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THE CORRELATIONS BETWEEN WORKLOAD AND STRESS AMONG MIDWIVES AND NURSES

EBE VE HEMŞİRELERİN İŞ YÜKÜ VE STRESS ARASINDAKİ İLİŞKİLERİ

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Abstract

The workforce crisis and shortage of health workers in the Health sector and increasing population density is the basis of study which is the main causes of stress among health care workers. The data gathering was used observation and documentary method. Statistical analysis was performed in SPSS-(Statistical Package for Social Sciences) Version 20. This data was captured using Taylor Manifest Anxiety Scale 1953 (for measuring anxiety of health workers) Chronometer and "Job Evaluation" by NHS The Spielberg-Hann test is a reliable way of determining the level of anxiety and is one of the most widely used methods in the world. The study sample consisted of 94 midwives and nurses. Among them 4.7% (5) of nurses were male other 95.3% (89) of the research participants were female with the age of 20-29 44.7% (42), 30-39 21.3% (20), 40-49 11.7% (11), over 50 years 22.3% (21) and length of working experience for participants were 4 (4.3%) up to 1 year, 44 (46.8%) of 1-5 years, 13 (13.8%) 6-10 years, 11 (11.7%) 11-20 years, 22 (23.4%) over 21 years. The result showed that total workload of midwife is 484 minutes a day and 65.1% spend for daily healthcare, 12.2% of time for public health, 12.3% spend for filling out essiential documents. But for workload of nurse was 507 minutes a day and average time of no-load 20 minutes not because of nurse. It took 5.4% of total working hours. The 30.8% midwives, 37% of nurses work in extra hours. By the way about 32.5 minutes were taken by break and for personal use. The research findings indicated that the majority of sample communities, about 94,8% have stress. In total, 5.2% of participants do not have stress The findings showed that workload of midwife is 484 minutes a day and workload of nurse was 507 minutes a day. The 59.6% of all participants' stress level determined in I, II. 61.1 % of midwives stress level in II, III. The positive correlation was verified for workload stress among nurse -(0.700) and midwives and negative correlations was for length of working stress (0.160). The nurses' and midwives who have less than 10 years of working experience or under the age of 40, they have high level of stress. Over 40 years of health workers stress level were low.

Key words: Healthcare, midwife, nurse, stress, workload

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INTRODUCTION

At the 19th Session of the Parliament of Mongolia on February 5, 2016, the "Sustainable Development Policy" was set up in September 2015 at 169 targets, 169 goals of the 17th Session of the United Nations, "Sustainable Development Mongolia 2030" approved. This document will be implemented in three stages of Mongolia's long term sustainable development concept. These include: 2016-2020, 2020-2025, 2025-2030.By implementing the Sustainable Development concept, by 2030 Mongolia expects to end all types of poverty and ensure long-term living conditions for Mongolia, reaching 78 years of age and one of the first 70 countries with high human development. The third goal of the 17th goal of Sustainable Development is to ensure that "Healthy Lifestyle" - at all levels, promotes healthy life and wellbeing. The healthcare sector, especially the medical institutions, will play an important role in the implementation of this goal.

Here are around 400 kinds of diseases worldwide and 80 percent of them are stressed by scientists. Therefore, scientists have developed a methodology for detecting stress in a variety of contexts and methods of stress. People are, in fact, feeling stressed, troubled, and depressed in their "dark side" of the existence of a "dark side" of life. However, stress is anxiety, frustration, depression, anxiety, ease of fatigue, neck pain, skin irritation, discomfort, dizziness, arthritis, hypertension, gastrointestinal impairment, kidney inflammation, there is little knowledge about the possibility of swelling.

In recent years, there has been a dramatic increase in workload of health care workers due to population decline, migration policy and lack of human resource allocation for health facilities. One of the conditions of health care development is the human resources of the health sector, and in Mongolia there are still shortage of health care professionals, including nurses and midwifes, in Mongolia and internationally. It is the responsibility of every Government to provide quality, accessible, and evidence-based health services to meet the needs of the population and to determine the human resource needs of the government.

The Government of Mongolia is implementing measures to protect human health, improve the quality of health care, to ensure the effectiveness of financing from the state budget, and to address the challenges faced by the health sector, but lack of human resources, including the nurses. The lack of a nurse specialist worldwide is largely due to the low level of nursing expertise in developing countries.

