

Life Satisfaction, Marital Satisfaction and their Association with Postpartum Depression among Mothers, Colombo, Sri Lanka

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Abstract— Postpartum depression (PPD), medical illness occurs after the delivery of a baby up to a year, involves feeling of sadness, anxiety, changes in sleep and appetite and risky for the mother and baby (American Psychiatric Association, 2017). Globally 13% of the mothers' experience PPD, in developing countries it is 19.8% (WHO, 2020). The rate for PPD for Sri Lanka is 15% (Jaufer, 2017). This research investigates the life satisfaction, marital satisfaction and their impact on PPD among mothers. There is a scarcity in research related to mental wellbeing of mothers within the health context of Sri Lanka. Descriptive cross-sectional quantitative study was conducted in the Colombo district among 200 postpartum mothers from public maternity clinics. The socio demographic characteristics questionnaire, Edinburg Post Natal Depression scale, Satisfaction with Life scale (SWLS) by Ed. Diner and ENRICH marital satisfaction scale (Fowers, 1993) were used. Data was analyzed by SPSS software 24. Life satisfaction has a significant low negative relationship with PPD. Marital satisfaction has moderate negative significant relationship with PPD. Marital satisfaction has a low positive relationship with life satisfaction. Life satisfaction and marital satisfaction has independent significant relationships with PPD. Marital satisfaction has low significant positive relationship with life satisfaction. Postpartum depression is a concern for Sri Lanka and worldwide. The life, marital satisfaction and other demographics have an impact on PPD

Index Terms— Postpartum depression, Colombo, Life satisfaction, marital satisfaction.

I. INTRODUCTION

Whether a woman is new to motherhood or having a second or third child, but the period after the delivery can be challenging in many ways. During this period biological, psychological, financial and social changes occur in most mothers. Some women are at risk for developing mental health problems such as depression and anxiety during this period. Most may experience a phenomenon called baby blues, which is a period of feeling low, sad, and hopeless and other negative emotions, but they usually pass within a few days and are not necessarily detrimental to the wellbeing of the mother, baby or anyone in the social unit. However, some may experience more severe symptoms with longer terms effects. The baby blues affect 30-75% of first time mothers and will last up to only two weeks after the delivery. In baby blues, mothers will have low mood and feel mildly depressed with feeling irritable, sudden crying without any reason. Baby

blues are due to hormonal and chemical changes happen after a child birth (NHS, 2018).

However, if the baby blue symptoms lasts more than two weeks, it may be a sign of postpartum depression (PPD). Postpartum depression (PPD) is a serious medical illness which makes the mother extremely sad, anxious with changes in energy, sleep, and appetite which can be treated and is highly risky for the mother and the baby which can last up to one year after the delivery (American Psychiatric Association, 2017). When this is not treated, it can affect the health of the mother, interpersonal relationships, mother baby bonding and the cognitive development of the baby (Agarwala et. al, 2019). It is reported that even though 13% suffered from PPD, and identification and diagnosis is a challenge as it is covertly suffered (Beck & Tatano, 2001). PPD is sometimes difficult to identify from depression that may happen at other times in a women's life. But in PPD the negative thoughts are mainly associated with the newborn baby and 10-15% women experience PPD. If PPD is not treated Pervasive depressed mood, suicidal ideation and sometimes obsession/ns can occur, associated with thoughts or gruesome images of harming the baby (Rai et.al, 2015). Mild cases of PPD can be treated through counseling while severe cases may require antidepressants and psychotherapy (NHS, 2018).

This research is conducted to see how life satisfaction, marital satisfaction and their impact on Post-partum depression. Marital satisfaction is the attitude of a person towards the marital relationship (King, 2016). Marriage is the most important human relationship which gives the basic structure to build the family relationship to make the next generation (Tummala, 2008) however it is also indicated that marital satisfaction is not easy to accomplish. However, a study done on marital change across the transition to parenthood discovered that the experiences of the spouse's on their mates and of the marital relationship changed from the last trimester of the pregnancy through three years of post-partum. In other words, the quality of the marital relationship deteriorates modestly throughout the first three years of the infant's life (Belsky & Rovine, 1990). Husband's helpful attitude, love and care during pregnancy and especially after the delivery will help her to not to have PPD and also to remain satisfied with her life (Munaf & Siddiqui, 2013).

Life satisfaction is a judgment from a person regarding how the life is overall. Life satisfaction is a main part of subjective well being (Diener, 1984). The life satisfaction can be measured using the tool (SWLS) satisfaction with life scale (Pavot & Diener, 1993). People

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answer the questions of this tool using their judgments of life satisfaction and therefore they are the evidence of the satisfaction of life (Tiberius, 2014). Life satisfaction is an important factor for psychological well being during the post natal period. Life satisfaction is related with social support from family, financial status and marital satisfaction. Life satisfaction is significantly related to social support (Aquino et al., 1996).

Postpartum depression, still PPD is a under diagnosed condition in developing countries like Sri Lanka. There are 385000 births occurred in every year Sri Lanka, and fifteen percent out of this experience post-partum depression. Sri Lanka lacks research on Postpartum depression. However, it is reported that 13% of the mothers of postpartum experience a mental disorder, especially depression. It is stated that in Sri Lanka a national estimate for PPD isn't documented the Edinburgh postnatal depression scale is used in Sri Lanka and a large research was conducted in Puttalam in 2004. The prevalence rate was 32.1% for PPD in Puttalam, Sri Lanka (Agampodi et.al, 2011).

II. AIMS AND OBJECTIVES

The below are mentioned are the main hypotheses of this research.

