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Research Article

Evaluation of the perceived effects of two shift duty and moonlighting among health workers in Umuguma Specialist Hospital, Owerri

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Abstract

The study examined the perceived effect of moonlighting and two shift duties among how to workers job performance in Umuguma specialist hospital, Owerri. Four research questions and three null hypotheses guided the study. The study adopted a descriptive survey Design on a target population of 1200 health workers. The sample size for the study was 300 drawn from the target population using the Taro Yarmane formula for finite sample as well as the proportionate stratified random sampling technique to derive the cluster proportions. They study used in researcher constructed questionnaire as instruments for data collection. The instrument was an open-ended questionnaire of the modified likert type of rating scale which was validated by 2s parts in measurement and evaluation of Alvan Ikoku Federal University of Education, Owerri and the researchers supervisor. The reliability of the instrument was established using the test-retest reliability method and Pearson product moment correlation and a correlation index of 0.71 was obtained. The direct method of data collection was used and data collected were encoded and analyzed using the mean and standard deviation to answer the research questions and Chi-square and ANOVA to answer the hypotheses at 0.05 level of significance all through the statistical package for social science (SPSS) page. Findings made include: that all items stated in research question one are causes of two shift duties and moonlighting, that two shift duties and moonlighting seriously influence health workers job performance a great deal in Umuguma specialist hospital, and so on. Recommendations made include: the nursing group should try to make two shift duty and moonlighting a practice that does not jeopardize the carefully plant duty rooster of health institutions, the government should put in place motivational techniques to minimize moonlighting among teachers in the health sector so that they can be more focused on the assigned job and duty posts.

Keywords: *effects, two shift duty, moonlighting, health workers, Specialist Hospital.*

INTRODUCTION

Shift work in the healthcare sector is often irregularly distributed to ensure round-the-clock patient care. Work schedules generally include fixed and rotating shifts, both of which have been shown to affect the health and quality of life of healthcare workers due to circadian misalignment [1]. In this vein, the consequences for the health and well-being of nurses working irregular and rotating shifts are diverse and include gastrointestinal disorders due to changes in eating habits, sleep disturbances, stress, job strain, personal dissatisfaction at work, and deterioration of social and family relationships [2].

Two-Shift Duty in the context of healthcare or nursing refers to a staffing model where a 24-hour workday is divided into two work periods, typically comprising 12 hours each. This system is often implemented to ensure continuous patient care while managing the workload and operational needs of the facility. The Day Shift typically starts early in the morning, example 7:00 AM to 7:00 PM While Night Shift Covers the remaining hours, example 7:00 PM to 7:00 AM. Each shift involves a handover period to ensure seamless communication about patients' conditions and any significant developments [3]

Moonlighting in nursing refers to the practice where nurses take on additional jobs outside their primary employment. This secondary employment can be within the same healthcare facility (internal moonlighting) or at a different institution (external moonlighting). Often pursued to supplement income, enhance skills, or explore diverse work environments, moonlighting is prevalent among nurses, especially in high-demand fields like nurse anesthesiology [4]

Furthermore, people who are taking up one or two jobs alongside having a primary job. The main reason for employees engaging in moonlighting is mainly due to increased standards of living. An individual is considered moonlighting or said to be moonlighted if he is still attached to a primary job but at the same time, he has another job to attain extra money. This job may be in the same hospital but different unit [5]

Approximately, 20% of all workers in industrial units of the developed countries are employed on night shift work or rotating shift schedule. Two-shift duty has been characterized as an unusual or irregular work schedules and working outside normal daily working hours. There is no doubt that shift work has been associated with a number of problems for human health such as sleep disorders, diseases of the gastrointestinal system, metabolic system, and increase in accident probability. [6]

Over the past few years non-standard work arrangements have replaced the job-for-life concept in many industries. The ongoing worldwide economic crisis of the new millennium has caused a prevalence and growth of unconventional types of employment. The adoption of new types of labour was also seen to be influenced by globalisation, ushering a need for flexible markets. The afore-mentioned macro-economic changes and the increase in labour market flexibility in recent years have also made job markets unstable, resulting in much shorter job tenures than in the past. These changes make it necessary for workers to moonlight to obtain a stable income and to protect themselves against uncertainty assert that non-standard workers have had to actively pursue a strategy of moonlighting to deal with the labour market's instability. Two shift-duty and moonlighting has become a widespread phenomenon, prevalent in many developed and developing economies.Two shift-duty and moonlighting statistics indicate that moonlighters are increasing in European countries. Likewise, 7.3 million US workers held several jobs in 2015 although this number has been falling progressively since the mid-1990s [7]

