



ORIGINAL RESEARCH PAPER

Nursing

A STUDY TO ASSESS THE EFFECTIVENESS OF MIDWIFE-LED COMPREHENSIVE INTERVENTIONS ON KNOWLEDGE, STRESS AND PHYSIOLOGICAL PARAMETERS REGARDING PREGNANCY INDUCED HYPERTENSION AMONG MOTHERS AT SELECTED HOSPITALS

KEY WORDS: Pregnancy induced hypertension, Midwife-led comprehensive interventions, knowledge, stress and physiological parameters.

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ABSTRACT

Background: Pregnancy and motherhood is considered as the most fulfilling experience for a woman and a very important phase in her life. A woman's body undergoes significant physiological, hormonal and developmental changes to meet the demands of the growing fetus. It is a normal physiological process and the outcome of such pregnancies are good but some pregnancies are complicated by conditions unique to pregnancy. Pregnancy Induced Hypertension (PIH) is such medical condition and it has significant health impact on both mother and the baby. It can indeed be a significant source of stress for the mothers due to hormonal changes occur during pregnancy, adaptation to the changes, health status of self and the baby, financial commitment and lack of spouse and family support. So, creating awareness about the pregnancy induced hypertension among the antenatal mothers can help in early recognition of the alarming symptoms and initiating appropriate measures at the right time to reduce the severity thereby enhance the health of the mother and the baby. **Aim and objectives:** To assess the effectiveness of Midwife-led comprehensive interventions on knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers. **Methodology:** Quantitative approach with quasi experimental pretest post-test control group design was chosen. A total of 60 pregnancy induced hypertension mothers were selected through non probability purposive sampling technique. Structured interview questionnaire, Younglan Kim Pregnancy Stress Scale (PSS) and physiological parameters chart were the data collection tools. **Results:** The study findings revealed that 53.33% of samples gained adequate knowledge, 80% and 83.33% of samples had reduced stress and physiological parameters in the post-test. The calculated student's paired 't' test was found to be statistically very highly significant at $p < 0.001$ for all three dependent variables in the study group. Similarly, in the study group calculated post test unpaired 't' value was $t = 8.69$, $t = 15.31$, $t = 15.31$ for knowledge, stress and physiological parameters respectively, showed a very highly statistical significance at $p < 0.001$. Statistically significance level of correlation and association were also identified for selected variables in the study group. **Conclusion:** The study concluded that the Midwife-led comprehensive interventions was effective in enhancing the knowledge, reduce stress and physiological parameters among pregnancy induced hypertension mothers.

INTRODUCTION

Pregnancy is a profound and transformative journey, marks one of the most extraordinary chapters in human life.¹¹ This intricate process encompasses not just the physical growth of a new life but also a series of biological, emotional, and psychological changes that together create the foundation for a new beginning.⁸ However, this anticipated journey may take a more complex turn, evolving into a high risk pregnancy.

Pregnancy Induced Hypertension (PIH) is a form of high blood pressure in pregnancy, it develops after 20th week of gestation. It affects approximately 5-10% of pregnancies globally.⁵ It typically manifests through several key symptoms such as edema, proteinuria, headache, vision problems and reduced urine output. It poses risks to both mother and the baby, associated with premature delivery, growth restriction, placental abruption and cardiac and renal problems.²

The global prevalence of pregnancy induced hypertension is 116 per 100,000 women.¹⁰ According to Health and Family welfare statistics (2021), the prevalence of pregnancy induced hypertension in India was 10.3%. In southern India, the prevalence of hypertensive disorders of pregnancy are as follows 47.4% gestational hypertension, 32.6% pre-eclampsia and 8.2% chronic hypertension.⁴ Tamil Nadu has the highest percentage of pregnancy induced hypertension 5.5% in 2020-2021, it is increased by 6.3% in 2021-2022.⁶

PIH can cause significant stress due to its impact on both physical and emotional well-being. The stress arises from the need for constant medical monitoring, the fear of adverse maternal and fetal outcomes, and the emotional strain.⁷ Appropriate prenatal care and proper lifestyle modifications helps in maintaining the health of both mother and baby which is very essential to prevent severe complications and ensure positive outcomes.

So, creating awareness regarding pregnancy induced hypertension, alarming symptoms, management including

diet, exercise, relaxation technique and its complications helps in reducing the severity of the problems and comprehensive care on these areas helps to promote health status of mother and the baby in a cost-effective way.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of midwife-led comprehensive interventions on knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers at selected hospitals.

