

Correlation of Interpersonal Relationship and Work Stress among Female Health Care Staff of a Private Hospital in Denpasar Bali

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Abstract

Interpersonal relationship and work stress are important elements in occupational health. To study the correlation of interpersonal relationship and work stress among female health care staff. This research is a cross sectional analytical study carried out in Surya Husadha Hospital Denpasar among female health care staff from 5 strata of professions including ICU doctors, nurses, pharmacists, medical lab technicians and administrative staff. About 82 samples are involved in this study which are drawn by multistage random sampling. Majority staff (28%) are known to be experiencing moderate interpersonal relationship with moderate level of work stress. The value of correlation coefficient of Pearson between interpersonal relationship and work stress is $r = -0.572$ and $p=0.001$. The p value indicates a significant correlation between interpersonal relationship and work stress whereas the value of $r = -0.572$ indicates a negative relationship with a moderate strength of correlation between the two variables whereby stronger the interpersonal relationship, lower the stress level or vice versa. Hence, the hypothesis of this research is accepted. There is a moderate negative correlation between interpersonal relationship and work stress among female health care staff in Surya Husadha Hospital Denpasar. The negative correlation means if interpersonal relationship decreases then work stress increases or vice versa. This study can benefit the future researchers to determine ways in enhancing the interpersonal relationship in order to decrease the level of stress among female health care staff also in improvising health care provider to the society.

Key words: interpersonal relationship, work stress, female health care staff, occupational health

Korelasi Hubungan Interpersonal dan Stress Kerja pada Petugas Kesehatan Wanita pada Rumah Sakit Swasta di Denpasar Bali

Abstrak

Hubungan interpersonal dan stres kerja merupakan elemen penting dalam kesehatan kerja. Mengkaji hubungan interpersonal dan stres kerja dalam kalangan petugas kesehatan wanita. Penelitian ini merupakan penelitian analitik cross sectional yang dilaksanakan di RS Surya Husadha Denpasar pada tenaga kesehatan wanita dari 5 strata profesi yaitu Dokter ICU, perawat, apoteker, teknisi lab medis dan staf administrasi. Sekitar 82 sampel dilibatkan dalam penelitian ini yang diambil secara multistage random sampling. Mayoritas staf (28%) diketahui mengalami hubungan interpersonal yang sedang dengan tingkat stres kerja sedang. Nilai koefisien korelasi Pearson antara hubungan interpersonal dengan stres kerja adalah $r = -0,572$ dan $p=0,001$. Nilai p menunjukkan korelasi yang signifikan antara hubungan interpersonal dengan stres kerja sedangkan nilai $r = -0,572$ menunjukkan hubungan negatif dengan kekuatan korelasi sedang antara kedua variabel dimana semakin kuat hubungan interpersonal, tingkat stres yang rendah dan sebaliknya. Dengan demikian hipotesis penelitian ini diterima. Dari studi ini didapatkan korelasi negative yang sedang antara

hubungan interpersonal dan stres kerja di kalangan tenaga kesehatan wanita di RS Surya Husadha Denpasar. Korelasi negatif tersebut bermakna, jika hubungan interpersonal meningkat (lebih baik) maka stres kerja menurun, dan sebaliknya. Penelitian ini dapat bermanfaat bagi peneliti selanjutnya untuk menentukan cara dalam meningkatkan hubungan interpersonal dalam rangka menurunkan tingkat stres di antara petugas kesehatan wanita serta dalam melakukan improvisasi penyedia layanan kesehatan kepada masyarakat.

Kata kunci : hubungan interpersonal, stres kerja, tenaga kesehatan wanita, kesehatan kerja

INTRODUCTION

Health care institution is a formal institution developed for patient care intended to meet the complex health needs of the society, where sick or injured individual has the access to centralized medical knowledge and technology. Professionally and technically skilled people is needed to apply their knowledge and skill with the help of complicated equipment and appliances to provide quality care for the patient. This institution also needs an appropriate commitment and leadership style to reduce job stress of workers (Pishgoorie, 2019; Cowley, 2003). The world's humanity has evolved in a male-centered society but as the human evolution changes, the tradition of male being dominant is now taken over when female started being independent. Female staff in the health care department are identified to have an occupation that has the highest level of risk both mentally and physically (Cooper et al, 2001).

Over the past two decades, there has been a growing belief that the experiences of stress at work has undesirable effects, both on the health and safety of workers and on the health and effectiveness of their organizations. According to the World Health Organization (WHO) (2018) 'work-related stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and that challenge their ability to cope' (Isa et al, 2018).

