Factors Predicting the Quality of Life in Thai Women with Hysterectomy

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Abstract

Aims and background: Quality of life is the standard outcome in health care system. Hysterectomy is the most common treatment for women with gynecological problems. Loss of uterus is perceived as the loss of female identity in women especially those in the reproductive age, have partner, low educational level, no funds saving. These factors might influence the quality of life after surgery. Purpose of this study was to assess factors that predict the quality of life in Thai women after hysterectomy at Ramathibodi hospital.

Methods: This descriptive predictive research was studied in 132 women who had hysterectomy at Ramathibodi hospital between January 2013-March 2016. The instruments were (1) the personal data and health status questionnaires developed by the researchers, and (2) the World Health Organization Quality of Life-Thai version (WHOQOL-BREF-THAI) developed by WHO. Alpha Cronbach's coefficient for WHOQOL-BREF-THAI questionnaires in this study was 0.88. Data were analyzed by descriptive statistics and multiple regression analysis using enter technique.

Result: The age of samples was ranged from 21-76 years (mean=50.74, SD=9.49), health status (mean=3.50, SD=0.86, range 2-5) and overall quality of life scores (mean=88.18, SD=12.10, range 63-118). Women were over 45 years old 73.50%; had education level equal to/more than bachelor's degree 66.70%; had a partner 56.10%; and had financial saving 59.10%. Health status and age were significant predictors of quality of life (p<0.001). The presence of a partner also predicted the quality of life (p=0.045). However, education level and financial status could not predict the quality of life in women with hysterectomy.

Conclusion: Results from this study can be used as evidence-based to improve quality of life in women after hysterectomy. Health care providers should focus on in women with poor health status, post reproductive age, no partner, lower education level, and lower financial saving to provide their information need, social support, and solve their concerns as the women's need to achieve their quality of life.

Keywords: Quality of life; Hysterectomy; Thai women; Factors predicting

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Introduction

"Quality of life" (QOL) is the standard outcome in caring people with health problems. World Health Organization (WHO) defines Quality of Life as "individuals' perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards, and concerns [1]. It consists of four domains: physical health, mental status, social relationships, and environment. These four domains of quality of life are essential for all people. When they have health deviation, it may affect directly to four domains of their quality of life [1-3]. In women who had gynecological problems is the vulnerability group. They have to experience symptom distress such as pain, abnormal uterine bleeding, dyspareunia, dysmenorrhea, hypermenorrhea, pelvic mass or cancer [4,5]. These signs and symptoms may suffer and affect women's quality of life. Hysterectomy is the last choice of those women' treatment even though it is the standard treatment and most common procedure for the women with gynecological problems both benign and malignant tumor. However, in Thai culture, women usually perceive about their disability when they loss the uterus after hysterectomy. Uterus is perceived by Thai culture as the identity of women. The loss of uterus might affect body image, self-esteem, and marital adjustment [6]. In addition, it may cause depression in these women [7,8].

Although, hysterectomy is the most common operation to cure the difficulty from gynecological signs and symptoms [4,7] and health care providers try to give information to those women who will receive hysterectomy. Some women still perceive the concern about the uterus loss. Then, this operation may affect women's physical and psychological health status, including social relationships, and environment after surgery [4]. Thus, it may affect the quality of life in women who had hysterectomy. Previous literature reviews supported that quality of life may relate to reproductive age. Hysterectomy can affect infertility, sexual dysfunction and other symptoms more than women post-reproductive age [4,6,9,10]. Besides, women who had a partner may have adequate support or trouble from their partner [5,9,10]. On the other hand, women with high education level and financial status may better manage their resources to solve their problems [5,6,9] than the lowers. These factors may affect the quality of life. Thus, age, health status, partner status, financial status, and education level of these women may influence the women's quality of life. Then, the purposes of this research were to examine factors that affect the quality of life in Thai women after hysterectomy in Ramathibodi hospital. Results from this study will provide evidence to promote the quality of life in further women after hysterectomy.

Purposes of the Study

The purpose of this research was to examine factors that predict the quality of life in Thai women undergoing hysterectomy.

Material and Method

This descriptive predictive study was conducted in Ramathibodi hospital, Mahidol University, Thailand. Data were collected in women after hysterectomy 3-36 months; during January-June 2016. This study was one part in the study of the "Quality of Life in Thai women after Hysterectomy". Then, some parts of the data collection might be mentioned in the earlier study. Sample size was calculated by using the Free Statistics Calculators version 4.0: A-Priori sample size for multiple regression from https://www.danielsoper.com/statcalc/calculator.aspx?id=1 [11-14]. Then, the power .80, alpha .05, 5 predictors, with effect size .10 was used. Then 132 participants were appropriated sample sizes for this study.

