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ACADEMIC
RESEARCH**

PART A

**APPLIED
AND NATURAL
SCIENCES**



PROORES
BAKU, AZERBAIJAN

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Heydar Aliyev
National Leader of Azerbaijan

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DIFFERENCES OF WORK STRESS BETWEEN NURSES AS MEMBERS OF AN INFORMAL GROUP AND THOSE OF NON MEMBERS IN HOSPITALS AT MEDAN

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ABSTRACT

Informal group is a group formed of similar interests or hobbies, in a formal organization. Its members are employees of the organization. Informal groups are often perceived as a threat to the organization. They provide benefits for members like acknowledgement, expressing ideas, gaining information, social support, problem solving and work motivation. Individuals without motivational support and low social relationships will be prone to be stressed in the workplace. Factors greatly affecting individual work stress are supports from others. Such supports can be obtained from the surroundings such as family, friends, leaders or informal groups. The purpose of this study is to determine differences in work stress of nurses members of an informal group with non members. Observational study design with cross sectional study was applied in this research. A sample of 58 nurses was taken randomly at two hospitals in the city of Medan. The results indicate that characteristics of the respondents were not influenced by work stress. Based on alpha chi square test of 5% with p value of 0.185, this shows no influence on informal group with the level of work stress. Furthermore, on the results of the alpha t test of 5% with p value of 0.000, there was no significant difference between nurses' work stress between members and non members of the informal group.

Keywords: informal groups, work stress

1. INTRODUCTION

Informal groups or "face to face group" is a system of human interrelations based on likes and dislikes, in the intimate psychological climate, face to face contact, and high moral¹. An informal group or primary group is an organization formed without full awareness with an unclear goal, as well as the Articles of Association (AD) and Bylaws (ART). The relationship is personal and informal. This informal group is formed within a formal organization whose members consist of employees at the institution. They want to conduct joint activities personally, with common interests or talents, such as: group gathering, the arts, religion, sports, etc. This informal group greatly influenced its individual members in the form of supports, motivation and social value generating acknowledgement, appreciation, respect and admiration.

Discussed informal groups pop out when people try to express effects, influence attempt and exchange information or services². Some researchers have identified some psychological reasons for the existence of informal networks such as affiliations needs, the sense of identity, social reality and defense mechanism³⁻⁴. Another situational factor which has received substantial attention in research on stress and well-being is the extent of support which individuals receive from other people in their environment. Common sources of social support are (at work) supervisors, managers, and work colleagues, and (outside of work) family and friends⁵. Formal authority has forced employee to show certain behaviors standardized by regulations so they contract their efforts and avoid being innovative and creative. On the other hand, informal organizations are the interlocking social structure created to answer employees' social and psychological needs because people need to feel they are part of something⁶. This benefits members in social supports, motivation and developing individual coping mechanisms. Low social supports influence work stress. Stress nurses working the potent factors which cause enormous stress at work place are, excessive workload (97.1%), unhealthy and dangerous working environment (92.4%), insufficient resources (93.3%), people's suffering (80.3%), conflicting demands (73.3%), lack of professional respect (84.8%), lack of promotion chances (85.1%), inadequate pay and benefit (90.2%), domestic problems (71.4%) and marital problem (68.3).

Workplace injury and accident cases in 2010, 48% occurred in nurses and health workers mostly working in hospitals, private nursing and health services⁷. Stress nurses working in Dr. Pirngadi hospitals of Medan in 2010 amounted to 42.24% especially in night shift nurses⁸. Research at Dr. Soetomo hospital in 2013 found very high levels of work stress in nurses aged 20-25 years⁹. In addition, stress nurses working in Islamic Hospital in Yogyakarta were as a result of heavy workload, urgent work time, low quality control, unhealthy working environment, work-related authorities with inadequate responsibility, work conflicts and differences in values between employees and leaders¹⁰. Blau and Scott (1962) declared that employees usually do not accomplish their duties by all of their power because formal authority often cannot motivate employees completely⁸.