Hypotheses:

1. H1: Life satisfaction significantly has a relationship with PPD
H0: Life satisfaction significantly hasn't a relationship with PPD
2. H1: Marital satisfaction significantly has a relationship with PPD
H0: Marital satisfaction significantly hasn't a relationship with PPD
3. H1: Life satisfaction significantly has a relationship with Marital satisfaction
H0: Life satisfaction significantly hasn't a relationship with marital satisfaction

Other than the main objectives, this study will explore the below mentioned relationships as well:

- Life satisfaction and age of the mother
- Life satisfaction and status of marriage
- Life satisfaction and level of education
- Life satisfaction and level of income of the mother
- Life satisfaction and the number of children
- Life satisfaction and past mental condition treatment
- Life satisfaction and employment status of the mother
- Marital satisfaction and age of the mother
- Marital satisfaction and level of education
- Marital satisfaction and marital status
- Marital satisfaction and level of income
- Marital satisfaction and number of children
- Marital satisfaction and past mental health treatment
- Marital satisfaction and employment status
- Past mental health treatment and Postpartum depression
- Postpartum depression and age of the mother
- Postpartum depression and status of marriage
- PPD and number of children
- PPD and level of education

- PPD and employment status
- PPD and level of income

III. METHODOLOGY

This is a descriptive cross-sectional study and was conducted from October to December 2019 at the Sri Lanka's Government maternity clinics in the Colombo district. The study was approved by the Ethics Review committee of University of West London. Sri Lanka, Colombo district Local clearance of permission was granted by the Provisional Director and Regional Director of Health services, Western Province, Sri Lanka advising all Medical officers of Health to support with this research. In Sri Lanka Health services are given by the central and provisional health authorities. The Family health bureau is the main organization of the ministry of health Sri Lanka for planning and implementing health services for maternal and child.

Public Health Midwife area is the smallest health unit and the mothers in each area must attend these clinics once a month to health services rendered free of charge by the government. Data collection was conducted on the days that the mothers attended the clinics for vaccinations for the babies. PPD develops from four weeks after the delivery up to one year. So, the vaccinations days of the clinics were chosen as the post partum mothers will visit on these days.

IV. PARTICIPANTS

There are 385000 births occurred in every year Sri Lanka, and fifteen percent out of this experience post partum depression (Isuru et. al, 2016). The formula for estimating a sample from a population with absolute precision (Lwanga & Lemshow, 1991) was used to find the sample size. The formula used is $n = z^2 * p (1-p) / d^2$.

level was at 95% with a 10% of non-respondent rate were assumed with a Z score of 1.96. PPD rate is 15% in Colombo, Sri Lanka (Isuru et. al, 2016). Therefore the "p" value used is 0.15. And the sample size calculated was 200. According to the target population a sample of two hundred mothers N= 200 were selected through random purposive sampling from the Colombo district. The inclusion criteria were the mothers who have babies less than one year and who attend public maternity health clinics,

The exclusion criteria were the mothers who attend private hospital maternity clinics. A small percentage of the mothers in Sri Lanka will attend private health services at private clinics. Since these services are taken through paid appointments, the mothers were not feasible to approach and they were excluded from the sample as its small percentage of Sri Lanka. Mothers below 18 years were excluded because if they are diagnosed with psychological or a significant physical illness which will deduct the capacity to give consent to answer all the questionnaires.

V. RESULTS

The research was conducted among 200 mothers in their postpartum period; the first year after the birth of the child. The mothers were recruited for the research through local government maternity clinics in the Colombo district, Sri Lanka with a response rate of 100%.

Table 1 Descriptive Statistics on age and the number of children in the family (N=200)

	Minimum	Maximum	Mean	Std. Deviation
Age	18.00	42.00	29.20	5.81
no. of children in the family	1.00	4.00	1.78	.83

The maximum age of the mother from the entire sample was 42 years while the minimum was 18 year $M= 29.2(SD=5.8)$. The maximum no of children in the family was 4 and minimum was 1, with an average of approximately 2 children per family.

Table 2. Percentages of participants in various marital status categories (N=200)

Marital status	Frequency	Percent
Married	187	93.5
Separated	5	2.5
Divorced	3	1.5
Never married	5	2.5
Total	200	100.0

The largest portion of the sample was married (93.5%) whereas 5% was separated, 3% divorced and 5% was never married.

Table 3 Level of education of the participants (N=200)

Level of education	Frequency	Percent
Never attended school	2	1.0
Completed grades 1-5	9	4.5
Completed grades 5-10	22	11.0
G.C.E.O/L	80	40.0
G.C.E. A/L	46	23.0
Diploma	12	6.0
Undergraduate	21	10.5
Post graduate diploma	8	4.0
Total	200	100.0

The largest portion of the sample was G.C.E.O/L qualified which is 40%, 23% was G.C.E.A/L qualified, 11% was with the education from Grades 5-10, while 10.5% was undergraduate degree, 6% was with diploma level education, 4.5% of the sample has received Grades 1-5 education while 1% remained without any education from a school.

Table 4 Employed Status of the participants (N=200)

Employment status	Frequency	Percent
Yes	62	31.0
No	138	69.0

Majority of the mothers 69.0% reported they are not employed at present. While 31% reported that they are employed.

Table 5 Monthly income of the mother (N=200)

Monthly income of the mother	Frequency	Percent
below 10,000	6	3.0
10,000 plus – 30,000	21	10.5
30,000 plus-50,000	22	11.0
50,000 plus-70,000	8	4.0
70,000 plus - 90,000	1	.5
90,000 plus and above	10	5.0
I don't want to answer	2	1.0
not applicable	130	65.0

Since a large portion of the mothers were not employed, 65% reported that monthly income demographic question was not applicable. And others reported with their respective income categories. Spearman correlation analysis was carried out to explore whether life satisfaction has or hasn't a relationship

with postpartum depression. The results showed a low negative correlation which was statistically significant. $r(200) = -.41, p= 0.00, p < 0.05$. When Life satisfaction is increased PPD decreases slightly; therefore, life satisfaction has a low negative relationship and is a significant predictor of PPD. When Life satisfaction is increased PPD decreases

slightly; therefore, life satisfaction has a low negative relationship and is a significant predictor of PPD.