OBJECTIVES

1. To assess and compare the pre and posttest level of knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers in the study and control group.
2. To assess the effectiveness of Midwife led comprehensive interventions on knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers in the study and control group.
3. To correlate the mean differed knowledge, stress and physiological parameter scores regarding pregnancy induced hypertension among mothers in the study and control group.
4. To associate the selected background variables with mean differed knowledge, stress and physiological parameter scores regarding pregnancy induced hypertension among mothers in the study and control group.

NULL HYPOTHESES

NH₁ - There is no significant difference between the pre and post test level of knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers between study and control group.

NH₂ - There is no significant correlation between the mean differed knowledge, stress and physiological parameter scores regarding pregnancy induced hypertension among mothers in study and control group.

NH₁ - There is no significant association between selected background variables with the mean differed knowledge, stress and physiological parameter scores regarding pregnancy induced hypertension among antenatal mothers in the study and control group.

MATERIALS AND METHODS

A quantitative research approach with quasi experimental pretest post-test control group design was adopted in this study. The independent variable for the study was Midwife-led comprehensive interventions and the dependent variables were knowledge, stress and physiological parameters. The study was conducted at Sir Ivan Stedford Hospital, Ambattur. The sample size was 60 (30 samples in each group). Non-probability purposive sampling technique was used to select the samples. The samples were selected based on the following:

Inclusion criteria

Antenatal mother who are

- Primi or Multigravida
- Between 24-30 weeks of gestation
- Medically diagnosed as pregnancy induced hypertension (systolic BP $\geq$ 140 mmHg or diastolic BP $\leq$ 90 mmHg associated with or without proteinuria and edema)
- Able to read, write and understand Tamil / English

Exclusion criteria

Antenatal mother who

- have complication such as eclampsia, HELLP syndrome etc
- have gestational diabetes mellitus
- have visual and hearing impairment

DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool for the data collection had 4 sections:

Section A: Assessment of background variables

It consists of

Demographic variables – Age in years (completed years), educational status, occupation, family monthly income in rupees, type of family, residence, diet pattern, source of information relevant to pregnancy induced hypertension.

Obstetrical variables – Pre-conception weight in kg, Gravida, type of conception, Gestational age in weeks, month of pregnancy induced hypertension diagnosed, previous obstetrical history, family history of pregnancy induced hypertension.

Anthropometric variables – Height, weight, abdominal girth and fundal height.

Section B: Assessment of knowledge

It consisted of 25 multiple choice questions with one correct answer each. It was categorized under the following components.

Content	Number of Questions
General information on Pregnancy Induced Hypertension	3
Causes and signs & symptoms	3
Complications	2
Management	12
Total	20

Scoring key

Each item was an objective type and closed ended with a single correct answer. Each correct answer carries "1" mark and wrong answer carries "0" mark. The total score of the tool was 20. The raw score was converted into percentage to interpret the level of knowledge.

Interpretation

Percentage	Inference
≥ 75	Adequate Knowledge
51-74	Moderately adequate knowledge
≤ 50	Inadequate knowledge

Section C: Assessment of Stress

Younglan Kim Pregnancy Stress Scale (PSS)³ was used to assess the stress of pregnancy induced hypertension mothers. The session consists of 34 questions.

Component	No. of questions
Physical and psychological changes	8
Coping in daily life	3
Health of the mother and baby	4
Family support	4
Healthcare services	4
Social atmosphere	5
Maternal role	6
Total	34

Scoring key

It consists of 34 items, the minimum score was "0" and the maximum score was "3". The total score was 136. The raw score was converted into percentage to interpret the level of stress. Higher scores indicating higher level of stress.

Interpretation

Score	Percentage	Inference
≤ 68	≤ 50	Mild stress
69-101	50-75	Moderate stress
≥ 102	≥ 75	High stress

Section D: Assessment of Physiological parameters

Physiological parameters chart was prepared by the investigator used to assess the physiological parameters which includes blood pressure, edema, proteinuria and weight gain.

Scoring key

The minimum score was '0' and the maximum score was '4'. The total score was 16. The raw score was converted into percentage to interpret the physiological parameters. It was assessed and recorded in the physiological parameters chart by the investigator.

