Social Support and Postpartum Quality of Life During The Postpartum Period

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Abstract

Research on social support and quality of life of puerperal women have not been done. Any support and quality of life assessment puerperal women a barometer of success during childbirth preparation training. The purpose of this study was to examine the influence of social support on postpartum women 's quality of life. The design of this study is a longitudinal repeated measure design. Data were taken at three postnatal visits at home. Location of the study in the district of Miri as the treatment group have given preparatory training during childbirth (*Pelatihan Persiapan Masa Nifas* / PMN)) and sub Sukodono as a control group (never given PMN). 3-40 days postpartum women as research samples, and conducted from June to December 2013. Samples were selected by purposive sampling, with the inclusion criteria postpartum women who are willing to be the respondent, lived with her husband, gave birth to a single infant of gestational age >28 weeks, and have contact with the grandmother or grandmother-in-law or a respected family. Data were collected by questionnaire. Kolmogorov Smirnov normality test and homogeneity of variance with Levene's test 's. Analysis of the characteristics of respondents, the value of social support new mothers, and quality of life with descriptive. The relationship between social support and quality of life of the mother postpartum mothers at each visit new mothers, were analyzed with logistic regression quality of life in visits 1, 2, and 3, the results of Kolmogorov Smirnov normal distribution (p>0.05), and analysis of Levene's test varies homogeneous (p>0,005). Post hoc tests with correction Beferroni showed increased mean quality of life score visit 1 to visit 2 (60,28±8,722 to 61,71±7,651) were significantly (p<0,05), and increased quality of life mean value visit 2 to visit 3 (61,71±7,65 to 62,87±7,90) were significantly (p <0,05).

Keywords: social support, quality of life, new mothers

Background

Postpartum period is one of the periods of crisis in the life of a woman and a difficult period. For couples with a first child, will be a new experience, both wife and husband, so it is perceived confusion, especially wives who would feel the feelings of anxiety, fear, and happy.

Social support is important for the well-being of mothers and infants. Adaptation woman becomes a mother, need social support. Research related to quality of life changes in postpartum women is still limited, although the assessment of quality of life is important. Measurement of quality of life needs to be done fatherly care delivery accuracy, the improvement of the physical, mental and social mother (Bahadoran et al., 2007).

Research on the influence of social support on postpartum women's quality of life is still limited. Search results just obtained an article in Pub Med, Webster et al. (2011) stated that women with less social support had significantly higher scores on the EPDS than enough support for women (p=0,007). Influence of social support on health-related quality of life. Women with family support and low pair has lower scores in all domains, with the largest average difference in social health domain (p=0,000).

Home visits conducted 4 times in support of health personnel. Government policy in the form of visits puerperal women (KF) and neonates. According to researchers, there is the possibility of assessment of social support and

quality of life does home visits, but the assessment of social support and quality of life for new mothers has not been implemented. This research is aimed to examine the difference and the influence of social support scores and also the quality of life of postpartum mothers by home visit 1, 2, and 3.

Method of study

This research employs the static group comparison, with longitudinal repeated measures design. This research employs the static group comparison, with longitudinal repeated measures design. The assessment is conducted three times such as the first assessment/K1 (3rd to 7th day of postpartum), the second assessment/K2 (8th–28th day of postpartum), and the third assessment/K3 (29th – 42nd of postpartum).

A total of 60 mothers were divided into 30 treatment groups, training during childbirth (PMN) in the village of Miri, and 30 mothers of control group (without PMN) in the village Sukodono. The research sample is postpartum mothers from 3 to 40 days. This research is conducted in June to October 2013. The sample is selected by purposive sampling with the inclusion criteria of the postpartum mother that gives birth in pregnancy period >28 weeks, have contact with the grandmother or grandmother-in-law or respected family and living with husband, and wants to be the respondent.

The dependent variable is the postpartum quality of life is the perception of postpartum mothers for their own quality of life. This is based on four sub measured variables of the quality of life by using the quality of life questionnaire Postpartum Quality of Life (PQOL) from Zhou et al. (2009). That has been tested its validity and its reliability. The independent variable that is used in this research is the independent variable, because the social support of postpartum mothers is self illustration that has interacted with the husband or parents and aimed to fulfill needs to be loved, to be respected, and also to be saved. Thus, the mothers will get happiness that can influence mothers' emotion and behavior.