In 2017, the population was 3,177,899, 3314 health organizations and 47429 specialists. There are 10,576 medical doctors and 12,270 nurses employed in health facilities, with 38.6 nurses per 10,000 population in 2017, which is below the global average by the number of nurses per population .The lack of nursing staff in Mongolia is associated with many factors, such as the burden of nurses, the low level of nursing expertise, and the satisfaction of customers. Training and preparation of nursing resources, proper distribution of workplaces, and adjustment of needs and supplies at the sectoral and public policy level is a key public health concern. Inadequate staffing and staffing of health facilities is the basis for conducting this survey as one of the main causes of stress in the health worker's workload and the stress of population growth due to population density and resettlement.

RESEARCH METHODS

In 2018, the number of 56 midwives and 40 nurses employed in the Amgalan Amnesty Center of the Capital City was set based on the following formula:

- n - number of essentials needed

- N- the size of the original set

- Z- tapping interval (1.96)

- p- basic level of indicator (50%)

- d - Impact of the model (5%)

The error limit was calculated at 0.05 (5%), and the reporting level was 95% and the survey was conducted with 94 midwives and nurses. In order to conduct research, written permission from authorities and investigators for voluntary involvement and research.

Data collection was used to combine quantitative or qualitative methods using single-moment models and analyzed the results using the SPSS-20.0 software. As a result of chronometric and work evaluation results in midwifery and nurse workloads, the results of the descriptive analysis, the time spent on the types of work, the average value of each of the 16 indicators of work, the median, the maximum and the mean value. Assumptions are assumed to be probable if the hypotheses and work evaluation hierarchies, operating areas, and core occupations of the midwife and nurse workload are different by the non-parametric test and if the mean value is less than 0.05.

Chronometer observation sheet in collecting data on the workload of the health worker within one day, the care and activities performed by the chronometer or health worker within 5 working days were followed by a direct observation sheet using the timetable. Assessment of the workload of midwives and nurses by chronometric method the one-day job of a nurse and nurse specified in the "Labor Law the length of time has been taken as the norm. It stipulates that it takes 60 minutes for lunch time for 8 minutes, 4 minutes for lunch, 60 minutes for HF 1986, and for 5-10 minutes short breaks every 1 hours for the purpose of preventing fatigue and preventing labor productivity.

Chronometer observation sheet consists of the following:

- by type and time of the assignment performed on the day of work / minute;
- Number of clients receiving and serving the service day;
- the type and nature of the services being delivered to one client;
- Time to spend on one action;
- Time spent on services provided to one client;
- Number of clients who served every five days of work;

Job evaluation

The use of data and observation methods is based on the "Occupational Assessment" methodology developed by the National Health Center of the UK. The methodology was evaluated by factors that could not be determined by Chronometric estimation. These include:

- Knowledge and work experience
- Responsibility / service, policy implementation, human and data resources, research and analysis etc.)
- Skills / communication, analysis, planning, senses, etc.)
- Right to act
- Efforts / physical, intellectual, emotional, and freedom of movement /

Taylor's anxiety alert the alarm was performed by Taylor in 1953 on the 'Measuring Exit'. The test is capable of solving theoretical and practical problems and is the basis for other tests. Measurement of the test was determined by a university (1971) student and a total of 103 patients with various mental illnesses. The reliability test of the test was 0.82 percent for re-examination after five months and 0.81 for subsequent studies (9-17 months). The Alert Taylor questionnaire consists of a total of 50 questions and yes, yes.

RESULTS

Of the 94 surveyed nurses and nurses surveyed, 4.7% (5) of males and 95.3% (89) were female nurses and nurses, and 44.7% (42), 30-39 21.3% (20), 11.7% (11), 40-49, and 22.3% (21). According to the year of employment, up to 1 year 4 (4.3%), 1-5 years 44 (46.8%), 6-10 years 13 (13.8%), 11-20 years 11 (11.7%), more than 21 years 22 (23.4%) participated.