Interpretation

Score	Percentage	Inference
0	0	Absence of PIH features
≤ 8	≤ 50	Mild PIH features
9-11	50-75	Moderate PIH features
≥ 12	≥ 75	Severe PIH features

DATA COLLECTION PROCEDURE

The study was conducted for a period of 4 weeks. A total of 60 antenatal mothers with pregnancy induced hypertension (30 samples each in study and control group) were selected based on inclusion criteria using non probability purposive sampling technique in selected settings.

After obtaining the consent from participants, pre-test level of knowledge was assessed by using structured knowledge questionnaire, stress was assessed by using Younglan Kim Pregnancy Stress Scale (PSS) and physiological parameters assessed and recorded in physiological parameters chart. On the same day, for the study group, Midwife-Led comprehensive interventions which includes Behaviour Change Communication through power point presentation regarding pregnancy induced hypertension and its management was given to a small group of 2-3 antenatal mothers for about 30-40 minutes at outpatient department. Reinforcement given via Whatsapp group. Demonstration of Benson Relaxation technique by the investigator on the same

day to a small group of 2-3 antenatal mothers for about 20 minutes. Return demonstration was done by the participants immediately. The participants practices the relaxation technique in the morning and evening daily for 4 weeks. Family based education to strengthen and support the mother for about 15 minutes to mother and the family members on the same day.

The post test was conducted after 7 days to assess the knowledge. Stress and physiological parameters was assessed after 1 month of intervention.

Similar schedule was followed for the control group, except the administration of comprehensive interventions. After the post test, the same Midwife-led comprehensive interventions was given to the antenatal mother with pregnancy induced hypertension in control group.

ETHICAL CONSIDERATIONS

The researcher obtained ethical clearance from the International Centre for Collaborative Research (ICCR), which is the Institutional Review Board of Omayal Achi College of Nursing (OACN), formal written permission from the Principal of OACN, and from the Chief Medical Officer of Sir Ivan Stedeford Hospital.

Written informed consent was obtained from the participants after a clear explanation of the study purpose, type of data required, nature of commitment, participation, procedure and potential benefits and the right to withdraw from the study at any point in time was explained. Confidentiality and full privacy of personal details revealed by the samples were assured.

RESULTS

Distribution of background variables

In the study group, 11(36.66%) of the mothers were between 31-35 years of age, 15(50%) of them were graduate, 24(80%) of them were home makers and 18(60%) of the mothers had monthly income between Rs.15,001-30,000, 17(56.66%) of them were living in joint family, 25(83.33%) of them residing in urban area, 19(63.33%) of them were non-vegetarian and 30(100%) of them received the information regarding pregnancy induced hypertension through health personnel, 19(63.33%) of them were multigravida, 30(100%) of them had conceived naturally, 22(73.33%) of them were between 27-30 weeks of gestation, 25(83.33%) of them were diagnosed as pregnancy induced hypertension at 6th month, 10(33.33%) of mothers had previous obstetrical history, 9(30%) of mothers had family history of PIH, 15(50%) of mothers were between 151-160cm, 11(36.66%) of mothers were more than 80kg, 23(86.66%) of mothers abdominal girth were between 90-100cm and 21(70%) of mothers fundal height were between 27-30cm.

In the control group, 12(40%) of the mothers were between 31-35 years of age, 13(43.33%) of them were completed secondary education, 25(83.33%) of them were home makers and 21(70%) of the mothers had monthly income between Rs.15,001-30,000, 20(66.66%) of them were living in joint family, 28(93.33%) of them residing in urban area, 17(56.66%) of them were vegetarian and 30(100%) of them received the information regarding pregnancy induced hypertension through health personnel, 22(73.33%) of them were multigravida, 30(100%) of them had conceived naturally, 21(70%) of them were between 27-30 weeks of gestation, 30(100%) of them were diagnosed as pregnancy induced hypertension at 6th month, 12(40%) of mothers had previous obstetrical history, 11(36.66%) of mothers had family history of PIH, 18(60%) of mothers were between 151-160cm, 17(56.66%) of mothers were between 71-80kg, 17(56.66%) of mothers abdominal girth were between 90-100cm and 17(56.66%) of mothers fundal height were between 27-30cm.

Table 1: Pre and Post test level of knowledge regarding pregnancy induced hypertension among mother in study and control group N=60

Group	Level of knowledge	Pretest (n=30)		Post-test (n=30)	
		n	%	n	%
Study	Adequate knowledge	0	0.00	16	54.33
	Moderately adequate knowledge	04	13.33	14	46.66
	Inadequate knowledge	26	86.66	0	0.00
Control	Adequate knowledge	0	0.00	0	0.00
	Moderately adequate knowledge	05	16.66	13	26.66
	Inadequate knowledge	25	83.33	17	73.33

The above table shows that, 86.66% of the mothers has inadequate knowledge during pretest whereas in post-test 54.33% of them had adequate level of knowledge, 46.66% of them had moderately adequate level of knowledge in the study group and there is no much difference between pre and post test in control group.