The quality of life postpartum mothers uses the instrument such as a questionnaire about the quality of life of postpartum mothers by translating the Postpartum Quality of Life questionnaire (PQOL) from Zhou et al. (2009) in Indonesian. Social support for postpartum mother uses the instrument such as a questionnaire about social support of postpartum mothers by translating the questionnaire Postpartum Social Support Questionnaire (PSSQ) from Hopkins & Campbell (2008) in Indonesia. Because these questionnaires are chosen they are suitable for the assessment of social support for the postpartum mother. The answer is done by giving score that is appropriate for the perception. The measuring scale with answer range between 1 and 5. The amount of the score is to see the level of social support of postpartum mothers. The higher the score the higher obtained shows social support of postpartum mothers, and vice versa.

Validity testing is conducted with the testing of the Product Moment Correlation Person. The question with significant score>0.05 is tested agained with the different samples until the all of the question have significant score<0.05. Reliability and validity are tested only once, the internal consistency of the test, by counting the alpha reliability coefficient, by using a two-item scale with the Spearman-Brown formula for two-item scale (Azwar, 2010). Reliability scores instrument has completed r≥0,30, therefore the questionnaire has been reliable to be used in data taken. Testing the validity and reliability instrument of this research is conducted in June 2013 to 30 research respondents with the sample that is appropriate for inclusion criteria.

The data are collected by the numerator by home visit. The difficulty and the obstacle are also noted in this research. The possible obstacle is when the mothers are looking after their baby and the only anticipation is waiting till they are free .

The characteristic of postpartum mothers is researched by mothers' ages, educations, and work. Mothers' age is shown in a table that contain mean, median, SD, minimal score (min) and maximal score (max), and 95% confidence Interval. The characteristic of mothers' work and education is shown in a table that contains the amount and the percentage.

The difference score of social support and the quality of life postpartum mothers in every home visit 1, 2, and 3, they are shown in score table that show the minimal-maximal score, mean, range between (gained score), SD, SE, t, p-value, and n. The influence of social support and the quality of life postpartum mothers when visiting home 1, 2, and 3, are shown in this table that contains R^2 (R-*Square*) score, B, influenced variable (X), and P Value.

Result and Discussion

The Characteristic of Respondent

The sample of this research uses 60 postpartum mothers in Sukodono and Miri Subdistrict. The analysis result is the average of mothers' age is about 19,40 years old (95% CI: 18,92-20,15), the median of 19 years old with the standard deviation 3,165 years. For the youngest age is 16 years old, and the oldest ages are 31 years old. The result of estimation interval can be concluded that 95% believed that the mean of mothers' age is between 18,92 to 20,15 years old. Almost distribution is the job of the respondents housewife about 37 persons (62,2%), and there is only a little amount of farmer that is 6 persons (6,7%). The mothers that work as entrepreneurs are 16 persons (26,7%) and civil officers are 3 persons (4,4%). Based on the data above, almost all the mothers are housewives, and then an entrepreneur, and then a farmer.

Almost distribution of education of mothers, senior high school for 22,2%. Almost all the education is junior high school and elementary school 22,2%; 5,6 % Degree Diploma; Bachelor Degree 4,4 %; and 4,4% Senior High School.

The average value of social support on visit 1 was 140,67±33,116, and then decreased at visit 2 was 140,33 ±28,347 and rose agained on the third visit of 146,41±17,808. The average value of the quality of life at 1 visit was 60,90±9,4, and then decreased at visit 2 was 61,71±7,65, and rose agained on the third visit was 62,24±7,25, with a mean value 3 average of 61,61±7,36 visits. Prior to hypothesis testing normality test and homogeneity test first. The normality test was done by using Kolmogorov Smirnov.

Score of Kolmogorov Smirnov test for normality, variables of social support and quality of life at 1, 2 visits, and 3 normal distribution, with p>0,05. Levene's test of homogeneity test, the variables of social support and quality of life in visits 1,2, and 3 are also expressed homogeneous, with p>0,05. Durbin Watson value fatherly sample 60, and the number of variables based on table 1 Durbin Watson (DW), was du=1,67, and dl=1,63. The value of Durbin Watson auto correlation was negative, it can be forwarded to the regression testing.

