of Structured Counselling on Anxiety and Coping Mechanisms in Pregnancy

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## ABSTRACT

Pregnancy is a critical life phase often accompanied by psychological challenges such as anxiety and difficulty in coping with physical and emotional changes. The present study aimed to examine the effectiveness of structured counselling in reducing anxiety and enhancing coping mechanisms among pregnant women. A quasi-experimental pre-test–post-test control group design was adopted. The study was conducted at **Sadar Hospital** in Saran District of Bihar, with a sample of 60 pregnant women divided equally into experimental and control groups. Standardized tools were used to measure anxiety and coping strategies. The experimental group received structured counselling sessions for four weeks, while the control group received routine antenatal care. The results indicated a significant reduction in anxiety levels and improvement in coping mechanisms among the experimental group compared to the control group. The findings highlight the importance of counselling interventions in promoting maternal mental health during pregnancy.

**Keywords:** Pregnancy, Anxiety, Coping Mechanisms, Structured Counselling, Maternal Mental Health

## INTRODUCTION

Pregnancy is a transformative stage in a woman's life characterized by significant biological, emotional, and social changes. While it is often associated with happiness and anticipation, it can also bring psychological challenges, particularly anxiety. Many pregnant women experience concerns related to their health, fetal development, childbirth, and future responsibilities as a mother. These concerns, if not properly managed, may lead to heightened anxiety and reduced psychological well-being.

Anxiety during pregnancy is an important public health concern, as it can influence both maternal and fetal outcomes. High levels of anxiety have been associated with sleep disturbances, emotional instability, and complications during delivery. In addition, anxiety may affect a woman's ability to cope effectively with the demands of pregnancy. Coping mechanisms play a vital role in managing stress, as they determine how individuals respond to challenging situations. Adaptive coping strategies, such as problem-solving and seeking support, contribute to better adjustment, whereas maladaptive strategies may increase distress.

Structured counselling has emerged as an effective intervention to support pregnant women in managing psychological stress. It involves planned and systematic sessions that focus on emotional support, cognitive restructuring, relaxation techniques, and coping skills training. Counselling helps individuals understand their thoughts and emotions, develop positive thinking patterns, and enhance their ability to handle stress. In the context of pregnancy, structured counselling can provide reassurance, reduce fear, and promote emotional stability.

Despite the growing recognition of maternal mental health, limited research has been conducted in rural and semi-urban Indian settings. Therefore, the present study aims to examine the effect of structured counselling on anxiety and coping mechanisms among pregnant women, contributing to the development of effective mental health interventions in maternal care.

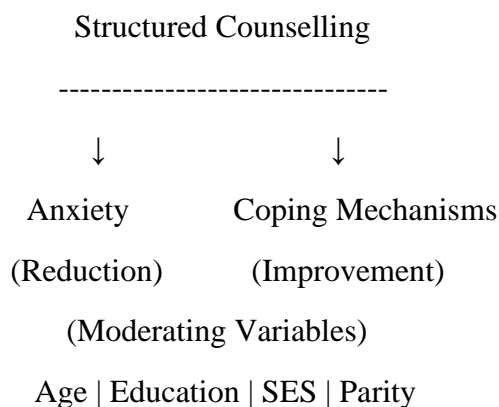
## Conceptual Framework

The present study is grounded in the assumption that psychological interventions can influence emotional outcomes during pregnancy. In this framework, **structured counselling** is considered the primary independent variable, while **anxiety** and **coping mechanisms** are the key dependent variables.

Structured counselling is a planned and systematic intervention designed to provide emotional support, cognitive guidance, and stress management techniques. It is expected to help pregnant women understand and regulate their thoughts and emotions, thereby reducing anxiety levels. At the same time, counselling is assumed to enhance coping mechanisms by promoting adaptive strategies such as problem-solving, relaxation, and seeking social support.