A Kruskal-Wallis H test showed that there was a statistically significant difference in Life satisfaction between the levels of marital status, $\chi^2(2) = 17.5, p = 0.001$.

The highest mean value of life satisfaction belongs to the never attended education level category $M= 29.0$ while the lowest is the Grades 1-5 education category $M= 20.44$.

A Kruskal-Wallis H test showed that there was a statistically significant difference in Life satisfaction between the levels of education, $\chi^2(2) = 31.56, p = 0.00$.

The highest mean values of life satisfaction and level of income is for, I don't want to answer category which is $M=30.0$ and lowest mean value is for the not applicable category which is $M=24.83$.

Life satisfaction with no past mental health condition was statistically higher than with the mothers who had a past mental health condition. However, a Mann Whitney test indicated that there is no significant relationship among life satisfaction with people who received or not for past mental health condition, $U= 658.0, p>0.05$

The test of normality showed that both variables were not normally distributed. Therefore, a spearman correlation analysis was carried out to explore whether marital satisfaction is related to PPD.

A Kruskal-Wallis H test showed that there was a statistically significant difference in Marital satisfaction and between the levels of marital status, $\chi^2(2) = 13.02, p = 0.01$, with a mean rank for married 100.9, for separated 38.9, for divorced 12.0. A Kruskal-Wallis H test showed that there wasn't a statistically significant difference in marital satisfaction between the levels of income, $\chi^2(2) = 6.3, p = 0.4$ also with the highest mean value for the group 50,000-70,000 which is $M=44.2$.

In the sample of 200 mothers, nine mothers had treatment for past mental health condition and also shows a significant score in Edinburgh post partum depression scale, where as 191 reports no past mental health treatment or scores to further test on PPD from the scale total.

The Mean score for Edinburgh total with a past mental condition ($M=15.0, SD=6.5$) is higher that with no past mental health condition ($M= 9.4, SD= 6.9$).

A Kruskal-Wallis H test showed that there was a statistically significant difference in Edinburgh total and between the levels of marital status, $\chi^2(2) = 18.2, p = 0.00$, with a mean rank for married 95.6, for separated 152.1, for divorced 173.1, and never married 175.0. The highest mean rank score for the Edinburgh total was in never married category.

A Kruskal-Wallis H test showed that there wasn't a statistically significant difference in PPD between the levels of income, $\chi^2(2) = 8.5, p = 0.28$. Therefore no relationship was found between PPD and level of income of the mother.

The inferential analyses using non parametric tests gave a variety of results for the hypotheses of this research. Life satisfaction has a significant low negative relationship with PPD. However Life satisfaction has no associations with the age of the mother, past mental health treatment, present employment status, number of children in the family or the monthly income of the mother. On the other hand Life satisfaction showed a statistical significant difference

between life satisfaction and with level of education of the mother and the status of marriage.

Marital satisfaction has moderate negative significant relationship with postpartum depression. Marital satisfaction has no relationship with age of the mother, number of children and employment status of the mother. Marital satisfaction had no statistical difference with level of income, while showing significant difference with level of education and past treatment for a mental health condition. Marital satisfaction further reported significant difference with each level of marital status such as married, separated and divorced. The never married component of the sample which was only four participants was not included while measuring the statistical difference with marital satisfaction.

Marital satisfaction has a low positive relationship with life satisfaction. The five mothers with past mental health treatment scored higher for the Edinburgh depression scale and the Levene's test for equality variance resulted that the past mental health treatment is not a significant predictor of Postpartum depression. PPD had no associations with number of children in the family, present employment status, level of monthly income, employment status and the age of the mother. But PPD resulted in a statistically significant difference with marital status and with level of education. Following the main the hypotheses, Life satisfaction and marital satisfaction has independent significant relationships with postpartum depression at different levels of strength while marital satisfaction has low significant positive relationship with life satisfaction.

VI. CONCLUSION

The results of this present study on life satisfaction, marital satisfaction and their associations with PPD in Colombo district, Sri Lanka reported low negative significant relationship between life satisfaction and PPD, while a moderate negative relationship between Marital satisfaction and PPD. By being consistent with past research marital satisfaction was positively correlated with life satisfaction in the sample while resulting no significance between past mental health treatment and PPD. All these are psychosocial variables which cannot be isolated as it can cause complex problems. Therefore making predictions through these statistical results is impossible. However it is extremely important to diagnose postpartum depression and reach treatment options such as psychotherapy and anti depressant medication. Otherwise PPD can affect the mother, baby, and the whole family structure.

Modern Western Cultures view postpartum depression in an individualistic view, while the mothers in Asia like Sri Lanka relies on practical and emotional social support. In Asian cultures give prescribed diets and specific activities to facilitate recovery and restore physical balance in mothers after a birth which are protective factors against PPD. In Japan a mother will get support complete from the family during first two postpartum months so that she can rest. The mothers in China, Taiwan, Hong Kong, Singapore and Vietnam have to engage in a postpartum convalescence period during first postpartum month (Arther, 2009). Therefore the impact from cultural variables is important in Asian postpartum mothers.

