



ISSN Print: 2664-6536
 ISSN Online: 2664-6544
 Impact Factor: RJIF 5.4
 IJBB 2025; 7(1): 121-125
www.biosciencejournal.net
 Received: 21-01-2025
 Accepted: 26-02-2025

N Israa Faisal Abbass
 M.Sc., AL-Hindi Teaching
 Hospital, Iraqi Ministry of
 Health, Baghdad, Iraq

Effectiveness of smile therapy on psychological status of postpartum Womens

N Israa Faisal Abbass

DOI: <https://www.doi.org/10.33545/26646536.2025.v7.i1b.107>

Abstract

Introduction: Maternal mental health may be considered a determining factor influencing infant development; stress during the postpartum period had negative effect on child psychophysiological development. This project will be study if researcher or therapeutic smile can affect positively on mothers' psychological health.

Method: Quazi - experimental study design one group pre-test/post-test design was carried out from period of 26/12/2024 to period of 1/6/2024 in AL-Hindi teaching hospital in holy Kerbela city in Iraq country. Questionnaire is assigned to depression, anxiety and stress scores DASS.

Result: Result show there are highly significant difference between women's psychological status before and after researcher interventional therapy (smile) at t -value 9.24 and p value of 0.000

Conclusion: Study conclude that smile is effective therapy for improve postpartum mothers' psychological health as it deceases level of stress, anxiety and depression scores.

Keywords: Maternal mental health, postpartum depression, stress, infant development

Introduction

The postpartum period is a time of a greater effect on mother's lifestyle, mental health, sleep, body dissatisfaction, and interpersonal relationships (Ashley *et al.*, 2022) ^[1]. Maternal mental health may be considered a determining factor influencing infant development; stress during the postpartum period had negative effect on child psychophysiological development (International Journal of Molecular Sciences, 2022) ^[2]. Anxiety and depression are more common during post-partum period. More than 20% experience clinical symptoms of anxiety and depression after childbirth (Fawcett *et al.*, 2019) ^[3], As mothers experience poor body appreciation, lower self-esteem and higher depressive symptoms during post-partum period compared to pregnancy period that means it is necessary for public health polices to support women, preserving their mental health and making this experience more positive (Frontiers in Global Woman's Health, 2022) ^[4].

Smile is type of facial expression that is non-verbal communication; it may be intentional or unintentional reaction to other people or situations. Neurotransmitters such as dopamine, endorphins, and serotonin released to bloodstream when a smile flashes across a face therapy helping the individual experience the sense of relaxation in his body and mind (KJ, 2019) ^[5].

Smiling can reduce the effect of physiological stress and improved stress recovery (Marie *et al.*, 2023) ^[6]. Nurses' smile had a significant benefit on patients as a form of interpersonal communication (Thakur & Sharma, 2021) ^[7].

This project will be study if researcher or therapeutic smile can affect positively on mothers' psychological health.

Study Method

Ethical consideration: Researcher takes all ethical issue consideration in every step of research application. Subject had the right to participate or refuse to participate of the study. Time for taking information was very appropriate for both sample and researcher. Research project doesn't cause any physical or psychological harm to participant or researcher.

Study design: Quazi - experimental study design one group pre-test/post-test design was carried out from period of 26/12/2024 to period of 1/6/2024.

Corresponding Author:
N Israa Faisal Abbass
 M.Sc., AL-Hindi Teaching
 Hospital, Iraqi Ministry of
 Health, Baghdad, Iraq

Siting of the study: AL-Hindi teaching hospital in holy Kerbela city in Iraq country.

Research questionnaire: Each equation is assigned to depression, anxiety and stress scores DASS (Fawcett *et al.*, 2019) [3] translated to Arabic language then test for it is validity assigned to 10 experts to test it is content related validity.

Reliability is tested by giving a questionnaire to 10 participants and then tested for it is reliability using Cronbach's Alpha and was 0.85%.

Sampling design

Method for selected samples was probability random sampling. Participant was 25 of post-partum mothers were as a study group.

Proposed hypothesis

Therapeutic smile affect positively on postpartum mothers' psychological health.