Anxiety during pregnancy is influenced by multiple factors, including fear of childbirth, concerns about fetal health, and changes in personal and social roles. Without appropriate intervention, high anxiety may negatively affect both maternal well-being and coping ability. Coping mechanisms, on the other hand, refer to the cognitive and behavioral efforts used to manage stress. Effective coping strategies contribute to better psychological adjustment, while ineffective strategies may increase distress.

The framework also acknowledges the role of certain background variables, such as age, education, socio-economic status, and parity, which may influence the effectiveness of counselling. These variables act as moderating factors that can affect both anxiety and coping outcomes.



The conceptual framework proposes a cause-and-effect relationship in which structured counselling leads to reduced anxiety and improved coping mechanisms among pregnant women. Counselling works by addressing negative thoughts, providing emotional reassurance, and equipping individuals with practical coping skills. As a result, pregnant women are better able to manage stress and adapt to the challenges of pregnancy.

This framework guides the study by focusing on how counselling influences psychological outcomes and provides a basis for testing the proposed hypotheses.

## REVIEW OF LITERATURE

Maternal mental health during pregnancy has received increasing attention in the Indian context due to its impact on both mother and child. Studies conducted in India indicate that anxiety among pregnant women is influenced by socio-cultural factors, lack of awareness, and limited access to psychological support services.

According to A.K. Singh, coping behavior is significantly shaped by environmental and cultural conditions. He emphasized that “*coping strategies are learned patterns of behavior that help individuals manage stress within their socio-cultural context.*” This highlights the importance of culturally relevant interventions for pregnant women in India.

Research by R. Srinivasan reported that a significant proportion of pregnant women experience moderate to high levels of anxiety, particularly in rural and semi-urban areas. The study noted that “*lack of emotional support and inadequate knowledge about pregnancy contribute to increased psychological distress.*”

Similarly, N. Sharma found that psychological interventions such as counselling significantly improve emotional well-being among expectant mothers. The findings suggested that *“structured counselling provides reassurance and enhances confidence, thereby reducing anxiety levels.”*

A study by Pandey (2025) found that the “role of yoga as a mediating factor in reducing stress, depression, and anxiety among adolescents.” These findings support the present study, which also examines a structured psychological intervention (counselling) to reduce anxiety and improve coping among pregnant women.

In another Indian study, P. Verma observed that coping strategies among pregnant women vary depending on education and family support. The study concluded that *“women who receive guidance and support are more likely to adopt adaptive coping strategies such as problem-solving and positive thinking.”*

Furthermore, research conducted by S. Patel emphasized the role of counselling in maternal healthcare. The author stated that *“integration of counselling services into antenatal care can significantly improve psychological outcomes among pregnant women.”*

Indian public health perspectives, including reports by the Indian Council of Medical Research, also highlight the need for mental health interventions during pregnancy. These reports indicate that maternal anxiety and stress remain under-recognized issues in India, especially in rural healthcare settings.

Overall, Indian research supports the view that anxiety is a common concern during pregnancy and that coping mechanisms play a crucial role in managing stress. Structured counselling has been identified as an effective approach to reduce anxiety and promote adaptive coping strategies. However, there is still a need for more region-specific studies to address cultural and contextual differences in maternal mental health.

## **Rationale of the Study**

Pregnancy is a critical period marked not only by physical changes but also by significant psychological adjustments. Many women experience varying levels of anxiety during this time due to concerns related to childbirth, fetal health, and changing social roles. If left unaddressed, such anxiety can negatively influence both maternal well-being and pregnancy outcomes. Despite this, mental health during pregnancy often receives less attention compared to physical health, particularly in resource-limited settings.

In many parts of India, including districts such as Saran in Bihar, awareness of maternal mental health remains limited, and access to psychological support services is often inadequate. Antenatal care primarily focuses on medical check-ups, with minimal emphasis on emotional and psychological needs. As a result, many pregnant women rely on informal coping strategies, which may not always be effective in managing stress and anxiety.

Coping mechanisms play a crucial role in determining how individuals respond to stressful situations. Adaptive coping strategies can help pregnant women manage emotional challenges more effectively, while maladaptive strategies may increase psychological distress. Therefore, there is a need to identify interventions that not only reduce anxiety but also strengthen positive coping mechanisms.