Instruments

There were two instruments used as follows:

1) the personal data and health status questionnaires; and

2) World Health Organization quality of life-Thai version (WHOQOL-BREF-THAI) developed by WHO.

These were the details of the instruments' information. According to this study was one part in the study of the "Quality of Life in Thai women after Hysterectomy". Then, some parts of the two instruments details might be mentioned in the earlier study. Personal data and health status questionnaires were created from literature review by the researchers and colleagues.

Data information included the participants' personal data, health status, and time after operation. World Health Organization quality of life-Thai version (WHOQOL-BREF-THAI) was developed by WHO. This short version questionnaire was used to assess the individuals' perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards, and concerns [1-3]. It consists of 4 domains; physical health, mental status, social relationships, and environment. The short version questionnaire consists of 26 items. In these 26 items - questionnaire; item 1 represented the general health status while item 26 represented the overall quality of life. Then the left 24 items (from item 2 to item 25) were responded for 4 domains of QOL; physical health, mental status, social relationships, and environment. The WHOQOL-BREF was translated into Thai by Mahudnirunkul and colleagues (B.E. 2540) [2,3]. The questionnaires were tested, and the content validity index (CVI) was .65 as well as its reliability was tested with Cronbach's alpha coefficient equaled to .84. There are 24 items with a 5-point Likert - scale. The score in each item ranged from 1 to 5 (from not agree at all to most agree). There were 21 positive items and 3 negative items. The summed scores were evaluated the quality of life. Higher scores meant higher QOL. Cronbach's Alpha Coefficient was test for the WHOQOL-BREF-THAI questionnaires in 20 participants was 0.88.

Protection of human rights

This study was one part in the study of the "Quality of Life in Thai women after Hysterectomy". Then, some parts of the "Protection of Human Rights" details had been mentioned in the earlier study. This project was approved by the Committees on Human Subjects from the Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand. This was done to ensure the protection of human rights. After it was approved the IRB from the committees, then the data collection process started. Researchers followed the procedures of the Helsinki Declaration of 1975, as a revised in 2000, ID 04-57-01, with number MURA 2014/195/S1-2PS2.

Data analysis

Data were analyzed by Statistical Package for Social Sciences (SPSS) for window version 21 by using the statistics as followed.

a) Personal data in Thai women undergoing hysterectomy, such as age, time since the operation, and health status were analyzed by mean, standard deviation, and range. Meanwhile, education level, marital status, perceived financial status, were analyzed by frequency and percent.

b) Factors predict the quality of life were analyzed by multiple regression using enter technique. Multiple regression analysis used 5 independent variables; health status (score 1-5), age (≤45 years, reproductive age = 1, >45 years, post reproductive age=0), education level (< graduate study = 0, ≥ graduate study=1), partner (had partner=1, no partner=0), financial status (sufficient funds savings=1, no funds savings=0) to predict one dependent variable (quality of life), with the significant level at .05. Then the multiple regression equation of

this study should be

$$Y \beta_0 + \beta_1 (HealthStatus) + \beta_2 (Age) + \beta_3 (PartnerStatus) + \beta_4 (EducationLevel) + \beta_5 (FinancialStatus)$$

Result

Results showed that the age of Thai women after hysterectomy was ranged from 21-76 years (mean=50.74; SD=9.49). The months after hysterectomy was ranged from 3-36 months (mean=24.33; SD=8.30). The scores of health status were ranged from 2-5, with possible range 1-5 (mean=3.50; SD=0.86), The scores of overall qualities of life were ranged from 63-118, with possible range 24 - 120 (mean=88.18; SD=12.10). Women age was over 45 years 73.50%; had education level equal and more than bachelor's degree 66.70%; had partner 56.10%; and had sufficient funds savings 59.10%. Data has been shown in Table 1.

Table 1: Demographic data in Thai women with hysterectomy (n=132).

Variables	n	%
Age (year) 21-76 years, mean=50.74 years (SD=9.49) Time since surgery (months) 3-36 months, mean=24.33 months (SD=8.30) Health Status (scores) 2-5, with possible range 1-5; mean=3.50 scores (SD=0.86) Quality of life (scores) 63-118, with possible range 24 - 120; mean=88.18 (SD=12.10)		
Age (years)		
≤ 45 years	35	26.5
> 45 years	97	73.5
Education Level		
<Bachelor's degree	54	33.3
≥ Bachelor	78	66.7
Marital Status		
-Have partner	74	56.1
-No partner	58	43.9
Perceived Financial Status		
-Sufficient funds savings	78	59.1
-No fund savings	54	40.9

Results found that health status and reproductive age could predict the quality of life, at .001 level, while women who had partner could predict the quality of life at .05 level. However, education level and financial status could not predict the quality of life in women after hysterectomy. All 5 factors could predict the quality of life at 41.60%. Detail has been shown in Table 2.