Table 2: Pre and Post test level of stress regarding pregnancy induced hypertension among mother in study and control group N=60

Group	Level of stress	Pretest (n=30)		Post-test (n=30)	
		n	%	n	%
Study	Mild stress	0	0.00	24	80.00
	Moderate stress	20	66.66	6	20.00
	High stress	10	33.33	0	0.00%
Control	Mild stress	0	0.00	0	0.00
	Moderate stress	17	56.66	22	73.33
	High stress	13	43.33	8	26.66

The above table shows that, 66.66% of them had moderate level of stress and 33.33% of them had high level of stress in pre test, whereas in post test 80% of them had mild level of stress in the study group and there is no much difference between pre and post test in control group.

Table 3: Pre and Post test level of physiological parameters regarding pregnancy induced hypertension among mother in study and control group

Group	Level of physiological parameters	Pretest (n=30)		Post-test (n=30)	
		n	%	n	%
Study	Absence of PIH features	0	0.00	0	0.00
	Mild PIH features	12	40.00	25	83.33
	Moderate PIH features	16	53.33	5	16.66
	Severe PIH features	2	6.66	0	0.00
Control	Absence of PIH features	0	0.00	0	0.00
	Mild PIH features	13	43.33	15	50.00
	Moderate PIH features	15	50.00	15	50.00
	Severe PIH features	2	6.66	0	0.00

The above table shows that, 53.33% of them had moderate level of PIH features in pre test whereas in post test 83.33% of then had mild level of PIH features in the study group and there is no much difference between pre and post test in control group.

Assessment of effectiveness of midwife-led comprehensive interventions on knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers

Table 4: Comparison of pre and post test mean knowledge, stress and physiological parameter scores within the study and control group. N=60

Variable	Group	Pre test		Post test		Mean difference	Paired 't' value
		Mean	SD	Mean	SD		
Knowledge	Study	8.33	1.92	15.70	3.85	7.37	t=8.89 p=0.001 *** (S)
	Control	8.23	2.03	8.83	1.97	0.60	t=1.65 p=0.11 (NS)
Stress	Study	92.23	15.23	50.17	8.33	42.06	t=14.92 p=0.001 *** (S)
	Control	93.23	15.99	90.23	11.66	3.00	t=1.91 p=0.06 (NS)
Physiological parameter	Study	8.87	1.85	3.77	1.74	5.10	t=12.87 p=0.001 *** (S)
	Control	8.73	1.91	7.57	1.59	1.16	t=2.09 p=0.06 (NS)

***p<0.001, S-Significant, NS-Not Significant

The above table 4 signifies the comparison of mean knowledge, stress and physiological parameter scores regarding midwife-led comprehensive interventions. In the study group, the pretest knowledge score was 8.33 which had increased to 15.70 in the post test, the pretest stress and physiological parameter score was 92.23 and 8.87 which had reduced to 50.17 and 3.77 in the post test respectively. The calculated 't' value for knowledge, stress and physiological parameter was t=8.89, t=14.92 and t=12.87 respectively, which revealed that there was high statistically significant difference at p=0.001 level in the study group and there was no statistically significant in the control group.

Table 5: Comparison of pre and post test mean knowledge, stress and physiological parameter scores between study and control group. N=60

Variable	Assessment	Study		Control		Mean difference	Paired 't' value
		Mean	SD	Mean	SD		
Knowledge	Pretest	8.33	1.92	8.23	2.03	0.10	t=0.20 p=0.85 (NS)
	Post test	15.70	3.85	8.83	1.97	6.87	t=8.69 p=0.001* ** (S)
Stress	Pretest	92.23	15.2	93.23	15.99	-1.00	t=0.20 p=0.85 (NS)
	Post test	50.17	8.33	90.23	11.66	-40.06	t=15.31 p=0.001* ** (S)
Physiological parameter	Pretest	92.23	15.23	93.23	15.99	1.00	t=0.20 p=0.85 (NS)
	Post test	50.17	8.33	90.23	11.66	40.06	t=15.31 p=0.001* ** (S)

***p<0.001, S-Significant, NS-Not Significant

The above table 5 depicts that in the pre test there was no statistically significant difference in comparison of mean knowledge, stress and physiological parameter scores between study and control group. In the post test, the mean difference score was 6.87, -40.06 and 40.06 with 't' values of t=8.69, t=15.31 and t=15.31 respectively. These values showed that there was a high statistical significance at p=0.001. This shows that Midwife-led comprehensive interventions had significantly improved knowledge, reduce stress and physiological parameters of pregnancy induced hypertensive mothers in study group.