Structured counseling has been recognized as a practical and non-invasive approach to improving psychological well-being. It provides a systematic framework for addressing emotional concerns, promoting positive thinking, and developing effective coping skills. However, there is limited empirical research examining the effectiveness of such interventions among pregnant women in rural and semi-urban Indian contexts.

The present study was undertaken to address this gap by evaluating the effect of structured counseling on anxiety and coping mechanisms among pregnant women. By focusing on a hospital-based sample in Saran district, Bihar, the study aims to provide evidence that can support the integration of psychological interventions into routine antenatal care. The findings are expected to contribute to improving maternal mental health services and promoting holistic care during pregnancy.

## Objectives of the Study

1. To assess the level of anxiety among pregnant women attending Sadar Hospital.
2. To examine the coping mechanisms used by pregnant women during pregnancy.
3. To evaluate the effect of structured counselling on anxiety levels among pregnant women.
4. To determine the impact of structured counselling on coping mechanisms among pregnant women.
5. To compare anxiety and coping outcomes between the experimental (counseled) and control (non-counseled) groups.

## Hypotheses

H1: Structured counselling significantly reduces anxiety levels among pregnant women.

H2: Structured counselling significantly improves coping mechanisms among pregnant women.

H3: There is a significant difference in post-test anxiety scores between the experimental and control groups.

H4: There is a significant difference in post-test coping scores between the experimental and control groups.

## METHODOLOGY

### Research Design

The study employed a **quasi-experimental design** with a pre-test and post-test control group structure to examine the effect of structured counselling on anxiety and coping mechanisms among pregnant women. This design allowed for comparison between participants who received the intervention and those who did not.

The research was conducted in Saran district of Bihar, specifically among pregnant women attending antenatal services at **Sadar Hospital**. The hospital caters to a diverse population from both rural and semi-urban areas, making it appropriate for the present study.

### Sample

The study included 60 pregnant women selected through purposive sampling from Sadar Hospital. Participants were divided into experimental ( $n = 30$ ) and control ( $n = 30$ ) groups. Women aged 18–35 years in the second or third trimester were included. The sample included women from both **rural and semi-urban backgrounds**, reflecting the demographic characteristics of the Saran district. Most participants belonged to varying socio-economic and educational levels, which provided a broader understanding of anxiety and coping patterns in different social contexts.

### Inclusion Criteria

- Pregnant women aged between 18 and 35 years
- Women in the second or third trimester
- Willingness to participate in the study
- Ability to understand Hindi

### Exclusion Criteria

- Women with severe medical or psychiatric conditions
- High-risk pregnancies requiring specialized care

### Assessment Tools

Anxiety was assessed using the Hindi adaptation of the State-Trait Anxiety Inventory developed by Charles D. Spielberger. The scale measures situational anxiety, with higher scores indicating greater anxiety. In the present study, the scale demonstrated good internal consistency (Cronbach's  $\alpha = 0.85$ ).

Coping mechanisms were measured using the coping scale developed by A.K. Singh, which assesses problem-focused, emotional, and avoidance coping strategies. The scale showed satisfactory reliability in the current sample (Cronbach’s  $\alpha = 0.80$ ).

A brief socio-demographic schedule was used to collect background information such as age, education, and parity.

### Structured Counselling Program

The experimental group received a structured counselling program for four weeks (2–3 sessions/week, 30–45 minutes each), including psycho education, relaxation techniques, cognitive restructuring, and coping skills training. The control group received routine care.

### Procedure

Prior approval to conduct the study was obtained from the administration of **Sadar Hospital**. Eligible pregnant women attending antenatal services were approached and informed about the purpose of the study. Written informed consent was obtained from all participants.

Participants who met the inclusion criteria were selected using purposive sampling and assigned to either an experimental group or a control group. At baseline, both groups completed the anxiety and coping measures (pre-test).