Table 2: Factors predict the quality of life in Thai women undergoing Hysterectomy.

Variables	b	SE b	Beta	R	R2	t	p value
Health status	8.31	0.979	0.604	0.562	316	8.488	<.001
Age group (reproductive period)	7.876	1.978	0.292	0.619	0.383	3.981	<.001
Education level (≥ bachelor)	2.878	1.934	0.114	0.63	0.396	1.488	0.139
Status (Have partner)	3.741	1.851	0.156	0.643	0.413	2.021	0.045
Financial status (funds saving)	1.5	1.947	0.062	0.645	0.416	0.77	0.443

Constant = 52.322 R square = 41.60% SE = Standard error

$$Y = 52.322 + 8.310(HealthStatus) + 7.816(Age) + 2.878(Educationlevel)(ns) + 3.741(PartnerStatus) + 1.500(FinancialStatus)(ns)$$

$(ns) = nonsignificant$

Discussion

Results from this study found that the average age of participants who had hysterectomy was 50.74 years. This result is congruent with previous studies [1-3] because this is common in women who had benign or malignant at pelvic organ. The mean of health status and overall quality of life were in moderate to high level. This result is congruent with previous studies [4] which can be explained that the hysterectomy can solve the women's gynecological problems.

These reasons can improve health status and quality of life. Results from this study also reported that factors could predict the quality of life were health status, reproductive age group period, women who had partners. However, those factors could not predict the quality of life were women who had education level higher than/ or equal to bachelor's degree and had sufficient funds savings. When considering about health status and reproductive age group, results showed that both factors were higher affected the quality of life in women after hysterectomy. This result is congruent with previous studies [5,6,8,10]. They found a positive effect on quality of life in women after hysterectomy. This can be implied that women with reproductive age had higher quality of life than post reproductive age. It also can be explained that younger women still had good health status can improve physical health and other three domains of quality of life than older women. They may perceive of their excellent physical strength, psychological status, social relationships, and environment after their operation. These both factors can affect their quality of life. When considering about women who had partner, it is one another factor that can affect the quality of life. This result is congruent with previous studies [9,10]. This can explain that women had well support from their partners. When they have sufficient support both infrastructure, financial, good psychological support which can improve their physical, psychological health, social relationships, and environment. Then, this factor might affect the quality of life in these women.

In the other point, when considering the level of education and financial status, it was found that they cannot predict the quality of life. The results are congruent with previous studies [5,9]. At the same time, these results are not congruent with the previous studies [6,10]. People who have a high educational level, they usually have sufficient financial saving. These women can use their resources and they have competency to search information to care for themselves more than women with a lower educational level and financial saving. Then, women with higher education level and financial saving tend to have higher quality of life. However, in this study, the level of education and financial status cannot predict the quality of life. This might be explained that this study collect data in university hospital, in the capital city of Thailand. All of the participants might receive systematic service, full information both pre and post operation. Then, it can be seen from the result of this study that all women had the same level quality of life. From this reason, education level and financial saving cannot predict the quality of life. In sum, health care providers must assess the women with poor health status, post reproductive age, no partner, lower education level, and lower financial saving to provide their information need, social support, and solve their concerns as the women's need to fulfill their quality of life.

Implication

The main finding of study research should be used to guide nursing practice. Professional nurse should focus to assess the quality of life in women with poor health status, post reproductive age, no partner, lower education level and financial saving to provide their information need, social support, and solve their concerns as the women's need. An intervention research study should be implemented to test the spousal support on the quality of life in reproductive women after hysterectomy in Thai culture.

Conclusion

It can be summarized that the general health status and quality of life in Thai women after hysterectomy was quite moderate to a high level. It was predicted by health status, partner status and reproductive age. It was higher in younger than older women. Women who had good health status and stay with partner had more QOL than women who had poor health status and no partner. Women with a higher educational level and financial status tend to have more QOL than women who had a lower educational level and financial status. Health care providers should focus on women with poor health status, older age, no partner, low educational level, and financial saving.

Limitation

This research studied in one setting, specific in university hospital, Thailand. It could not generalize to women in other countries.

Acknowledgment

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