Moonlighting is performed to supplement one's primary job income. Moonlighting comprises outdoor work which means having two or more part-time jobs or additional work. This usually occurs to someone who has a career which is more dominant and acts as a principal occupation. Employees engage in two shift-duty to balance their source of income due to burden of expenses which they face, particularly in today's fast-paced environment. However, due to their attempt in balancing multiple jobs to sustain their needs, sometimes public officials forget to perform their given tasks responsibly [8].

A mal-adaptation syndrome related to two shift-duty work, characterized by impaired sleeping/waking, gastrointestinal disorders, and an increased risk of cardiovascular diseases. Recently, a syndrome called "shift-duty work disorder" has been identified by the presence of the following symptoms: alteration of circadian rhythm of sleep/wake, insomnia, excessive day sleepiness, and fatigue. Different percentages of two shift-duty work disorder have been reported in cross-sectional studies, ranging from 24.4% to 44.3% [9]

Most studies highlighted that the overall quality of sleep among night shift nurses was significantly poorer than that of day and no night-rotating workers. Two shift-duty work induces sleep deprivation which, in turn, alters the daily levels of alertness and job performance, favoring fatigue, this condition, often associated with shifts, is probably due to the desynchronization of circadian rhythm or reduced sleep, similar to jet lag syndrome.

Indeed, a sleep disturbance that occurs in shift work is strongly associated with chronic fatigue. The symptoms of fatigue, including "sleepiness and lack of energy," "impaired concentration," and "feelings of discomfort," were more severe in the nurses who worked night shifts than others who worked during the day. Most authors observed that the fatigue related to night shifts can increase the risk of human errors and injuries and can negatively affect the quality of patient care [9]

Moreover, fatigue reduces performance and job satisfaction, favoring absence due to sickness, absenteeism, turnover, and job attrition and often induces use of psychotropic drugs. Fatigue remains the major source of nurses' errors in administering medication.In a study by Jamal and Baba, rotating shift nurses showed a lower degree of job satisfaction[10]

In the present-day Nigerian context, the occurrence of two-shift duties and moonlighting jobs among employees, particularly in professions like healthcare, is an issue worthy of research for several reasons like economic reality and cost of living; impact on employee and well being; quality of service delivery; organizational impact; policy and regulatory implication; socio-cultural dynamics and global comparison and learning opportunities.

In the colonial days, and shortly after independence, life was a good steady for both private and public workers. Much was achieved by employees with lower income while the source of revenue to government was mainly farm products. In terms of research, it will help in understanding workers behaviour and decision to allocate their time between work and leisure and consequently effect on workers performance and productivity in the private and public sectors. More precisely, Moonlighting is commonly understood as shaving, a second job, usually part-time, in addition to a primary job, full time. Multiple job holding can act as a means of tackling financial constraints, ensuring uninterrupted employment and as a conduct for further career progression via the accumulation of necessary occupational expertise [11]

Shift work, particularly work including night shifts, is the most widely studied condition, as it may interfere at several levels with human homeostasis and well-being. At the biological level, the perturbation and, sometimes, the inversion of the sleep/wake cycle, connected with the modified activity/rest pattern, is a significant stress for the endogenous regulation of the "circadian" (of about 24 hours) rhythms of biological functions, which are driven by the body clock located in the suprachiasmatic nuclei of the encephalon and synchronized by environmental cues (the light/dark cycle in particular) through non-vision-related photic stimuli from retinal ganglion cells with high sensitivity to light.