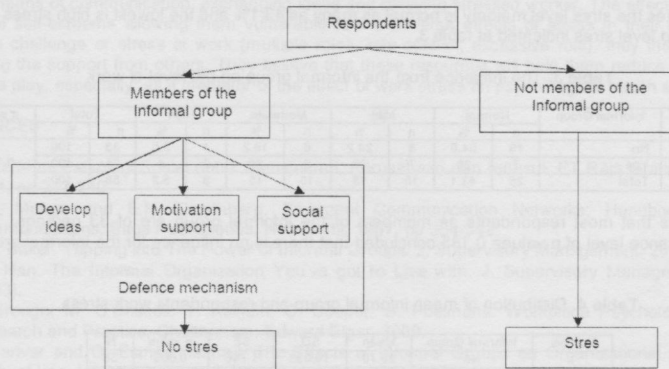
Work related stress, the early theory of work stress declared that stress as difference stimulus based and responds based. The contemporary theory of work stress declared that stress as difference interactional (structural) and transactional (process)¹¹. Behavioural stress symptoms such as: delaying work, declining achievement and productivity, sabotage behaviours, increasing frequency of absence from work, eating disorder behaviour, losing appetite, drinking alcohol, being aggressive, stealing, declining quality of interpersonal relationships (family and friends) and a suicidal tendency¹². Successful used are coping can be health and well-being¹³. Coping leads to cognitive and behavioural efforts to control, reduce, tolerate

internal or external demands created by stressful situations. Individuals can mobilize coping resources to overcome stress such as: economic assets, individual capabilities and skills, defence techniques of social support and motivational¹⁴.

2. MATERIALS AND METHODS

The subjects were nurses in Haji Adam Malik Hospital and Elisabeth Hospital at Medan. Samples were taken randomly as many as 58 nurses. Observational study was conducted using cross-sectional study design. Work stress measurement used modified questionnaires (of DASS-21, the DASS-42 and NIOSH work stress questionnaires).

Frame work study



Picture 1. Frame work Study; Defence Mechanism^{12,18}

Study hypotheses

1. There is relationship between the characteristics of the respondents and the work stress levels of nurses.
2. There is influence from the primary group on the level of work stress
3. There is significant difference on work stress between members of the informal group and nurses of non members.

Data Analysis

The data obtained would be analyzed using parametric statistics, including analysis of data normality, and then applying chi square test and independent t test.

3. RESULTS AND DISCUSSION

Survey 58 respondents consisted of 33 did not join the informal group and 25 informal groups. Characteristics of the repondents in this study are described based on age group, education, ethnic, years of service shows in table 1.

Table 1. Data Characteristics of Respondents by Age group, Education, Ethnic and Years of service in Haj Adam Malik Hospital Medan

Number	Category	Frequency	Percent (%)
1	Age		
	31 – 40	21	36.2
	41 – 50	32	55.2
	≥ 51	5	8.6
	Total	58	100
2	Education		
	Nurse Senior High School	11	19
	Diploma	29	50
	Bachelor's degree	18	31
	Total	58	100
3	Ethnic		
	Batak Toba	26	44.8
	Karo	12	20.7
	Mandailing	9	15.5
	Melayu	5	8.6
	Jawa	6	10.3
	Total	58	100
4	Religion		
	Islam	23	39.7
	Protestan	25	43.1
	Katolik	10	17.2
	Total	58	100
5	Years of service (years)		
	< 10	12	20.7
	11 – 15	17	29.3
	16 – 20	26	44.8
	> 21	3	5.2
	Total	58	100

Table 1 indicates the age majority is 41-50 years old as many as 55.2%. The most group of education is Diploma as many as 50%, the most group of ethnic is Batak Toba as many as 44.8%, the most group of religion is protestan as many as 43.1%, and the most group yer as of service is 16-20 years as many as 44.8%. The level of stress indicated at table 2.

Table 2. Distribution of Stress Level

Number	Category	Frequency	Percent (%)
1	Normal	25	43.1
2	Mild	15	25.9
3	Moderate	15	25.9
4	High	3	5.2
	Total	58	100

Table 2 indicates the stres level majority is normal as many as 43.1% and the lowest is high stress as many as 5.2%. The informal group and level stres indicated at table 3.

Table 3. The influence from the informal group on the level of work

Number	Informal Group	Normal		Mild		Moderate		High		Total	p value
		n	%	n	%	n	%	n	%		
1	No	18	54.5	8	24.2	6	18.2	1	3.0	33	0.185
2	Yes	7	28	7	28	9	36	2	8	25	
	Total	25	43.1	15	15	15	15	3	5.2	58	

Table 3 shows that most respondents as members of the informal group are of 33 persons. The results of the analysis at 5% significance level of p value= 0.185 concluded that there is no influence for the informal group on the level of stress.