Following the pre-test, the experimental group received a structured counselling program over four weeks, while the control group continued to receive routine antenatal care without additional intervention. After completion of the intervention, both groups were reassessed using the same instruments (post-test).

All responses were recorded confidentially, and participants were assured of their right to withdraw at any stage. The collected data were then organized for statistical analysis.

## RESULTS

The data were analyzed to examine the effect of structured counselling on anxiety and coping mechanisms among pregnant women attending **Sadar Hospital**. Descriptive statistics (mean and standard deviation) and *t*-tests were used to assess differences between groups. Anxiety scores were categorized into low (0–33%), moderate (34–66%), and high (67–100%) levels based on percentage scores.

**Table 1 Pre-test and Post-test Anxiety Scores of the Experimental Group**

Measure	N	Mean	SD	t-value	p-value
Pre-test	30	42.50	6.20		
Post-test	30	31.10	5.45	7.85	.000**

A significant reduction in anxiety scores was observed in the experimental group following the counselling intervention ( $t = 7.85, p < .01$ ).

**Table 2 Pre-test and Post-test Coping Scores of the Experimental Group**

Measure	N	Mean	SD	t-value	p-value
Pre-test	30	48.20	7.10		
Post-test	30	61.35	6.40	8.12	.000**

Coping scores significantly improved after the counselling program ( $t = 8.12, p < .01$ ), indicating enhanced adaptive coping strategies.

**Table 3 Post-test Anxiety Scores: Experimental vs Control Group**

Group	N	Mean	SD	t-value	p-value
Experimental	30	31.10	5.45		
Control	30	40.80	6.00	6.45	.000**

The experimental group reported significantly lower anxiety compared to the control group ( $t = 6.45, p < .01$ ).

**Table 4 Post-test Coping Scores: Experimental vs Control Group**

Group	N	Mean	SD	t-value	p
Experimental	30	61.35	6.40		
Control	30	49.20	7.00	7.02	.000**

The experimental group demonstrated significantly higher coping scores than the control group ( $t = 7.02, p < .01$ ).

## DISCUSSION

The present study examined the effectiveness of structured counselling in reducing anxiety and improving coping mechanisms among pregnant women attending **Sadar Hospital**. The findings indicate that participants who received the counselling intervention showed a significant reduction in anxiety levels and a marked improvement in coping strategies compared to those who received routine antenatal care.

The observed decrease in anxiety among the experimental group suggests that structured counselling is effective in addressing pregnancy-related psychological distress. The intervention provided participants with information, emotional support, and practical techniques such as relaxation and cognitive restructuring. These components likely helped participants manage negative thoughts and physiological symptoms associated with anxiety. This finding is consistent with previous research by Vivette Glover (2014), who highlighted the importance of managing prenatal stress to improve maternal and fetal outcomes.

The improvement in coping mechanisms further supports the effectiveness of the counselling program. Participants in the experimental group demonstrated greater use of adaptive coping strategies, such as problem-solving and emotional regulation. Counselling sessions encouraged participants to actively engage with their concerns and seek appropriate support, which enhanced their ability to manage stress. This aligns with the work of Charles S. Carver (1997), who emphasized that adaptive coping strategies are associated with better psychological adjustment.

In the Indian context, socio-cultural factors play a crucial role in shaping psychological experiences during pregnancy. The present findings are in line with the views of A.K. Singh (2004), who noted that coping behaviors are influenced by environmental and cultural conditions. The use of Hindi-based counselling and culturally relevant examples in the present study may have contributed to the effectiveness of the intervention.

Another important finding is the significant difference between the experimental and control groups in the post-test phase. While the experimental group showed improvement, the control group did not exhibit notable changes in anxiety or coping. This indicates that routine antenatal care alone may not be sufficient to address psychological concerns, highlighting the need to integrate mental health interventions into maternal healthcare services.

Overall, the results of the study support the hypothesis that structured counselling is an effective approach for enhancing maternal mental health. The findings emphasize the importance of providing psychological support during pregnancy, particularly in settings where awareness and access to mental health services are limited.

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