However, shift work and night work have been identified in the literature as the most harmful schedules for workers, and their negative impacts can translate into three primary domains: health, family and social life, and the organizational context. In terms of health, problems tend to arise due to the circadian disturbance to which the workers are subjected. When shift work involves working at night, it requires an inversion of the workers' sleep–wake cycle, which can lead to disturbances in their circadian systems. This has been associated with several health problems. Specifically, it identified several health problems associated with shift work and night work, including sleep problems, cardiovascular problems, psychological problems, oncological problems, and problems with the female reproductive system. [12]

Nurses and midwives are the world's largest group of health professionals, representing 48% of the global health workforce, and their role is widely considered critical for the delivery of Universal health coverage (UHC) goals in high- as well as low-income countries. However, the profession has recently come under pressure because of growth of the demand for health services and concomitant scarcity of funds, and the global shifts in the world's health labour market. As the nursing workforce is predominately female, policy options to address nurses' participation in the public and private labour market will need to take gender into account [13].

Over the recent decade and a half, the number of females holding at least two jobs has more than tripled and their moonlighting rate has risen from 2.2% to 4.7%. In addition, females whose primary jobs are in industries such as entertainment and recreation services, professional services, educational services and public administration are the most likely to engage in two shift-duty and moonlighting. Majority of females engage in moonlighting both for financial as well as non-financial reasons (opportunity to learn new skills). However, the percentage of staff from public hospitals in South Africa engaged in moonlighting fell from 35.1% for men and 17.6% for women in 2001 to 25.0% and 14.2% respectively in 2009 [14].

In Sub-Saharan Africa, the practice of engaging in two-shift duties and moonlighting among health workers is emerging as a critical concern with profound implications for healthcare delivery. Health systems in the region are already burdened by chronic workforce shortages, with only 1.3 health workers per 1,000 people, far below the WHO's threshold of 4.5 per 1,000 needed to meet the Sustainable Development Goals (SDGs) [15]

This workforce deficit exacerbates the challenges posed by moonlighting and dual-shift employment. Moonlighting, defined as health workers taking on additional jobs beyond their primary employment, often arises due to inadequate remuneration. In countries such as Nigeria, up to 50% of health workers report engaging in multiple jobs to supplement low wages.

While moonlighting offers financial relief for workers, it compromises their physical and mental well-being, leading to burnout, decreased job satisfaction, and reduced quality of care.

Furthermore, the dual demands of moonlighting and extended shift work contribute to medical errors, absenteeism, and reduced patient outcomes. Studies in Sub-Saharan Africa have revealed that long hours and insufficient rest between shifts are associated with a 20% higher likelihood of clinical errors, while patient satisfaction declines by up to 15% in facilities where staff shortages force extended work hours [16]

This issue is compounded by unequal distribution of health workers, with rural areas facing acute shortages. For instance, in Malawi, up to 50% of nursing positions remain unfilled, leading lower-skilled staff to assume tasks beyond their expertise, thereby reducing care quality[17]

Addressing this dual employment challenge is essential to improve healthcare system resilience in Sub-Saharan Africa. Strategic interventions, such as better remuneration policies, workforce distribution reforms, and supportive regulations, are crucial to mitigating the adverse effects of moonlighting and extended shifts. These measures will ensure healthier working conditions, better health outcomes, and progress toward achieving universal health coverage in the region [18]

The increasing prevalence of two-shift duties and moonlighting among health workers in Nigeria has become a pressing concern in the face of escalating economic pressures and an overstretched healthcare system. Nigeria's healthcare workforce faces immense challenges, including low remuneration, staff shortages, and inadequate working conditions, prompting many professionals to take on additional jobs or extended hours to meet financial needs. While this coping mechanism provides immediate financial relief, it introduces significant challenges that compromise healthcare delivery, workforce sustainability, and employee well-being [19]. This led the researcher to carry out the study on the *perceived effects of two shift duty and moonlighting among health workers in Umuguma Specialist Hospital, Owerri*.

Materials and methods

Research Design

The study adopted a descriptive survey design. It was conducted at Imo State Specialist Hospital, Umuguma, Owerri, Imo State. The design was a descriptive study design that focuses on obtaining information regarding the activities, beliefs, preferences and attitudes of people through direct questioning of a sample of respondents. It is a system of collecting data through the use of a self-reporting technique.