However the Edinburgh Postnatal depression scale is now used as a screening tool in primary health care system such as the government maternity clinics in Sri Lanka. The questionnaire is given for the mother in the first postpartum month to fill during the clinic visit. If a mother gets nine or more in the score then she will be referred to a psychiatrist in a government hospital for further assessments. Still the mothers in Sri Lanka is reluctant to fill and give as the Sri Lankan Society consists of range of cultural taboos such as having a psychological problem or mental disorder is a disgrace or shame for the mother and whole family. Therefore the population seeking for mental health treatments is low which leads to low screening and under diagnosed.

VII. RECOMMENDATIONS

As the present research highlighted, Sri Lankan maternal health care will improve by making awareness of PPD among the public, increase screening, follow-ups on mothers with risk of developing PPD, monitoring and record keeping on employment history, level of income, number of children, past mental health history, marital status and education level of mothers who visit the government maternity clinics which can be helpful for early detection of risk for PPD. To prevent relapses, routine checkups are recommended at maternity clinics.

The public mid wives, medical officers of health and other related health staff will benefit by receiving specialized training on postpartum depression and treatment options. Further most importantly Sri Lanka government, policy makers, mental health workers such as psychologists, counselors must educate the public on importance of mental health, maternal mental health, empower family units, couple on ways of improving marital, sexual satisfaction which will increase life satisfaction. Culturally sensitive appropriate counseling programs must be integrated into maternal health care sector. It is important for the Sri Lanka population to improve quality of life through quality leisure time which will improve physical and psychological well being of the entire country population.

VIII. FUTURE RESEARCH

Maternal health is less explore in Sri Lanka, especially postpartum depression and its predictors. Also qualitative studies are scarce in Sri Lanka which can capture lived experiences of the mothers. Therefore the maternal health care in Sri Lanka will benefit by conducting more quantitative and qualitative research regarding postpartum depression and interventions. Longitudinal studies with larger sample covering the entire country are suggested. Culturally appropriate interventions must be developed through research for women with PPD or risk. Exploring on paternal health and paternal depression after a birth of new born baby is also scarce in Sri Lanka.

REFERENCES

- [1] Hori, M. (2017). Full-Time Employment and Marital Satisfaction among Women in East Asian Societies. *Comparative Sociology*, 16(6), 771–787. <https://doi.org/10.1163/15691330-12341444>
- [2] Levenson, R. W., Carstensen, L. L., & Gottman, J. M. (1993). Long-term marriage: Age, gender, and satisfaction. *Psychology and Aging*, 8(2), 301–313. <https://doi.org/10.1037/0882-7974.8.2.301>
- [3] Marini, M. M. (1980). Effects of the Number and Spacing of Children on Marital and Parental Satisfaction. *Demography*, 17(3), 225. <https://doi.org/10.2307/2061101>
- [4] Sharma, I., Rai, S., & Pathak, A. (2015). Postpartum psychiatric disorders: Early diagnosis and management. *Indian Journal of Psychiatry*, 57(6), 216. <https://doi.org/10.4103/0019-5545.161481>
- [5] Unger, D. G., & Wandersman, L. P. (1985). Social Support and Adolescent Mothers: Action Research Contributions to Theory and Application. *Journal of Social Issues*, 41(1), 29–45. <https://doi.org/10.1111/j.1540-4560.1985.tb01115.x>
- [6] Whiffen, V. E. (1988). Vulnerability to postpartum depression: A prospective multivariate study. *Journal of Abnormal Psychology*, 97(4), 467–474. <https://doi.org/10.1037/0021-843x.97.4.467>
- [7] (2012, April 12). The relationship between marital status and life satisfaction among South African adults [Review of The relationship between marital status and life satisfaction among South African adults]. First submission: 12 April 2012.
- [8] (n.d.). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1508186/pdf/mjph00014-0094.pdf>
- [9] (n.d.). https://www.researchgate.net/publication/221799209_Postpartum_depression_-_a_problem_that_needs_urgent_attention
- [10] (n.d.). Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: from neurobiology to clinical practice. *Psychiatry (Edmont (Pa. : Township))*, 4(5), 35–40.
- [11] (n.d.). Family Planning Prevalence Among Postpartum Mothers Attending Child Welfare Clinics – A Sri Lankan Experience July 2009 *Indian Journal of Community Medicine* 34(3):265-6 [Review of Family Planning Prevalence Among Postpartum Mothers Attending Child Welfare Clinics – A Sri Lankan Experience July 2009 *Indian Journal of Community Medicine* 34(3):265-6].
- [12] (n.d.). Leisure and Marital Satisfaction in Intercultural Marriages Iryna Sharaievska, Jungeun Kim & Monika Stodolska [Review of Leisure and Marital Satisfaction in Intercultural Marriages Iryna Sharaievska, Jungeun Kim & Monika Stodolska].
- [13] (n.d.). Life Satisfaction Among Rural Low-Income Mothers: The Influence of Health, Human, Personal, and Social Capital • Sheila Mammen, • Jean W. Bauer & • Daniel Lass.
- [14] (n.d.). Mazaheri, M. A., Rabiei, L., Masoudi, R., Hamidzadeh, S., Nooshabadi, M. R., & Najimi, A. (2014). Understanding the factors affecting the postpartum depression in the mothers of Isfahan city. *Journal of education and health promotion*, 3, 65. <https://doi.org/10.4103/2277-9531.134784> [Review of Mazaheri, M. A., Rabiei, L., Masoudi, R., Hamidzadeh, S., Nooshabadi, M. R., & Najimi, A. (2014). Understanding the factors affecting the postpartum depression in the mothers of Isfahan city. *Journal of education and health promotion*, 3, 65. <https://doi.org/10.4103/2277-9531.134784>].
- [15] (n.d.). Relation of Maternal Role Concepts to Parenting, Employment Choices, and Life Satisfaction Among Japanese Women • Susan D. Holloway, • Sawako Suzuki, • Yoko Yamamoto & • Jessica Dalesandro Mindnich [Review of Relation of Maternal Role Concepts to Parenting, Employment Choices, and Life Satisfaction Among Japanese Women • Susan D. Holloway, • Sawako Suzuki, • Yoko Yamamoto & • Jessica Dalesandro Mindnich].
- [16] (n.d.). SOME DIFFERENTIALS OF THE MARITAL SATISFACTION OF FRENCH WORKING WIVES IN THE PARIS AREA [Review of SOME DIFFERENTIALS OF THE MARITAL SATISFACTION OF FRENCH WORKING WIVES IN THE PARIS AREA].
- [17] (n.d.). The prevalence of postpartum depression The relative significance of three social status indices • Lisa S. Segre PhD, • Michael W. O'Hara PhD, • Stephan Arndt PhD & • Scott Stuart MD [Review of The prevalence of postpartum depression The relative significance of three social status indices • Lisa S. Segre PhD, • Michael W. O'Hara PhD, • Stephan Arndt PhD & • Scott Stuart MD].
- [18] (n.d.). Ziaee, T., Jannati, Y., Mobasheri, E., Taghavi, T., Abdollahi, H., Modanloo, M., & Behnampour, N. (2014). The Relationship between Marital and Sexual Satisfaction among Married Women Employees at Golestan University of Medical Sciences, Iran. *Iranian journal of psychiatry and behavioral sciences*, 8(2), 44–51. [Review of Ziaee, T., Jannati, Y., Mobasheri, E., Taghavi, T., Abdollahi, H., Modanloo, M., & Behnampour, N. (2014). The Relationship between Marital and Sexual Satisfaction among Married Women Employees at Golestan University of Medical Sciences, Iran. *Iranian journal of psychiatry and behavioral sciences*, 8(2), 44–51.]
- [19] A CORRELATION STUDY BETWEEN POSTPARTUM DEPRESSION AND PSYCHOSOCIAL FACTORS-- 《Acta Academiae Medicinae Qingdao Universitatis》2009年04期. (n.d.).