Home visit 1

The relationship of social support with quality of life of postpartum women showed a weak association, and patterned positive value means the higher the social support the higher quality of life. The coefficient of determination of 0,01 means that the regression line equation obtained can explain the 1% variation in the quality of life can be explained from the social support variables while the remaining 99% is explained by other factors. The test results found no statistically significant relationship between social support and quality of life puerperal women, on visit 1 (3-7 days postpartum).

Home visit 2

The relationship of social support with quality of life of postpartum women showed a weak correlation, and a negative pattern that is to say the quality of life will go down 0,0026 new mothers when maternal social support. The coefficient of determination of 0,009 means that the regression line equation obtained can explain 0,9% of the value quality of life can be explained from the social support variables, while the remaining 99,1% is explained by other factors. The test results found no statistically significant relationship between social support and quality of life puerperal women, on the 2nd visit (8-28 days postpartum).

Home visits 3

The relationship of social support with quality of life of postpartum women showed a weak correlation, and a negative pattern that is to say the quality of life will go down 0,011 new mothers when maternal social support. The coefficient of determination of 0,001 means that the regression line equation obtained can explain 0,1% of the value quality of life can be explained from the social support variables , while the remaining 99,9% is explained by other factors. The results of test found no statistically significant relationship between social support and quality of life puerperal women, on visit 3 (day 29-42 postpartum).

Looks a decrease in the average social support from visit 1 to 2 (gained score=0,333), but an increase in the average social support from visit 2 to 3 (gained score=6,078 . In general, an increase in the value of social support, visit 1 to visit 3 (gained score 5,744). Gained score (difference scores) were tested using the t test, the difference in the value of social support, visit 2 to 3 p-value=0,008 (p<0,05), it can be concluded that there are statistically significant differences between the social support, visit 2 to visit 3. However, there was no significant difference statistically between the social support visit 1 to 2 with p=0,917 (p>0,05), and 1 to 3 with p=0,142 (p>0,05).

Has been improving the quality of life an average of 1 to 2 visits (gained score=0,333), 2 to 3 visits (gained score=6,078), and social support of the visit 1 to visit 3 (gained score 5,744). Gained score (difference scores) were tested using the t test, visit 1 to 2 looks value difference p=0,02 (p<0,05), visit 2 to 3 with p=0,05 (p<0,05), and visits 1 to 3 with p=0,00 (p<0,05), so it can be concluded that there is a statistically significant difference. The value of quality of life at home visit 2 to 3 is greater than the home visit 1 to 2, but the increase in the value of the gained score (score difference) were highest for visits 1 to 3.

Discussion

Postpartum support (Gulick, 2003) consists of: 1) emotional support such as empathy, care, love, and trust. 2) Informational support such as giving the information that can be used to solve the problem like take caring baby, self treatment and personal problems or other environment. 3) Instrumental support such as giving help to take caring baby and do the housework.

Depressed women reported that they get less support after they give birth than when they are being pregnant. Postpartum depression event especially is because less emotional support from husband and mother from the women that gets postpartum depression, and also practical help from the husband (Dennis & Ross, 2006), and interaction between mother and father (Lu *et al.*, 2011). Haga *et al.* (2012) identified three aspects of social support that will be used. They are emotional, informational, and instrumental support. There is a relation between postpartum depression with emotional and instrumental support consistently.

Social support will decrease prenatal depression and will act as savior between potential stressor and care. The support from family is needed by the women to adapt in transition period to be a parent. Mother or mother-in-law probably will see the depression and low income, thus they can help to solve the problem (Lu *et al.,* 2011).

Social support has positive influence when the women give birth and it proves as the factor of avoiding postpartum depression (Evans *et al.*, 2011). Depression is the significant indicator of emotional and instrumental social (Boothe *et al.*, 2011). A father will more satisfied if their marriage has the children and they will have more positive attitude as the father, but the satisfaction of marriage has no relation with adaptation of the mother since postpartum period (Lu *et al.*, 2011).

Formal structural support and functional emotional support when the mother give birth are the prediction of postpartum independent depression, and for 6 and 12 weeks of postpartum social support dimension that relates with it is social and functional support (Leahy-Warren et al., 2011). Prevalence of postpartum depression is 13,2% for 6 weeks and 9,8% for 12 weeks.