Ethical Consideration

All ethical standards pertaining to human research were carefully considered in this study. The researcher obtained a letter of introduction from the head of department of nursing science, Imo State University and submitted same to the head of Nursing Service at Umuguma Specialist hospital, Owerri, Imo State to obtain permission for the study. Also, the letter of permission was received from the head of nursing service and was sent to the nurse in-charge of the children unit for approval. Also, written and verbal informed consent was obtained from the respondents. They were assured of anonymity and that confidentiality regarding the collected data will not be breached, good rapport and interpersonal relationship was also established between the researcher and the respondents.

Target Population

The study population comprises of all the health workers in Umuguma specialist hospital in Owerri, Imo State which 1,200 and the target population is 300 health workers.

Table 3.1: Showing the population of health workers in Umuguma Specialist Hospital, Owerri

Cadre	Number of health workers
Doctors	50
Midwives	80
Nursing officer 1	150
Nursing officer II	120
Senior nursing officer	150
Principal officer	250
Assistant chief nursing officer	300
Chief nursing officer	100
Total	1200

Inclusion Criteria: The inclusion criteria are as follows; health workers (mention them by profession example Doctors, midwives, Nursing officer I, Nursing Officer II, Senior Nursing Staff, principal officer, assistant chief nursing officer, Chief Nursing officer etc in Imo State Specialist Hospital, Umuguma.

The study population was chosen to provide a comprehensive understanding of the effect of two shift duty and moonlighting among health workers in Umuguma Specialist Hospital, Owerri, Imo State by including all health workers. the research aimed to capture a diverse representation of the target population of acceptance experiences and number of health workers.

Exclusion Criteria: The study excluded:

1. Nurses who refused to participate in the study.
2. Nurses who were unable to comprehend what the research entails.

Sample and Sampling Technique

endra (2018), defined sample as a subset of population that is used to represent the entire group as a whole. Sampling was considered because the entire population 1,200 could not be used due to time and financial constraint. The sample was obtained using Taro Yamane formula to get the sample size as follows.

$$\frac{n = N}{1+N(e)2}$$

Where
N = Target population
N = Sample size
1 = A constant (Unity)
E = Level of significance/Limit of tolerable error (0.05).

$$n = \frac{1200}{1+1200\ (0.05)^2}$$

$$N = \frac{1200}{1+1200\ (0.0025)}$$

$$n = \frac{1200}{1+3 = 300}$$

Therefore, applying the above formular on the population, a sample size of 300 respondents was statistically obtained. The proportionate stratified sampling technique was further used to obtain members of each group

Table showing sample distribution

S/N	Occupation	number
1	Doctors	13
2	Midwives	20
3	Nursing officer I	37
3	Nursing officer II	30
5	Senior nursing officer	37
6	Principal officer	63
7	Assistant chief nursing officer	75
8	Chief nursing officer	25
	Total	300

Instrument for Data Collection

The instrument for data collection used were structured closed ended questionnaire. The instrument for data collection consists of 25 items in four sections.

Section A: This section comprised the respondents demographic data and other personal data required for the study

Section B: Consist of items on information about causes of Two shift duties and moonlighting among health workers in Umuguma specialist hospitals, Owerri.

Section C: Consist of items on information on coping strategies of health workers towards two shift duty and moonlighting in Umuguma Specialist hospital, Owerri.

Section D: Consist of items on the influence of two shift duty and moonlighting on educational outcome of Nurses.

Section E: Consist of items on *perceived effects of two shift duties and moonlights on health workers job performance in Umuguma Specialist Hospital, Owerri.*

Section F: Consist of items on Predictive factors affecting to their coping mechanisms of health workers on *two shift duties and moonlights* in Umuguma specialist hospital, Owerri

Validity of the Instrument

Validity refers to the degree at which an instrument measures exactly what it is supposed to measure. The semi structured questionnaire used for this study was submitted to the supervisor who is an expert in research methods for face and content validity. Two other experts from measurement and evaluation also validated the instrument. The content validity was achieved by ensuring that all questions asked were based on the research questions. The researcher effected the necessary corrections as made by the experts before the final draft was printed and approved by her supervisor as an instrument for data collection for the study.

Reliability of the Instrument

The reliability of the instrument was ascertained through a pilot study using test-retest method in which 20 copies of the questionnaire were administered to 20 health care workers at health centre in Umuguma, Owerri in Imo State. After filling the questionnaire, the researcher collected the responses. The same questionnaire but fresh copies were administered to same groups after 1 week, results of the 1st and 2nd test compared and analysed using Pearson Product Moment Correlation co-efficient. It yielded a high positive average correlation of 0.71, meaning the instrument was determined to be reliable.