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- En.Cnki.Com.Cn. Retrieved April 4, 2020, from http://en.cnki.com.cn/Article_en/CJFDTOTAL-BATE200904016.htm
- [20] A Mobarakabadi, Reza Fallahchai, & Mahin Askari. (2014). The Relationship between Marital Satisfaction and Postpartum Depression in Women who Visited Health Centers in Bandar Abbas city. <https://www.semanticscholar.org/paper/The-Relationship-between-Marital-Satisfaction-and-Mobarakabadi-Fallahchai/1be9ee96fa6046f16a64a93dc332398756d93c15>
- [21] Aasheim, V., Waldenström, U., Hjelmstedt, A., Rasmussen, S., Pettersson, H., & months postpartum. Schytt, E. (2012). Associations between advanced maternal age and psychological distress in primiparous women, from early pregnancy to 18 BJOG: An International Journal of Obstetrics & Gynaecology, 119(9), 1108–1116. <https://doi.org/10.1111/j.1471-0528.2012.03411.x>
- [22] Aasheim, V., Waldenström, U., Rasmussen, S., Espeshaug, B., & Schytt, E. (2014). Satisfaction with life during pregnancy and early motherhood in first-time mothers of advanced age: a population-based longitudinal study. BMC Pregnancy and Childbirth, 14, 86. <https://doi.org/10.1186/1471-2393-14-86>
- [23] Abebe, A., Tesfaw, G., Mulat, H., Hibde, G., & Yohannes, kalkidan. (2019). Postpartum depression and associated factors among mothers in Bahir Dar Town, Northwest Ethiopia. Annals of General Psychiatry, 18(1). <https://doi.org/10.1186/s12991-019-0244-4>
- [24] Andrews-Fike, C. (1999). A Review of Postpartum Depression. Primary Care Companion to the Journal of Clinical Psychiatry, 1(1), 9–14. <https://doi.org/10.4088/pcc.v01n0103>
- [25] Angeles, L. (2010). Erratum to: Children and Life Satisfaction. Journal of Happiness Studies, 11(4), 539–539. <https://doi.org/10.1007/s10902-010-9196-8>
- [26] APA PsycNet. (n.d.). Psycnet.Apa.Org. Retrieved April 4, 2020, from <https://psycnet.apa.org/record/1989-26081-001>
- [27] Appolonio, K. K., & Fingerhut, R. (2008). Postpartum Depression in a Military Sample. Military Medicine, 173(11), 1085–1091. <https://doi.org/10.7205/milmed.173.11.1085>
- [28] Ayoub, K., Shaheen, A., & Hajat, S. (2017). Prevalence and associated factors of post-partum depression in Palestinian mothers: a cross-sectional study. The Lancet, 390, S31. [https://doi.org/10.1016/s0140-6736\(17\)32032-9](https://doi.org/10.1016/s0140-6736(17)32032-9)
- [29] Ball, R. E., & Robbins, L. (1986). Marital Status and Life Satisfaction among Black Americans. Journal of Marriage and the Family, 48(2), 389. <https://doi.org/10.2307/352406>
- [30] Barnes, D. L. (2006). Postpartum Depression: Its Impact on Couples and Marital Satisfaction. Journal of Systemic Therapies, 25(3), 25–42. <https://doi.org/10.1521/j Syst.2006.25.3.25>
- [31] Beck, C. T. (2002). Postpartum Depression: A Metasynthesis. Qualitative Health Research, 12(4), 453–472. <https://doi.org/10.1177/104973202129120016>
- [32] Belsky, J., & Rovine, M. (1990). Patterns of Marital Change across the Transition to Parenthood: Pregnancy to Three Years Postpartum. Journal of Marriage and the Family, 52(1), 5. <https://doi.org/10.2307/352833>
- [33] Bergant, A. M., Heim, K., Ulmer, H., & Illmensee, K. (1999). Early postnatal depressive mood. Journal of Psychosomatic Research, 46(4), 391–394. [https://doi.org/10.1016/s0022-3999\(98\)00116-0](https://doi.org/10.1016/s0022-3999(98)00116-0)
- [34] Berger, E. M. (2012). Happy Working Mothers? Investigating the Effect of Maternal Employment on Life Satisfaction. Economica, 80(317), 23–43. <https://doi.org/10.1111/j.1468-0335.2012.00932.x>
- [35] Carr, D., Freedman, V. A., Cornman, J. C., & Schwarz, N. (2014). Happy Marriage, Happy Life? Marital Quality and Subjective Well-being in Later Life. Journal of Marriage and Family, 76(5), 930–948. <https://doi.org/10.1111/jomf.12133>
- [36] Cooke, L. P., & Gash, V. (2010). Wives' Part-time Employment and Marital Stability in Great Britain, West Germany and the United States. Sociology, 44(6), 1091–1108. <https://doi.org/10.1177/0038038510381605>
- [37] Curtis, L. (2008). Encyclopedia of Aging and Public Health2008309Edited by Sane Loue and Martha Sajatovic. Encyclopedia of Aging and Public Health. Berlin and Heidelberg: Springer 2008. xxii+843 pp., ISBN: 978 0 387 33753 1 £168.50 \$299. Reference Reviews, 22(7), 30–31. <https://doi.org/10.1108/09504120810905178>
- [38] Definition Of Life Satisfaction Psychology Essay. (2018). UKEssays.Com. <https://www.ukessays.com/essays/psychology/definition-of-life-satisf-action-psychology-essay.php>