Table 6: Correlation between the mean differed knowledge, stress and physiological parameter scores among mothers in the study group N=30

Group	Variables	Mean differed score		'r' value	Interpretation
		Mean	SD		
Study	Knowledge	7.60	2.85	r= 0.37 P=0.01* (S)	Positive fair correlation
	Stress	42.07	10.44		
	Knowledge	7.60	2.85	r= 0.31 P=0.01* (S)	Positive fair correlation
	Physiological parameters	5.10	2.17		
	Stress	42.07	10.44	r= 0.28 P=0.05* (S)	Positive fair correlation
	Physiological parameters	5.10	2.17		

***p<0.001, S-Significant, NS-Not Significant

The above table depicts the correlation of mean differed knowledge, stress and physiological parameters score of pregnancy induced hypertension mothers in the study group, which was assessed by using Karl Pearson correlation coefficient. The positive fair correlation was identified between the mean differed knowledge, stress and physiological parameters score with an 'r' value of 0.37, 0.31, 0.28 at p<0.05 level of significance respectively, which revealed that there was a statistically significant difference.

The positive poor correlation was identified between the mean differed knowledge, stress and physiological parameters score, which revealed that there was no statistically significant difference in the control group.

Association of selected background variables with the mean differed knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers in the study group N=30

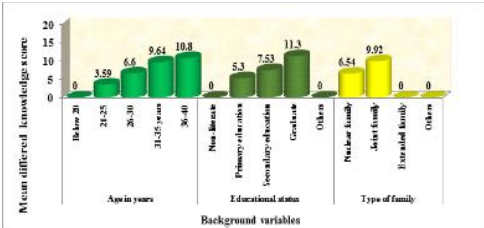


Figure 1: Association of selected background variables with the mean differed knowledge score among mothers in the study group.

Figure 1 depicts that there was a significant association was found in background variables like age, educational status and type of family among mothers in the study group, thus infers that the mean differed knowledge score was high among mothers between 36-40 years of age (10.8), mothers who are graduate (11.3) and mothers from joint family (9.92).

N=30

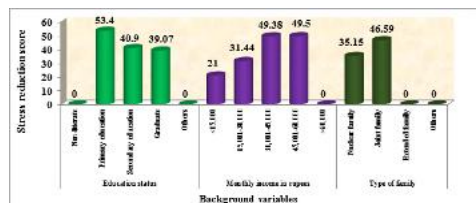


Figure 2: Association of selected background variables with the stress reduction score among mothers in the study group. Figure 2 depicts that there was a significant association was found in background variables like educational status, family monthly income and type of family among mothers in the study group, thus infers that the stress reduction score was high among mothers in primary education (53.4), family monthly income Rs.45,001-60,000 (49.5) and mothers from joint family (46.59).

N=30

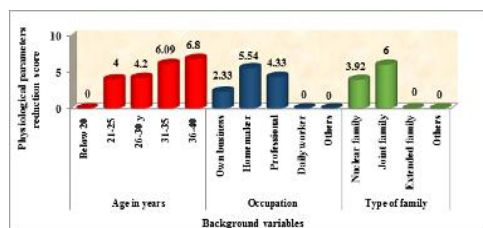


Figure 3: Association of selected background variables with the physiological parameters reduction score among mothers in the study group.

Figure 3 depicts that there was a significant association was found in background variables like age, occupational status and type of family among mothers in the study group, thus infers that the physiological parameters reduction score was high among mothers in age group of 36-40 years (6.8), mothers in home maker (5.54) and mothers from joint family (6.00).

In control group, there was no statistically significant association with the knowledge gain score, stress and physiological parameters reduction score in background variables.