Method of Data Collection

The copies of the validated questionnaire were administered by the researcher and one research assistant to the respondents at the area under study, 300 questionnaires distributed, completed and all collected back. This resulted to a 100% return rate.

Statistical Analysis

The data collected were analysed using the chi-square test of independence by the use of statistic package for social sciences (SPSS) version 20.0 frequency, mean and standard deviation were presented on tables.

Results

Table 4.1: Mean and standard deviation responses on the causes of two shift duties and moonlighting among health workers in Umuguma specialist hospital, Owerri

S/N	Item	Doctor			Midwives			Nursing off I			Nursing off II			Snr. Nursing off			Principal off			Asst. Chief Nur. Off			Chief Nurs. Off			Av. Ẍ	Av. SD	Remark
		N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD			
1	*I do two shift duty work often*	13	3.4	.51	20	3.6	.51	37	3.5	.52	30	3.6	.51	37	3.5	.51	63	3.5	.51	75	3.6	.522	25	3.4	.58	3.6	.131	Accepted
2	*I do two-shift work to increase patients demand*	13	3.5	.63	20	3.4	.67	37	3.4	.73	30	3.4	.72	37	3.5	.69	63	3.4	.64	75	3.7	.45	25	3.7	.46	3.6	.123	Accepted
3	*I perform two shift duty due to staffing shortages*	13	3.3	.70	20	3.4	.68	37	3.3	.68	30	3.3	.70	37	3.4	.67	63	3.3	.71	75	3.6	.45	25	3.6	.50	3.6	.177	Accepted
4	*The reason of working shift schedule is because my salary is insufficient to meet my basic financial needs.*	13	3.5	.63	20	3.4	.67	37	3.4	.73	30	3.4	.72	37	3.5	.69	63	3.4	.64	75	3.6	.48	25	3.5	.51	3.5	.155	Accepted
5	*Shift work*	13	3.3	.70	20	3.3	.70	37	3.3	.68	30	3.3	.70	37	3.4	.67	63	3.3	.71	75	3.6	.50	25	3.4	58	3.6	.155	Accepted

	is apply because of work-life balance.																							
6	*Working a two-shift work and moonlight affect my health and well-being.*	13	3.5	.63	20	3.4	.67	37	3.4	.73	30	3.4	.72	37	3.5	.69	63	3.4	.64	75	3.8	4.9	25	3.6	.49	3.6	.166	Accepted
7	*There is a lot of challenges faced while working a two-shift work and moonlight e.g. fatigue, stress, family responsibilities, social impact, health issues etc.*	13	3.3	.70	20	3.4	.68	37	3.3	.68	30	3.5	.73	37	3.4	.50	63	3.6	.50	75	3.6	.49	25	3.6	.50	3.6	.154	Accepted
8	*Do you engage in moonlighting, outside your primary healthcare position?*	13	3.5	.63	20	3.4	.67	37	3.4	.73	30	3.4	.63	37	3.4	.68	63	3.4	.69	75	3.5	.50	25	3.8	.41	3.6	.159	Accepted
9	I engage in moonlighting to improve my living standards.	13	3.3	.70	20	3.4	.68	37	3.3	.68	30	3.4	.81	37	3.4	.67	63	3.3	.70	75	3.6	.55	25	3.8	.37	3.3	.195	Accepted
10	Rising costs of living have influenced my decision to work two shifts or moonlight.	13	3.4	.51	20	3.6	.51	37	3.5	.52	30	3.6	.51	37	3.4	.60	63	3.4	.69	75	3.8	.54	25	3.7	.46	3.5	.168	Accepted
11	Staff shortages at my workplace often compel me to take on	13	3.5	.63	20	3.4	.67	37	3.4	.73	30	3.4	.72	37	3.4	.68	63	3.3	.70	75	3.6	.48	25	3.7	.48	3.4	.141	Accepted