- [39] Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. Journal of Personality Assessment, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- [40] Encyclopedia of Quality of Life and Well-being Research2015 251 Edited by Alex C. Michalos Encyclopedia of Quality of Life and Well-being Research Dordrecht Springer 2014 9789400707535. (2015). Reference Reviews, 29(7), 22–22. <https://doi.org/10.1108/rr-06-2015-0143>
- [41] Fan, Q., Long, Q., De Silva, V., Gunarathna, N., Jayathilaka, U., Dabrera, T., Lynn, H., & Østbye, T. (2020). Prevalence and risk factors for postpartum depression in Sri Lanka: A population-based study. Asian Journal of Psychiatry, 47, 101855. <https://doi.org/10.1016/j.ajp.2019.101855>
- [42] Fergusson, D. M., McLeod, G. F. H., Horwood, L. J., Swain, N. R., Chapple, S., & Poulton, R. (2015). Life satisfaction and mental health problems (18 to 35 years). Psychological Medicine, 45(11), 2427–2436. <https://doi.org/10.1017/s0033291715000422>
- [43] Fox, A. (2016). Postpartum Depression and Birth Experiences. https://sophia.stkate.edu/cgi/viewcontent.cgi?article=1581&context=msw_papers
- [44] Gjerdingen, D. K., & Chaloner, K. M. (2020). The relationship of women's postpartum mental health to employment, childbirth, and social support. Journal of Family Practice, 38(5), 465–473. <https://go.gale.com/ps/anonymous?id=GALE%7CA15448196&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00943509&p=AO NE&sw=w>
- [45] Gotlib, I. H., Whiffen, V. E., Mount, J. H., Milne, K., & Cordy, N. I. (1989). Prevalence rates and demographic characteristics associated with depression in pregnancy and the postpartum. Journal of Consulting and Clinical Psychology, 57(2), 269–274. <https://doi.org/10.1037/0022-006x.57.2.269>
- [46] Goyal, D., Gay, C., & Lee, K. A. (2010). How Much Does Low Socioeconomic Status Increase the Risk of Prenatal and Postpartum Depressive Symptoms in First-Time Mothers? Women's Health Issues, 20(2), 96–104. <https://doi.org/10.1016/j.whi.2009.11.003>
- [47] Hadizadeh Talasaz, Z., Nourani Saadoldin, S., & Shakeri, M. T. (2016). Job Satisfaction and Occupational Stress in Organizational Commitment Among Midwives Working in the Maternity Wards; Mashhad, Iran, 2014. Health Scope, 6(1). <https://doi.org/10.17795/jhealthscope-35507>
- [48] Han, K.-T., Park, E.-C., Kim, J.-H., Kim, S. J., & Park, S. (2014). Is marital status associated with quality of life? Health and Quality of Life Outcomes, 12(1). <https://doi.org/10.1186/s12955-014-0109-0>
- [49] Jan, M., & Masood, T. (2008). An Assessment of Life Satisfaction among Women. Studies on Home and Community Science, 2(1), 33–42. <https://doi.org/10.1080/09737189.2008.11885250>
- [50] Jose, O., & Alfons, V. (2007). Do Demographics Affect Marital Satisfaction? Journal of Sex & Marital Therapy, 33(1), 73–85. <https://doi.org/10.1080/00926230600998573>
- [51] Kalhor, M., & Olyaie, N. (2016). Relationship between Marital Satisfaction and Mental Health of Married Women Referring to Health Centers in Sanandaj, Iran in 2014. Global Journal of Health Science, 9(1), 19. <https://doi.org/10.5539/gjhs.v9n1p19>
- [52] Kim, H.-S. (2011). Impacts of Social Support and Life Satisfaction on Depression among International Marriage Migrant Women in Daegu and Kyungpook Area. Journal of Korean Academy of Psychiatric and Mental Health Nursing, 20(2), 188. <https://doi.org/10.12934/jkpmhn.2011.20.2.188>
- [53] King, M. E. (2016). Marital Satisfaction. Encyclopedia of Family Studies, 1–2. <https://doi.org/10.1002/9781119085621.wbefs054>
- [54] Klainin, P., & Arthur, D. G. (2009). Postpartum depression in Asian cultures: A literature review. International Journal of Nursing Studies, 46(10), 1355–1373. <https://doi.org/10.1016/j.ijnurstu.2009.02.012>
- [55] Klainin, P., & Arthur, D. G. (2009). Postpartum depression in Asian cultures: A literature review. International Journal of Nursing Studies, 46(10), 1355–1373. <https://doi.org/10.1016/j.ijnurstu.2009.02.012>
- [56] Koukoulis, S., Vlachonikolis, I., & Philalithis, A. (2002). Socio-demographic factors and self-reported functional status: the significance of social support. BMC Health Services Research, 2(1). <https://doi.org/10.1186/1472-6963-2-20>
- [57] Kourou, C. D., Papp, L. M., & Cummings, E. M. (2008). Interrelations and moderators of longitudinal links between marital satisfaction and depressive symptoms among couples in established relationships. Journal of Family Psychology, 22(5), 667–677. <https://doi.org/10.1037/0893-3200.22.5.667>
- [58] Kousha, M., & Mohseni, N. (1997). Social Indicators Research, 40(3), 329–357. <https://doi.org/10.1023/a:1006894525035>
- [59] Lee, D. T. S., Yip, A. S. K., Leung, T. Y. S., & Chung, T. K. H. (2004). Ethnoepidemiology of postnatal depression. British Journal of Psychiatry, 184(1), 34–40. <https://doi.org/10.1192/bjp.184.1.34>