DISCUSSION

Pregnancy Induced Hypertension (PIH) is a form of high blood pressure in pregnancy, it develops after 20th week of gestation. Severe hypertension increases the risk of cardiac failure, heart attack, renal failure and cerebral vascular accidents for the mother. In addition, the fetus is at the increased risk of poor placental transfer of oxygen, growth restriction, preterm birth, placental abruption, stillbirth and neonatal death. PIH can cause stress for the mothers in several ways such as hormonal changes, fear of health risk for self and the baby, emotional strain, coping with physical changes, frequent antenatal visit, financial concerns and lack of support from the partner, family and friends. Most of the antenatal mothers have lack of awareness about pregnancy induced hypertension, complications and its management. Creating awareness about the pregnancy induced hypertension among the antenatal mothers can help in early recognitions of the alarming symptoms and to reduce stress and to maintain physiological parameters in normal level. Therefore, the present study was undertaken to assess the effectiveness of Midwife-led comprehensive interventions on knowledge, stress and physiological parameters regarding pregnancy induced hypertension among mothers and to compare the outcomes between study and control groups.

The comparison of mean differed level of knowledge, stress and physiological parameters within the study and control

groups was calculated using the paired t-test. The test findings revealed that in the study group, the calculated t value is 8.89 for knowledge, 14.92 for stress and 12.87 for physiological parameters which revealed that there was a high statistically significant difference at $p=0.001$ level. There was no statistically significant difference between pre and post intervention level of knowledge, stress and physiological parameters in the control group.

The study conducted by Shweta Shridhar Ghag., et al., (2023) demonstrated that the planned health teaching was effective in significantly improving the knowledge level of pregnancy induced hypertensive mothers. The pre-test mean knowledge score was 5.25 and the post-test mean knowledge score was 13.65. The calculated 't' value is 15.56 which is greater than table value and it is significant difference between pre and post-test knowledge ($p \leq 0.05$). The planned health teaching as effective in improving the knowledge of antenatal mothers regarding pregnancy induced hypertension. These findings highlight the importance of well-structured and targeted educational interventions to enhance knowledge and promote positive maternal health outcomes.8

The comparison of knowledge, stress and physiological parameters between study and control group was calculated using the student-independent t-test showed that no statistically significant difference was found in the pretest, where as in the post test the calculated t value is 8.69 for knowledge, 15.31 for both stress and physiological parameters respectively, these values showed that there was a high statistical significance at $p < 0.001$. This infers that midwife-led comprehensive interventions had significantly improved the knowledge and reduced the stress and physiological parameters scores of pregnancy induced hypertension mothers in the study group.

The study findings were supported by Abd Elgwad, F., et al. (2021), who evaluated the effectiveness of Benson's relaxation therapy among women with pregnancy-induced hypertension. The experimental group showed a reduction in moderate stress from 97.5% (pre-test) to 37.5% (post-test), while the control group showed minimal change ($t = 8.74$). Physiological parameters also improved significantly, with systolic blood pressure decreasing from 158.25 mmHg to 144.13 mmHg ($t = 9.40$). A highly statistically significant difference was observed between the experimental and control groups ($p = 0.001$). The study concluded that the intervention is effective in reducing stress levels and improving physiological parameters.1

The correlation of mean differed knowledge, stress and physiological parameters scores of pregnancy induced hypertension mothers in the study and control group, which was assessed by using Karl Pearson correlation coefficient. The positive fair correlation was identified between the mean differed knowledge, stress and physiological parameters scores with an 'r' value of 0.37, 0.31, 0.28 at $p < 0.05$ level of significance respectively, which revealed that there was a statistically significant difference in the study group. No statistical relationship was identified between the variables in the control group.

There was a significant association of background variables like age, educational status and type of family among mothers with mean differed knowledge score, educational status, family monthly income and type of family with the stress reduction score, age, occupational status and type of family with the physiological parameters reduction score in the study group. There is no association of selected background variables with the mean differed knowledge, stress and physiological parameters scores regarding pregnancy induced hypertension among mothers in the control group.

CONCLUSION

The study concluded that the Midwife-led comprehensive interventions was an effective interventional strategy to enhance knowledge, reduce stress and physiological parameters of pregnancy induced hypertension mothers. The study findings revealed that in comparison to the control group, the study group showed a statistically significant improvement in the level of knowledge, reduction in stress and physiological parameters following the administration of the Midwife-led comprehensive interventions. Hence, the study recommended the utilization of Midwife-led comprehensive interventions by the health care professional in the hospital, community health centre, nurse educators to improve knowledge, reduce stress and physiological parameters of pregnancy induced hypertensive mothers.

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Conflict Of Interest:None

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