Null hypothesis: Therapeutic smile had no effect on postpartum mothers' psychological health

Application of interventional program: First step researcher gives mothers education about self-care without smile appearance in his face and then completed research questionnaire according to mother's answer. Researcher wait for about 10 minutes near the postdelivery room to insure there are not any extraneous variables will affect the study while mother was at postnatal room without telephone as the hospital policy and no one visit them and no health care intervention was given at this time. Researcher then gives newborn care information to exact mothers with same langue style and was Polite and Courteous Speech Style and in the same voice tone but with smile appearance in researcher face, then researcher recompleted the questionnaire for second time after information was given.

Result

Table (4-1) Sample Socio-Demographic Characteristic

Table 1.1: Age Group of the Study Sample

	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
Mother age/ years	12-16	1	4.0	4.0	4.0
	17-21	5	20.0	20.0	24.0
	22-26	8	32.0	32.0	56.0
	27-31	4	16.0	16.0	72.0
	32-36	5	20.0	20.0	92.0
	37-41	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

The result show that the age group (22-26) for participant was the highest percent 32%, n= 8

Table 1.2: Gravida of the Study Sample

	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
Gravida/ Number of successful pregnancies	1.00	5	20.0	20.0	20.0
	2.00	4	16.0	16.0	36.0
	3.00	3	12.0	12.0	48.0
	4.00	5	20.0	20.0	68.0
	5.00	5	20.0	20.0	88.0
	6.00	3	12.0	12.0	100.0
	Total	25	100.0	100.0	

Result show that 1,4,5 number of successful pregnancy was highest percent 20% and n=5

Table 1.3: para of the Study Sample

	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
Para/ number of deliveries	1.00	6	24.0	24.0	24.0
	2.00	3	12.0	12.0	36.0
	3.00	5	20.0	20.0	56.0
	4.00	3	12.0	12.0	68.0
	5.00	6	24.0	24.0	92.0
	6.00	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

Finding indicates that the highest of number of mothers delivery was first and fifth delivery percent is 24% n=6

Table 1.4: Para of the Study Sample

	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
Abortion/number of abortions	.00	21	84.0	84.0	84.0
	1.00	4	16.0	16.0	100.0
	Total	25	100.0	100.0	

Result showing that the mothers who had no previous abortion were the highest percent 84% n=21 and the remaining percent was the women who had only one previous abortion.

Table 1.5: Economic status of the Study Sample

Economic status	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
	Poor	10	40.0	40.0	40.0
	Moderate	12	48.0	48.0	88.0
	Good	3	12.0	12.0	100.0
	Total	25	100.0	100.0	

Moderate Economic status was the highest percent of 48% n= 12

Table 1.6: Educational level for the Study Sample

Educational level for mothers	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
	Primary	18	72.0	72.0	72.0
	middle school	2	8.0	8.0	80.0
	Secondary	3	12.0	12.0	92.0
	Collage	2	8.0	8.0	100.0
	Total	25	100.0	100.0	

Mothers who had educational level of Primary school

Table 1.7: Educational level for husband of the Study Sample

Educational level for father	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
	Primary	11	44.0	44.0	44.0
	middle school	14	56.0	56.0	100.0
	Total	25	100.0	100.0	

Result show that middle school were the highest percent of 56% n=14 while remaining percent was husband who had only primary school

Table 1.8: Educational level for husband of the Study Sample

Harmony between father and mother	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
	Good	4	16.0	16.0	16.0
	very good	10	40.0	40.0	56.0
	Bad	11	44.0	44.0	100.0
	Total	25	100.0	100.0	

The highest percent of the relationship between the mothers in the study sample and their husband was bad relationship n=11 percent is 44%

Table 1.9: Educational level for husband of the Study Sample

Home condition	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
	single family	9	36.0	36.0	36.0
	extended family	16	64.0	64.0	100.0
	Total	25	100.0	100.0	

Table indicate that Extended family were the highest percent 64% n=16

Table 1.10: Newborn gender

Newborn gender	Classification	Frequency	Percent	Valid Percent	Cumulative Percent
	Male	16	64.0	64.0	64.0
	Female	9	36.0	36.0	100.0
	Total	25	100.0	100.0	

Finding indicate that Male newborn was highest percent 64% n=16

Table 2: comparison of overall psychological health status before and after therapy

Pre interventional therapy				Post interventional therapy	
Psychological health classification		Frequency	Percent	Frequency	Percent
Valid	Good	6	24.0	24	96.0
	moderate	12	48.0	1	4.0
	Bad	7	28.0	0	0
	Total	25	100.0	25	100.0

Finding indicates that 48% of women had moderate psychological status n=12 before interventional therapy while after interventional therapy r 96% of women had good psychological status n= 24