Over the past two decades, there has been a growing belief that the experience of stress at work has undesirable effects, both on the health and safety of workers and on the health and effectiveness of their organizations. This belief has been reflected not only in public and media interest, but also in increasing concern voiced by the trade's unions and by scientific and professional organizations, including the International Labor Office (Cowley et al, 2003). National Institute of Occupational Safety and Health (NIOSH) reported that one fourth of workers in the United States view their jobs as the top stressor in their lives and 26%-52% of workers report moderate-to-high levels of stress at work. Furthermore, 75% of employees believe that they incur more on job stress than workers did a generation ago. According to Cooper (2001), the health care professionals are considered to be members of high stress occupations, together with pilots, police, miners and social workers. The specific factors which make their profession so stressful include their responsibility for "people" rather than "objects", and the fact that their actions or omissions have a profound impact on human life (Cooper, 2001). When comparing female with each other, there also appears to be differences in the ways that married and single female experience stress. Female are more likely than male (28% vs 20%) to report having a great deal of stress. Almost half of all female (49%) surveyed said their stress has increased over the past five years, compared to four in 40 males (39%).

The interpersonal relationship is a determinant factor for the undertaking of the care of the patients in intensive care. After all, this environment where the professional relationships are more intense and the professionals become closer to each other which eventually become a stage for conflictual relationships. However, this interpersonal relationship is one of the factors causing work stress (Wagner et al, 2009). Workplace relationships stress is generally a response from problematic relationships between administrators, coworkers, and/or

subordinates. Additional stressors include harassment, discrimination, threats of violence, and managerial bullying. There are five categories of bullying behavior: (1) Threat to professional status through belittling opinions, public humiliation, and accusations of “lack of effort”; (2) threat to personal standing such as name-calling, insults, and teasing; (3) isolation such as preventing access to opportunities such as training and with-holding information; (4) overwork such as under pressure to produce work, impossible deadlines, and unnecessary disruptions; and (5) destabilization such as failure to give credit when due, meaningless tasks, removal of responsibility, and shifting of goalposts.

Work stress is the common obstacle faced by female health care staff. Work stress has often been regarded as an aversive characteristic of the working environment. This has often led to stress being grouped with physical hazards and research being directed to measurement of exposure levels and examination of the relationship between these and health performance outcomes. Stress has been viewed as a physiological response to a threatening or damaging environment. Another approach has viewed stress in terms of an interactional framework, one of the best examples is the Karasek’s model suggesting that job demands and decision latitude interact to influence health. Information relevant to all of these approaches to stress is easy to collect. However, more recent views of stress suggest that they are inadequate and should be replaced by transactional theories which focus on the cognitive processes and emotional reactions. Today, in order to protect the life standard in a fixed level, many families are being dependent on a female’s financial support (Nevin and Fatma, 2007). The complications take place when the work authorities in hospital and family obligations meet plus with unshared loads of responsibilities with their spouses; female health care staff tend to result in having work stress. In general, female is more likely than men to experience physical symptoms of stress, like fatigue, irritability, headaches and depression. This could be due to female’s high commitments to cope with work stress. Therefore, female health care staff tends to face more stress due to these reasons. Therefore, this study is conducted to evaluate the correlation of interpersonal relationship and work stress among female health care staff.

METHOD

This is an analytical study which is planned as cross sectional to determine the correlation of interpersonal relationship and work stress among female health care staff. The target population in this study is female health care staff of a private hospital in Denpasar, Bali and the reachable population is female health care staff in Surya Husadha hospital Denpasar from 5 strata of professions which are Intensive Care Unit (ICU) doctors, nurses, pharmacists, medical lab technicians and administrative staff. Inclusion criteria of samples are married female staff aged from 18 till 45 years. Exclusion criteria are having serious illness, rejection to involve on all study process, and drop out criteria was not being present during the study or resigning as a research subject and didn’t give accurate data on questionnaires.

Sampling technique used in this study was stratified random sampling. Female health care staff in Surya Husadha hospital Denpasar are divided into 5 categories, which are ICU doctors, nurses, pharmacists, medical lab technicians and administrative staff. These 5 categories are selected out of other medical professions as they are categorized as the main medical staff and easy to reach. Upon selecting the strata, the number of female staff in each category is determined and the total population is 103 staff as shown in total population column in Table 1.