	additional shifts																																			
12	*Does moonlighting have negative impact in your primary job performance?*	13	3.3	.70	20	3.4	.68	37	3.3	.68	30	3.3	.70	37	3.4	.68	63	3.4	.69	75	3.5	.50	25	3.5	.51	3.4	.132	Accepted
13	Economic policies such as inflation have significantly affected my income and pushed me to moonlight	13	3.5	.63	20	3.4	.67	37	3.4	.73	30	3.4	.72	37	3.4	.67	63	3.3	.71	75	3.7	.48	25	3.4	.48	3.4	.156	Accepted
	Grand mean	**13**	**3.6**	**.54**	**20**	**3.7**	**.49**	**37**	**3.6**	**.52**	**30**	**3.6**	**.49**	**37**	**3.6**	**.50**	**63**	**3.6**	**.50**	**75**	**3.6**	**.49**	**25**	**3.6**	**.59**	**3.6**	**.171**	**Accepted**

Table 4.1 shows mean responses on the causes of two shift duties and moonlighting among health workers in Umuguma specialist hospital, Owerri. Items 1-13 have mean scores of 3.6, 3.6, 3.6, 3.5, 3.6, 3.6, 3.6, 3.6, 3.3, 3.5, 3.4, 3.4, and 3.4 with their corresponding standard deviations of .131, .123, .177, .155, .155, .166, .154, .159, .195, .168, .141, .132 and .156 respectively all depicting acceptance. Meanwhile, the grand mean score of 3.6 which is greater than the criterion means of 2.5 is a clear indication of acceptance.

Table 4.2: Mean and standard deviation responses on influence of moonlighting and two shift duties on the educational performance of health workers in Umuguma hospital

S/N	Item	Doctor			Midwives			Nursing off I			Nursing off II			Snr. Nursing off			Principal off			Asst. Chief Nur. Off			Chief Nurs. Off			Av. Ẍ	Av. SD	Remark
		N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD			
14	• *How do you typically cope with the demands of shift work and moonlighting* • *Maintaining a regular sleep schedule* • *Engaging in Physical exercise* • *Consuming a balance diet* • *Taking Short break during shifts.*	13	3.3	.70	20	3.4	.68	37	3.3	.68	30	3.3	.70	37	37	.61	63	3.5	.51	75	3.5	.74	25	3.3	.98	3.6	.65	Accepted
15	• I create a schedule to manage my two-shift duties and moonlighting effectively.	13	3..5	.63	20	3.4	.67	37	3.4	.73	30	3.4	.72	37	3.5	.69	63	3.4	64	75	3.4	.90	25	3.3	.98	3.5	.72	Accepted
16	I engage in regular physical exercise to improve my stamina and reduce fatigue.	13	3.3	.70	20	3.4	.68	37	3.2	.75	30	3.4	.63	37	3.3	.73	63	3.3	.71	75	3.4	.94	25	3.2	.82	3.5	.70	Accepted
17	I collaborate with team members to distribute responsibilities effectively during shifts.	13	3.3	.70	20	3.4	.68	37	3.3	.70	30	3.4	.51	37	3.6	.59	63	3.4	.64	75	3.4	.90	25	3.3	.89	3.5	.69	Accepted
18	*I face challenges in implementing effective coping strategies for*	13	3.3	.70	20	3.4	.68	37	3.4	.72	30	3.4	.62	37	3.5	.61	63	3.3	.71	75	3.3	.97	25	3.4	.87	3.5	.73	Accepted