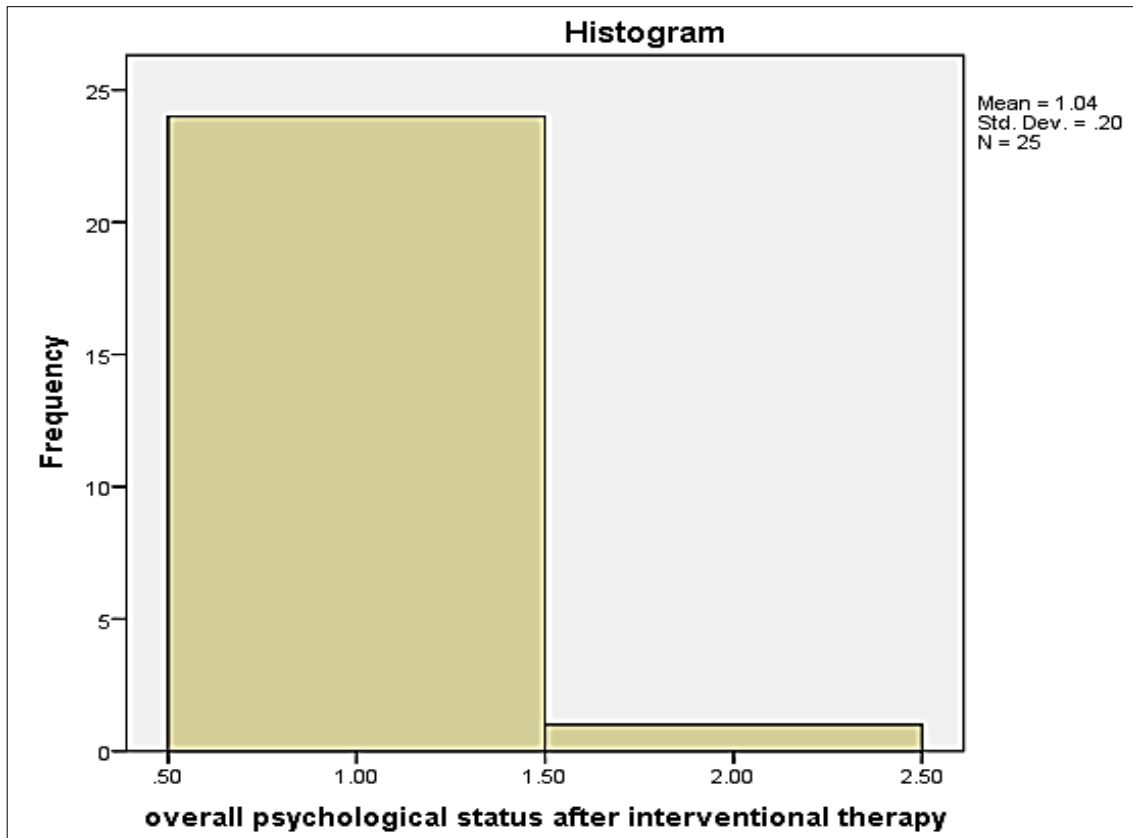


Fig 1: Show overall psychological status after interventional therapy

Table 3: Comparison of overall psychological health status before and after therapy

		Paired Samples Test							
		Paired Differences					t	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Lower	Upper								
Pair 1	Psychological status pre – post therapy	1.36160	.73490	.1469	1.058	1.664	9.264	24	.000

Result show there are highly significant difference between women’s psychological status before and after researcher interventional therapy (smile) at *t*-value 9.24 and *p* value of 0.000

Table 4: Differences between newborn gender and effectiveness of therapy

		Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Pospsych	Equal variances assumed	13.253	.001	-2.880	23	.008	-.35799
	Equal variances not assumed			-2.251	8.908	.051	-.35799

Result show that there is significant difference between newborn gender and effectiveness of therapy

Table 5: Differences between newborn gender and effectiveness of therapy

Post psychological health / economic					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.702	2	.351	3.707	.041
Within Groups	2.083	22	.095		
Total	2.784	24			

Table indicate that there is significant difference between economic status of the family and effectiveness of therapy

Discussion

Smile is reaction of thinking, feeling, behaviors, this study used smile as a therapy for improve women’s psychological health.