According to Slovin’s formula, the number of samples required for this study is 82 staff with confidence interval of 95% and margin error of 5%. By random sampling method, samples in each profession category were stratified proportionally as shown in Table 1.

Table 1
Total population and proportion of samples for each profession category

Professions	Total population	Number of samples
ICU doctors	4	3
Nurses	75	60
Pharmacists	6	5
Medical lab technicians	9	7
Administrative staff	9	7

Interpersonal relationship is measured with a questionnaire of 38 items which is modified into Indonesian language. This questionnaire has tested its validity and reliability and obtained a Cronbach’s Alpha value of 0.936. The categories of interpersonal relationship scoring are 0–94 : poor interpersonal relationship, 95–120 : moderate interpersonal relationship, and 121–152 : good interpersonal relationship

Work stress is measured using a 10 question scale from Perceived Stress Scale (PSS-10) by Cohen (Purnami & Sawitri, 2019; Cohen, 2012) which is modified according to work stress and translated into Indonesian language. This questionnaire has tested its validity and reliability with a value of Cronbach’s Alpha 0.734. The categorized version of stress level based on PSS are 0–12 : low stress level, 13–19 : moderate stress level, and 20–40 : high perceived stress.

This study protocol is reviewed and approved by the Research Ethics Committee, Faculty of Medicine, Udayana University/Sanglah Hospital Denpasar, Bali Indonesia on 13th August 2018 based on Nuremberg Code and Helsinki Declaration of research protocol with reference number No: 1839/ UN14.2.2.VII.14/ LP/2018.

RESULTS AND DISCUSSION

The main findings of this study is we found significant negative correlation between interpersonal relationship and work stress among female health care staff. Below are detail of the data and statistical analysis results.

Based on the analysis, the scoring of interpersonal relationship is summarized in Table 2.

Table 2
Interpersonal Relationship Score

Score Intervals	Category of Interpersonal Relationship	Frequency	Percentage (%)
0-94	Poor	20	24.4
95-120	Moderate	42	51.2
121-152	Good	20	24.4

Interpersonal relationship is described with a minimum value of 61; maximum value of 152; mean 105.79; and a standard deviation of 20.526. Based on the analysis, the scoring of work stress is summarized in Table 3.

Table 3
Work stress score

Score Intervals	Category of Stress	Frequency	Percentage (%)
0 – 12	Low	22	26.8
13 - 19	Moderate	37	45.1
20 - 40	High	23	28.0

Work stress has descriptive data with a minimum value of 6, maximum value of 26, mean 16.09, and a standard deviation of 4.897. Relationship between Interpersonal Relationship and Work Stress. Table 4 is the detailed crosstab of the two variables in this study.

Table 4
Description of correlation of Interpersonal Relationship and Work Stress

	Interpersonal Relationship		
	Poor	Moderate	Good
Work Stress			
Low	1	12	9
Moderate	5	23	9
High	14	7	2

SPSS program is used in order to identify the correlation between the variables of interpersonal relationship and work stress as presented in Table 5.

Table 5
Correlation test of Interpersonal Relationship and Work Stress

Variables	Mean	SD	r	p
Interpersonal relationship	105.79	20.526	-0.572	0.001
Work Stress	16.09	4.897		

The value of correlation coefficient of Pearson between interpersonal relationship and work stress is $r = -0.572$ and $p = 0.001$. The significance level used is (α) 0.05, therefore the value of p is significant, indicating a correlation between interpersonal relationship and work stress. According to classification of r value, the value of $r = -0.572$ indicates a moderate strength of correlation between the variables of interpersonal relationship and work stress. The negative value of r presenting a negative relationship between the two variables whereby the stronger the interpersonal relationship, the lower the work stress level or vice versa.

Based on the scatterplot in Figure 1, the correlation coefficient of $r = -0.572$ is proved by a linear negative correlation. The correlation test shows a negative moderate correlation between interpersonal relationship and work stress among female health care staff. The negative correlation means, if interpersonal relationship is increasing (or better) than the work stress will be decrease, or vice versa. Majority of female health care staff in Surya Husadha hospital known to be experiencing moderate interpersonal relationship with moderate level of stress for about 23 respondents (28%).

According to a study conducted in Muhammadiyah Bantul General Hospital, the level of stress is said to be low with a good interpersonal relationship among the

nurses (Puspitowarno, 2011). Another research conducted and it is known to be 40 people (80.3%) have a good interpersonal relationship with low work stress (Vemmylia, 2009).