- [60] Lombardo, P., Jones, W., Wang, L., Shen, X., & Goldner, E. M. (2018). The fundamental association between mental health and life satisfaction: results from successive waves of a Canadian national survey. *BMC Public Health*, 18(1). <https://doi.org/10.1186/s12889-018-5235-x>
- [61] Madanian, L., & Mansor, S. M. S. S. (2013). Marital Satisfaction and Demographic Traits in an Emigrant Sample: Rasch Analysis. *Procedia - Social and Behavioral Sciences*, 107, 96–103. <https://doi.org/10.1016/j.sbspro.2013.12.404>
- [62] Małus, A., Szyłuk, J., Galińska-Skok, B., & Konarzewska, B. (2016). Incidence of postpartum depression and couple relationship quality. *Psychiatria Polska*, 50(6), 1135–1146. <https://doi.org/10.12740/pp/61569>
- [63] McMahon, C. A., Boivin, J., Gibson, F. L., Fisher, J. R. W., Hammarberg, K., Wynter, K., & Saunders, D. M. (2011). Older first-time mothers and early postpartum depression: a prospective cohort study of women conceiving spontaneously or with assisted reproductive technologies. *Fertility and Sterility*, 96(5), 1218–1224. <https://doi.org/10.1016/j.fertnstert.2011.08.037>
- [64] Meçe, D. (2013). Postpartum Depression and Marital Relationship. *Academic Journal of Interdisciplinary Studies*, 2(4), 319. <https://www.mcser.org/journal/index.php/ajis/article/view/138>
- [65] Meltzer, A. L., & McNulty, J. K. (2010). Body image and marital satisfaction: Evidence for the mediating role of sexual frequency and sexual satisfaction. *Journal of Family Psychology*, 24(2), 156–164. <https://doi.org/10.1037/a0019063>
- [66] Miller, L. J. (2002). Postpartum Depression. *JAMA*, 287(6), 762. <https://doi.org/10.1001/jama.287.6.762>
- [67] Miyake, Y., Tanaka, K., Sasaki, S., & Hirota, Y. (2011). Employment, income, and education and risk of postpartum depression: The Osaka Maternal and Child Health Study. *Journal of Affective Disorders*, 130(1–2), 133–137. <https://doi.org/10.1016/j.jad.2010.10.024>
- [68] Munaf, S., & Siddiqui, B. (2013). Relationship of Post-natal Depression with Life and Marital Satisfaction and Its Comparison in Joint and Nuclear Family System. *Procedia - Social and Behavioral Sciences*, 84, 733–738. <https://doi.org/10.1016/j.sbspro.2013.06.636>
- [69] Munaf, S., & Siddiqui, B. (2013). Relationship of Post-natal Depression with Life and Marital Satisfaction and Its Comparison in Joint and Nuclear Family System. *Procedia - Social and Behavioral Sciences*, 84, 733–738. <https://doi.org/10.1016/j.sbspro.2013.06.636>
- [70] Muraca, G. M., & Joseph, K. S. (2014). The association between maternal age and depression. *Journal of Obstetrics and Gynaecology Canada: JOGC = Journal d'obstetrique et Gynecologie Du Canada: JOGC*, 36(9), 803–810. [https://doi.org/10.1016/S1701-2163\(15\)30482-5](https://doi.org/10.1016/S1701-2163(15)30482-5)
- [71] Ng, K.-M., Loy, J. T.-C., Gudmunson, C. G., & Cheong, W. (2008). Gender Differences in Marital and Life Satisfaction among Chinese Malaysians. *Sex Roles*, 60(1–2), 33–43. <https://doi.org/10.1007/s11199-008-9503-6>
- [72] O'Hara, M. W. (1986). Social Support, Life Events, and Depression During Pregnancy and the Puerperium. *Archives of General Psychiatry*, 43(6), 569. <https://doi.org/10.1001/archpsyc.1986.01800060063008>
- [73] O'Hara, M. W., & McCabe, J. E. (2013). Postpartum Depression: Current Status and Future Directions. *Annual Review of Clinical Psychology*, 9(1), 379–407. <https://doi.org/10.1146/annurev-clinpsy-050212-185612>
- [74] Odinka, J. I., Nwoke, M., Chukwuorji, J. C., Egbuagu, K., Mefoh, P., Odinka, P. C., Amadi, K. U., & Muomah, R. C. (2018). Post-partum depression, anxiety and marital satisfaction: A perspective from Southeastern Nigeria. *South African Journal of Psychiatry*, 24. <https://www.ajol.info/index.php/sajpsy/article/view/168596>
- [75] Patel, M., Bailey, R. K., Jabeen, S., Ali, S., Barker, N. C., & Osiezagha, K. (2012). Postpartum Depression: A Review. *Journal of Health Care for the Poor and Underserved*, 23(2), 534–542. <https://doi.org/10.1353/hpu.2012.0037>