1. **Discussion of Demographic Characteristics:** Result show that the age group (22-26) for participant was the highest percent 32%, n= 8, Result show that 1,4,5 number of successful pregnancy was highest percent

20% and n=5, number of mothers delivery was first and fifth delivery percent is 24% n=6, the mothers who had no previous abortion were the highest percent 84% n=21 and the remaining percent was the women who had only one previous abortion. Moderate Economic status was the highest percent of 48% n= 12, Mothers who had educational level of Primary school was the highest percent 72%, the middle school were the

highest percent of 56% n=14 while remaining percent was husband who had only primary school, The highest percent of the relationship between the mothers in the study sample and their husband was bad relationship n=11 percent is 44%, the extended family were the highest percent 64% n=16. Finding indicate that Male newborn was highest percent 64% n=16 this demographic characteristic may be because of study setting was at a hospital in a Rural Area, where a women married in early years and leave schools, also they do not have a job or appointment so they had low chance of abortion because of hard work. The moderate family economy may be because of the mother's husbands not completed the education also that may reflect why the highest percent of relationship between them was bad relationship and may also interpret why the extended family were the highest percent.

2. Discussion of Effectiveness of Smile Therapy: Result show there are highly significant difference between women's psychological status before and after researcher interventional therapy (smile) at *t*-value 9.24 and *p* value of 0.000. that is may be because of it reflect positive feedback of active caregiver listening to the degree that promotes therapeutic communication. According to Low, Bono, & Azmi (2023) ^[8], A decreased risk of PPD for postpartum mothers is shown to be significantly correlated with greater emotional support, and vice versa. Current result agrees with the study result of Sriyatin (2019) ^[9], Whereas after smile therapy and pregnancy education, the lowest difference in the anxiety level score between the intervention group and the control group was -10.785 and the biggest difference in the anxiety level score between the intervention and control groups was -1.614, the average difference in anxiety level scores was -6,200 and the standard deviation is 2,291, at a value of *p* = 0.009, meaning that there was a difference in the level of anxiety scores between the intervention group and the control group also study conclude that socialization and application of smile therapy in health services, especially maternity nursing, will be beneficial for improving maternal welfare during the maternal period (pregnancy, maternity and post-partum).

3. Discussion the Study of Difference Between Postpartum Women Demographic Characteristic and the Effectiveness of smile therapy: Result show that there is highly significant difference between newborn gender and effectiveness of therapy at *p* value at. 008 this might because of cultural preference differences between male and female gender.

Also, result indicate that there is significant difference between economic status of the family and effectiveness of therapy at *p* value of. 041, might be because of bad impact of poor economy on psychological health and vice versa.

Conclusion

Study conclude that smile is effective therapy for improve postpartum mothers' psychological health as it deceases level of stress, anxiety and depression scores

Recommendation

Study recommended to apply smile therapy in most of care provided for postpartum women.

References

1. Macpherson AR, Reid M, Dautovich N. Smiling in media: Impacts and implications. *Psychology of Popular Media*. 2022.
2. *International Journal of Molecular Sciences*. 2022;23(22):13932.
3. Fawcett EJ, Fairbrother N, Cox ML, White IR, Fawcett JM. The prevalence of anxiety disorders during pregnancy and the postpartum period: Multivariate Bayesian meta-analysis. *The Journal of Clinical Psychiatry*. 2019, 80(4). DOI:10.4088/jcp.18r12527
4. *Frontiers in Global Women's Health*. 2022;3:834040.
5. KJ DJ. The impact of smile on human interactions: A psychological perspective. *International Journal of Indian Psychology*. 2019, 7(1).
6. Cross MP, Acevedo AM, Leger KA, Pressman SD. How and why could smiling influence physical health? A conceptual review. *Health Psychology Review*. 2023;17(2):321-343. DOI:10.1080/17437199.2022.2052740
7. Thakur K, Sharma SK. Nurse with smile: Does it make difference in patients' healing? *Industrial Psychiatry Journal*. 2021;30(1):6.
8. Low SR, Bono SA, Azmi Z. The effect of emotional support on postpartum depression among postpartum mothers in Asia: A systematic review. *Asia-Pacific Psychiatry*. 2023;15(2-3):e12528. DOI:10.1111/appy.12528
9. Sriyatin S. The effect of smile therapy and education in pregnancy on decreasing levels of anxiety in prim gravid. *Journal of Maternity Care and Reproductive Health*. 2019, 2(1).