Development of the family and married satisfaction are reported as the adapting factor from mother and father for postpartum period, and expressing love and care to a new mother. Development of the family is important to adapt with the family itself. The proper treatment such as support from the family along for postpartum period can facilitate the adaptation of a mother (Lu *et al.,* 2011).

Antenatal and postnatal education program are the part of family that is a center of treatment. There is a possibility for the fathers to participate in treatment after the mother give birth (Oommen e*t al.,* 2011). The possible influence of culture and principle should be considered by healthy professional that develops the strategy to facilitate family adaptation with young parents (Lu *et al.,* 2011).

The Recommendation

1. This research is to explain about the challenge when giving support that is needed for the mothers to increase their health and to help planning of the program.

2. This is suggested to plan education in-service about the important of social support after giving birth for midwife or nurse that has role to service the mothers.

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Table 1: Descriptive of variable

Home Visit	Variable	N	Mean	SD
1	Social support	60	140,67	33,116
	Quality of life	60	60,90	9,4
2	Social support	60	140,33	28,347
	Quality of life	60	61,71	7,65
3	Social support	60	146,41	27,808
	Quality of life	60	62,24	7,255
Mean	Social support	60	142,47	24,255
	Quality of life	60	61,61	7,366

Table 2. Normality test postpartum quality of life at home visit 1,2 , and 3

	Variable	Home visit	K-S	p	Distribution
1	Quality of life	1	0.798	0,548	normal
2		2	0,658	0,779	normal
3		3	0,745	0,636	normal
4		Mean of 1, 2, 3	0,713	0,689	normal

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Table 3. Homogeneity test of social support at home visit 1,2, and 3

	Variable	Home visit	Levene statistik	p	Conclusion
1	Social support	1	2,661	0,106	homogen
2		2	0,025	0,875	homogen
3		3	0,783	0,379	homogen
4		Mean	0,013	0,910	homogen

Table 4. Homogeneity test of quality of life at home visit 1,2, and 3

No	Variabel	Home visit	Levene statistik	p	Conclusion
1	Quality of life	1	0,216	0,643	homogen
2		2	0,227	0,635	homogen
3		3	0,138	0,711	homogen
4		Mean	0,371	0,544	homogen

Table 5. Autocorrelation of variable

Quality of life	Social support	Durbin Watson (Dw)	Conclusion		VIF
HV 1	HV 1	1,681	Du<dw<(4-dl)	Autocorrelation -	1,00
HV 2	HV 2	1,679	Du<dw<(4-dl)	Autocorrelation -	1,00
HV 3	HV 3	1,690	Du<dw<(4-dl)	Autocorrelation -	1,00
Mean	Mean	1,680	Du<dw<(4-dl)	Autocorrelation -	1,00

HV=Home visit

Table 6. Correlation and regression analysis of social support and quality of life of postpartum women variable at home visit 1

Home visit	r	R^2	Correlation	p
1	0,102	0,010	Quality of life=56,493+0,027*social support	0,338
2	0,096	0,009	Quality of life =56,354-0,026*social support	0,367
3	0,038	0,001	Quality of life =63.253-0,011*social support	0,724

Table 7. The difference of social support at home visit 1,2, and 3

Social support	N	Mean	Gained score mean	Std. Deviation	Gained score SD	Std. Error Mean	t	p
HV 1	60	140.67	0,333	33.116	30.427	3.491	0.104	0.917
HV 2	60	140.33		28.347		2.988		
HV 2	60	140.33	6,078	28.347	21.078	2.988	2.738	0.008
HV 3	60	146.41		27,808		2.222		
HV 1	60	140.67	5,744	33.116	36,82	3.491	1.480	0.142
HV 3	60	146.41		27.808		2.931		

HV=Home visit

Table 8. The difference of quality of life at home visit 1,2, and 3

Quality of life	N	Mean	Gained score Mean	Std. Deviation	Gained score SD	Std. Error Mean	t	p
HV 1	60	60,28	1,433	8,722	5,765	0,919	2,359	0,02
HV 2	60	61,71		7,651		0,807		
HV 2	60	61,71	1,156	7,651	5,665	0,807	1,935	0,05
HV 3	60	62,87		7,903		0,833		
HV 1	60	60,28	2,589	8,722	6,080	0,919	4,040	0,00
HV 3	60	62,87		7,903		0,833		

HV=Home visi