- [76] Patel, M., Bailey, R. K., Jabeen, S., Ali, S., Barker, N. C., & Osiezagha, K. (2012). Postpartum Depression: A Review. *Journal of Health Care for the Poor and Underserved*, 23(2), 534–542. <https://doi.org/10.1353/hpu.2012.0037>
- [77] Powdthavee, N., Lekfuangfu, W. N., & Wooden, M. (2015). What's the good of education on our overall quality of life? A simultaneous equation model of education and life satisfaction for Australia. *Journal of Behavioral and Experimental Economics*, 54, 10–21. <https://doi.org/10.1016/j.socec.2014.11.002>
- [78] Prasoon, R., & Chaturvedi, K. (n.d.). LIFE SATISFACTION: A LITERATURE REVIEW Life Satisfaction: A literature Review. <http://theresearcherjournal.org/pdfs/01021220163.pdf>
- [79] Predictors of Postpartum Depression: An Update : Nursing Research. (2019). https://journals.lww.com/nursingresearchonline/Abstract/2001/09000/Predictors_of_Postpartum_Depression__An_Update.4.aspx
- [80] Schechter, D., Endicott, J., & Nee, J. (2007). Quality of life of 'normal' controls: Association with lifetime history of mental illness. *Psychiatry Research*, 152(1), 45–54. <https://doi.org/10.1016/j.psychres.2006.09.008>
- [81] Shahrawat, A., & Shahrawat, R. (2017). Application of Maslow's Hierarchy of Needs in a Historical Context: Case Studies of Four Prominent Figures. *Psychology*, 08(07), 939–954. <https://doi.org/10.4236/psych.2017.87061>
- [82] Spangenberg, J. J., & Pieters, H. C. (1991). Factors Related to Postpartum Depression. *South African Journal of Psychology*, 21(3), 159–165. <https://doi.org/10.1177/008124639102100305>
- [83] Spangenberg, J. J., & Pieters, H. C. (1991). Factors Related to Postpartum Depression. *South African Journal of Psychology*, 21(3), 159–165. <https://doi.org/10.1177/008124639102100305>
- [84] Stone, E. A., & Shackelford, T. K. (2007). *Marital Satisfaction*. SAGE Knowledge; SAGE Publications, Inc. <http://sk.sagepub.com/reference/socialpsychology/n323.xml>
- [85] Summon 2.0. (2020). <https://uwl.summon.serialssolutions.com/search?s.q=life+satisfaction+and+level+of+education+link+among+new+mothers&post-search=Submit#>
- [86] Summon 2.0. (n.d.). Uwl.Summon.Serialssolutions.Com. Retrieved April 4, 2020, from <https://uwl.summon.serialssolutions.com/search?s.q=marital+satisfaction+and+post-partum+depression&post-search=Submit#>
- [87] University of West London EZproxy login. (n.d.). <https://www.sciencedirect-com.ezproxy.uwl.ac.uk/science/article/pii/S0140673617320329>
- [88] University of West London EZproxy login. (n.d.). https://www-jstor-org.ezproxy.uwl.ac.uk/stable/352406?pq-origsite=summon&seq=1#metadata_info_tab_contents
- [89] University of West London EZproxy login. (n.d.). <https://search-proquest-com.ezproxy.uwl.ac.uk/docview/197636765?pq-origsite=summon>
- [90] Wan, C. K., Jaccard, J., & Ramey, S. L. (1996). The Relationship between Social Support and Life Satisfaction as a Function of Family Structure. *Journal of Marriage and the Family*, 58(2), 502. <https://doi.org/10.2307/353513>
- [91] Weller, B. K., & Sirin, A. S. (2017). Evaluation of health-related behaviors and attitudes of women during pregnancy in Edirne, Turkey. *Studies on Ethno-Medicine*, 11(1), 55–62. <https://doi.org/10.1080/09735070.2017.1311709>
- [92] What Is Postpartum Depression? (2016). <https://www.psychiatry.org/patients-families/postpartum-depression/what-is-postpartum-depression>
- [93] Wikipedia Contributors. (2019, October 16). *Education in Sri Lanka*. Wikipedia; Wikimedia Foundation. https://en.wikipedia.org/wiki/Education_in_Sri_Lanka
- [94] Yucel, D. (2014). Together, Forever? Correlates of Marital Well-Being. *Social Indicators Research*, 125(1), 257–269. <https://doi.org/10.1007/s11205-014-0832-2>
- [95] Zhang, H., Tsang, S. K., Chi, P., Cheung, Y. T., Zhang, X., & Yip, P. S. (2012). Wives' Relative Income and Marital Satisfaction among the Urban Chinese Population: Exploring Some Moderating Effects. *Journal of Comparative Family Studies*, 43(2), 185–199. <https://doi.org/10.3138/jcfs.43.2.185>
- [96] Zubaran, C., & Foresti, K. (2011). Investigating quality of life and depressive symptoms in the postpartum period. *Women and Birth*, 24(1), 10–16. <https://doi.org/10.1016/j.wombi.2010.05.002>