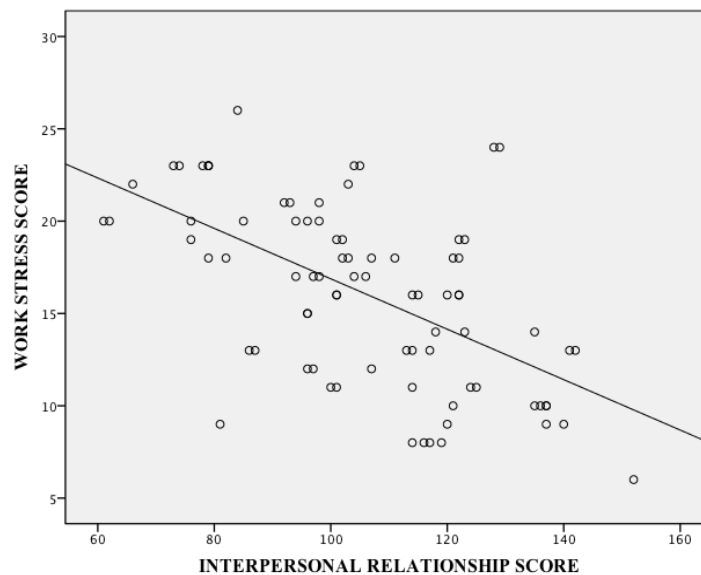


Figure 1. Scatterplot of Interpersonal Relationship Scores versus Stress Score

These results differ from this study. These differences might be influenced by other factors. Researcher made marriage factor as confounding variable in order to prevent family conflict influences this study by taking samples from married female staff. The reason for excluding unmarried female staff is due to the limited number of unmarried female staff in the health care department. Researcher also limited the age of respondents from 18 to 45 years in order to prevent menopausal factor influencing the study. The factors contributing to stress can vary and not necessarily solely interlinked with interpersonal relationship.

In this study, it is found that 53.7% respondents often have trusts among their colleagues at work. Poor relations are those with low trust, low supportiveness and low interest in listening or trying to deal with problems that confront the organizational member. Mistrust between colleagues is positively related to high role ambiguity, which leads to inadequate communications between people and to psychological strain in the form of low job satisfaction and to feelings of job-related threat to one's well-being (Gibbons, 2001). Cooperation at work place is an important element to have a harmonious working environment. People cooperate if they expect everyone else does that too whereby numerous and repeated bilateral communications being created and reinforce this expectation. In conjunction to it, 50% of respondents in this study said sometimes they lost interest and motivation to work if there is less cooperation among themselves.

About 36.6% respondents prefer to work in a group than individually. Important situations that affect the organization's operations and decision making have resulted in increased team or group functions in an organizational decision making. The importance of the team should be emphasized due to the desire of the organization's success. In general, group decision making indicates that group judgment has proved to be more accurate and more certain or more convincing than individual judgment.

Researcher found that only 30.5% respondents are highly interested and said to always getting engaged with suggestions and opinions from their colleagues. Opinions and suggestions should be opened up in order to have a good interpersonal relationship. Suggestions can wider an idea or even can solve conflicts as each person's creativity differs from one another.

This research slightly differs from the research conducted by Puspitowarno about the relationship of coping strategies with the stress level of nurses' work in the Inpatient Room of PKU Muhammadiyah Hospital in Yogyakarta which stated that out of 30 respondents, 22 (66.7%) experienced job stress levels in the low category. Another study conducted by Puspitowarno in 2011, about relationship of coping strategies with the response of nurses' work stress levels in Adult Inpatients PKU Muhammadiyah Bantul General Hospital resulted the same whereby most nurses in inpatient rooms experience low level of stress (Puspitowarno, 2011).

CONCLUSION

To conclude this study, the relationship between interpersonal relationship and level of work stress among female health care staff in Surya Husadha hospital Denpasar shows a majority about 23 staff (28%) experiencing moderate interpersonal relationship and moderate level of work stress. Researcher proved the hypothesis which shows a negative moderate correlation between interpersonal relationship and work stress. Therefore, the higher the interpersonal relationship, the lower the stress level among female health care staff or vice versa.

This study has several limitations. First, this study is planned as cross sectional with a small sample size. Second, the participation rate in this study is 84% whereby only 87 participants responded out of 103 staff.

For future researchers, the researcher is suggesting to supervise the respondents while filling out the questionnaires to prevent rejection of questionnaires due to unanswered questions. Researcher recommends the future researchers to conduct a study on correlation of marital factors with work stress among female health care staff.

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