Table 1. *The results of the workload of midwives and nurses*

AVG	**241.0**	**65.1**	**278.0**	**75.1**	**259.5**	**70.1**
P25-p75	170.0-321.0	45.9-86.8	200.0-415.0	54.0-112.1	185.0-368.0	50.0-99.4
The total time spent on the public health care /MIN/						
AVG	45.0	12.2	30.0	8.1	37.5	10.1
P25-p75	25.0-60.0	6.8-16.2	15.0-60.0	4.0-16.2	20.0-60.0	5.4-16.2
total time spent on the primary form (min)						
AVG	48.0	12.3	52.0	14.0	50.0	13.5
P25-p75	30.0-120.0	8.1-32.4	30.0-120.0	8.1-32.4	30.0-120.0	8.1-32.4
\Total time spent on idle/						
Average	30.0	8.1	20.0	5.4	25.0	6.8
P25-p75	15.0-50.0	4.0-13.5	13.0-50.0	3.5-13.5	14.0-50.0	3.8-13.5
Total time spent on workplace preparation /min/						
Average	30.0	8.1	40.0	10.8	35.0	9.5
P25-p75	8.0-40.0	2.1-10.8	13.0-60.0	4.3-16.2	10.5-50.0	3.2-13.5
Working on daily basis						
Average	60.0	16.2	60.0	16.2	60.0	16.2
P25-p75	15.0-120.0	4.0-32.4	20.0-120.0	5.4-32.4	17.5-120.0	4.7-32.4
The total time spent on work not included in the job description /min/*						
Average	50.0	13.5	35.0	9.4	42.5	11.5
P25-p75	30.0-125.0	8.1-33.8	20.0-120.0	5.4-32.4	25.0-122.5	6.8-33.1
Daily workload /min/						
Голч	484.0	130.8	507.0	137	495.5	133.9
P25-p75	380.0-490.0	102.7-132.4	472.0-618.0	127.5-167.0	426.0-554.0	115.1-149.7
Total time spent on private needs (short break) /min/						
Average	40.0	10.8	25.0	6.8	32.5	8.8
P25-p75	15.0-40	4.0-10.8	15.0-50	4.0-13.5	15.0-45.0	4.0-12.1

The midwife's spending is 484 minutes per day based on evaluating the workload of midwives and nurses, and 65.1% of daily activities are spent on medical care, 12.2% for public health care and 12.3% for primary care. The nurses spend 507 minutes on daily activities. An average of 20 minutes spent on loose stays due to the reasons why the nurse did not work, which accounted for 5.4% of the total work time. The midwife is 30.8% and the nurse works 37% more hours. It also takes a short break or takes an average of 32.5 minutes for personal use.

Table 2. *Workload of midwives and nurses / by job evaluation criteria/*

	Midwives	Nurses
	Skills	
Average	72	72
p25	58	58
p75	79	82
	Knowledge experience and prep study	
Average	82	82
p25	52	60
p75	120	120
	Responsibility to take	
Average	61	58
p25	54	51
p75	70	65
	Action and freedom	
Average	17	17
p25	4	4
p75	17	17
	The effort and work environment	
Average	55	60
p25	32	38
p75	62	62
	Total score	
Average	287	289
p25	200	211
p75	348	346

The skills, knowledge, experience gained, training received, the responsibility to perform the work, the efforts made, the freedom to work and the working conditions were evaluated for the performance evaluation of the chronometric method. The survey respondents observed that midwives and nurses who participated in the survey had the same skills required to carry out their work. The experts are physically, mentally and psychologically to work the efforts of nurses are 5 points or 1 level higher than the midwife's effort. In addition, the freedom to act on the job has been assessed by the midwives and nurses at the same level as the results of the study.

Table 3. *Comparison of stress levels for midwives and nurses*

	% Describe	Identify partnerships Philosophy questionnaire					Total
		No stress	Stress I	Stress II	Stress III	Stress IV	
Midwife	Number	2	19	12	21	0	54
	Percentage	3.7	35.2	22.2	38.9	0	100%
	Total %	2.1	20.2	12.8	22.3	0	57.4%
Nurse	Too	2	14	10	13	1	40
	Percentage	5.0	35.0	25.0	32.5	2.5	100%
	Total %	2.1	14.9	10.6	13.8	1.1	42.6%
Total	Number	4	33	22	34	1	94
	Percentage	4.3	35.1	23.4	36.2	1.1	100%

Determining the stress level of the total respondents, 5.2% had no stress and 94.8% had stress. From that:
- 35.1% is the 1st grade of stress
- 23.4 percent of the second degree of stress
- 36.2 percent is the third degree of stress
- 1.1 percent had a fourth degree of stress.