Table 4. Distibution of mean informal group and respondents work stress

Number	Informal Group	Mean	SD	SE	p value	N
1	No	24.70	10.033	1.746	0.000	33
2	Yes	6.00	8.841	1.768		25

Table 4 indicates that the average work stress of non member was 24.70 with a standard deviation of 10.033, whereas that of members was 6.00 with a standard deviation of 8.81. The results of the statistical test obtained p = 0.000, meaning that at 5% alpha, there is a significant difference on the mean of working stress between two respondents.

This study generates three findings

Findings number 1: there is no relationship between the characteristics of the respondents and the work stress levels of nurses.

Findings 2: there is no influence from the primary group on the level of work stress

Findings 3: There is significant difference on work stress between members of the informal group and nurses of non members.

Characteristics of respondents

Respondent characteristics such as age, education, ethnic, religion and work duration variables are with no effect on work stress. The results are consistent with Kahn concept of work stress. Work stress is influenced by variables of skills, abilities and the work demands. When they are not in accordance, this generates work stress. Compatible individual skills and abilities with work demands are required to avoid the stress, confusion and conflict in the workplace⁵. Individual skills and abilities should be in correspondence with the work demands, as the alignment toward clarity of the worker role. Inharmonious labour relations (skills and abilities) and work environment (work demands) may lead to stress and result in distress. Some research outlines that the labour relations and working environment are the right model for a negative response¹⁶⁻¹⁷.

The influence of the primary group on the work stress level

The results of data processing using the chi-square showed no primary group effect on the level of work stress. The stress level is affected by the coping mechanisms or individual ability in receiving a stress response. Moos Coping Model describes the relationship between the environment and individual system creating conditions for a transferred transition on individual's coping abilities and skills¹⁸.

Work stress differences between nurses, members of an informal group and the non members

According to data analysis with the t test, the results showed no significant difference between member of informal group nurses and the non members. Informal organizations provide great benefits for their members. Within the informal group, members can communicate and convey ideas, creativity and problems related to their work¹⁹. Although there is incontrovertible evidence that social support makessignificant contributions to psychological health and well-being⁵. There has been ongoing debate about the nature of this contribution. Generally three alternative 'pathways' have been suggested²⁰. The path reflects a direct relationship between support and well-being; that is, high levels of support will have direct positive effects on reduced stress and increased well-being. Several studies have obtained empirical confirmation of this direct effect. An extension of this nation is a mediating effect of social support, that is that social support fuctions as an intervening variable between stressors and strain or well-being outcomes. Finally, the expanded version of the job demand-control models proposed by Johnson and Hall, proposed that, like job control, social support from colleagues, supervisors or other people can operate as a moderating (buffering) variable in the relationship between stressors and strain well-being. This mechanism is known as the stress-buffering hypotheses.

When individuals encounter problems in work or life, they tend to find ways to resolve them. Though ways taken are different for each individual, in general, he or she searches someone else to ask for help, advice, support and motivation to

deal with problem. The role informal group such as: communication network, information network, know network, problem solving network and access network¹⁹. Social support and the importance of providing content of social support in advance on the individual's adjustment for development of coping strategies had been emphasized by many researches findings²¹⁻²². Hospital related stressors need to be addressed by nursing professionals from the perspective that there may be ways of reducing the nursing students stress through staff nurses' understanding of nursing students' clinical training requirements, emotional support and on time feedback about their achievements or pitfalls²³.

4. CONCLUSIONS

Work stress differences between member of informal group nurses and the non members evidence that the existence of an informal group is not necessarily a bad influence on the organization, it can be a positive one. This positive influence is as a means of communication, exchanging ideas and relieving stressed worker. The effects of social support will increase individual self-esteems allowing them vulnerable to the adverse effects of stress in their environment. When a person is facing a challenge or stress at work (multiple roles, role conflict, excessive role), they tried to mobilize existing resources including the support from others. They believe that these resources will help them reduce tension. Practical and emotional supports play, especially, as a mediator of the effect of work stress on psychological health and wealth.

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