The majority of midwives and nurses covered by the survey are stressed. Specifically, 59.6% of people in stress and 2nd and 3rd degree stress are attracting our attention. As for the midwife, strain II and III were 61.1%, and 57.5% for nurses were stressed. Nurses stressed that the nurses' nurses were divided into 42 and 2 percent respectively.

According to the year of employment, up to 1 year 4 (4.3%), 1-5 years 44 (46.8%), 6-10 years 13 (13.8%), 11-20 years 11 (11.7%), more than 21 years 22 (23.4%) had a disproportionate level of stress. Level III stress for workers working for 1-5 years. The proportion of people below the age of 39 in stress levels is higher than their age. For instance, 70.0% (30-39) and 45.2% of adults (20-29) have high stress levels. This result is more relevant to the performance of the year of work, and correlation between years of service and age is strongly correlated and the stress is inversely related to their age.

Table 4. *The correlation between workload and stress among midwives and nurses*

		Midwives/ Nurse	Job experience	Age
Midwife/ nurse	Correlation	.700**	-.160**	-.224**
	Sig.(2-tailed)	0	0.051	0
	N	94	94	94
Job experience	Correlation	-0.075	1	.909**
	Sig.(2-tailed)	0.051		0
	N	94	94	94
Age	Correlation	-.147**	.909**	1
	Sig.(2-tailed)	0	0	
	N	94	94	94

When we correlate the correlation between these studies, stresses indicate that the burden of midwives and nurses is r- (0.700) or directly related. For stressed work

years, r- (0.160), which is contraindicated and midwives and nurses working less than 10 years, have high stress levels and tend to be less stressed for midwives and nurses who work for more than 10 years from the study. In the age range, r- (0.224) or decreased dependence is less than 40 years old, with a high stress level and over 40 years of age.

DISCUSSION

According to some studies, the researcher, S.Myagmarchuluun, conducted a 2008 study that the first-time nurses spent most of the time on health care (drop-out and pressure), which is why our research nurse has the highest health care and 278 minutes spent the same. According to a survey conducted in 1201 nurses in Ulaanbaatar in 2009, the workload of nurses was high (74%) and poor working conditions (40%).

Night shift nurses carry 22 kinds of tasks over a single period of time, and only 16 hours and 10 minutes of 15 tasks are performed. Of course, 90% of the work is spent on grain preparation. The result is that our nurses spend about 507 minutes on average daily routine work, including 70.1% of daily work hours spent on medical care.

The researcher assessed the work load and job description of some family nurses of Ts.Oyundari family nurses in Ulaanbaatar. The survey was conducted by chronometric analysis of 133 household nurses and provided 44% of total work for family nurses the result of poor public health services is the result of our survey midwives in the primary care 48 minutes to care for 45 minutes in public care and differs from the results

CONCLUSION

1. Midwives spend 484 minutes on average daily routine, and 65.1% in day-to-day activities are spent on medical care, 12.2% in public health care, and 12.3% in primary care. The nurses spend 507 minutes on daily activities. No matter the nurse the average spent 20 minutes spent on loose stops was 5.4% of the total work time. The midwife is 30.8% and the nurse works 37% more hours.

2. The total number of respondents is 59.6 for 2nd and 3rd stresses. As for the midwife, strain II and III were 61.1%, and 57.5% for nurses were stressed. Situation Tends to midwives and nurses who work for up to 1 and III for a total of 50.0%, 54.5% for 1-5 years and 61.5% for 6-10 years or more. The extent of the body's alarm is similar to the mid-year for all midwives and nurses. In other words, midwives and nurses are more likely to be more susceptible to negative emotions due to circumstances.

3. We stress correlation between correlations between this study and correlated with r- (0.700) in the burden of midwives and nurses. For stressed work years, r- (0.160), which is contraindicated and midwives and nurses working less than 10 years, are highly stressed, and the less stressed midwives and nurses who work less than 10 years from the study. In the age range, r- (0.224) or

decreased dependence is less than 40 years old, with a high stress level and over 40 years of age.

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