	shift work																											
19	*If yes, what are the barriers? rephrase* *Lack of time* *Fatigue* *Work environment* *Family responsibilities* *Lack of support from management*	13	3.4	.62	20	3.3	.73	37	3.3	.78	30	3.4	.63	37	3.3	.66	63	3.5	.61	75	3.3	.94	25	3.6	.50	3.5	.65	Accepted
20	I create a schedule to manage my two-shift duties and moonlighting effectively.	13	3.4	.51	20	3.6	.50	37	3.6	.50	30	3.4	.62	37	3.4	.75	63	3.4	.60	75	3.3	.95	25	3.8	.41	3.5	.74	Accepted
21	*What do you experience in additional workload in moonlighting?* • *I prioritize task and responsibilities in moonlighting* • *I set clear boundaries between jobs* • *I utilize time management tools e.g. planners, apps.* • *I communicating with employers about availability.* • *I take regular breaks to avoid burnout.*	13	3.5	.63	20	3.5	.63	37	3.5	.63	30	3.4	.71	37	3.3	.66	63	3.4	.72	75	3.4	.91	25	3.8	.37	3.6	.64	Accepted
22	Balancing work shifts and educational responsibilities is challenging for me.	13	3.4	.63	20	3.3	.73	37	3.4	.72	30	3.5	.52	37	3.5	.61	63	3.4	.68	75	3.6	.64	25	3.7	.46	3.6	.59	Accepted
23	I have developed effective time management skills to cope with work and educational demands.	13	3.3	.70	20	3.4	.68	37	3.4	.72	30	3.4	.62	37	3.5	.61	63	3.4	.68	75	3.5	.64	25	3.7	.48	3.5	.56	Accepted
	Grand mean	13	3.5	.32	20	3.6	.14	37	3.6	.21	30	3.6	.20	37	3.5	.21	63	3.6	.17	75	3.4	.38	25	3.5	.38	3.5	.29	Accepted

Table 4.2 shows the mean and standard deviation responses on influence of moonlighting and two shift duties on the educational performance of health workers in Umuguma Specialist Hospital. From the analysis, items 14–23 had mean scores of 3.6, 3.5, 3.5, 3.5, 3.5, 3.5, 3.5, 3.6, 3.6, and 3.5 with their corresponding standard deviations of .65, .72, .70, .69, .73, .65, .74, .64, .59, and .56, all showing acceptance. The grand mean score of 3.5 depicts that respondent accepted clearly all the item statements made in the table with respect to the influence of moonlighting and two shift duties on the educational performance of health workers in Umuguma Specialist Hospital. The result of the analysis therefore shows that moonlighting and two shift duties to a high extent influence educational performance of health workers in Umuguma Specialist Hospital.

Table 4.3: Mean and Standard deviation responses on perceived effects of two shift duties and moonlighting on health workers job performance

S/N	Item	Doctor			Midwives			Nursing off I			Nursing off II			Snr. Nursing off			Principal off			Asst. Chief Nur. Off			Chief Nurs. Off			Av. Ẍ	Av. SD	Remark
		N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD			
24	Long work hours affect my ability to retain and process information for academic purposes.	13	3.4	.51	20	3.6	.51	37	3.5	.52	30	3.4	.72	37	3.3	.66	63	3.2	.71	75	3.6	.66	25	3.6	.49	3.6	.60	Accepted
25	I feel emotionally stressed trying to balance work, studies, and personal life.	13	3.3	.70	20	3.3	.73	37	3.4	.63	30	3.4	.62	37	3.4	.67	63	3.5	.61	75	3.6	.64	25	3.6	.50	3.5	.61	Accepted

26	I am motivated to pursue my studies despite the challenges of moonlighting and two-shift duties.	13	3.4	.51		20	3.5	.51		37	3.5	.52		30	3.4	.72		37	3.3	.72		63	3.4	.60		75	3.5	.70		25	3.6	.49	3.5	.64	Accepted
27	Financial factors can influence people's decisions to moonlight	13	3.5	.63		20	3.5	.61		37	3.4	.72		30	3.4	.63		37	3.4	.67		63	3.3	.71		75	3.6	.59		25	3.6	.49	3.5	.69	Accepted
28	Two shift duties and Moonlighting help in motivating a college institution.	13	3.3	.70		20	3.3	.73		37	3.4	.63		30	3.3	.68		37	3.5	.61		63	3.4	.68		75	3.3	.83		25	3.6	.49	3.4	.76	Accepted
29	Dividing resources and attention between shifts might impact academic quality and student experiences.	13	3.3	.70		20	3.5	.61		37	3.4	.72		30	3.3	.78		37	3.5	.51		63	3.3	.71		75	3.4	.66		25	3.5	.51	3.4	.66	Accepted
30	Limited daylight hours for afternoon shifts could restrict participation in sports and outdoor activities.	13	3.3	.51		20	3.3	.73		37	3.4	.62		30	3.4	.51		37	3.3	.73		63	3.4	.68		75	3.5	.64		25	3.4	.50	3.4	.70	Accepted
31	Reduced interaction between shifts can hinder school spirit and sense of communication.	13	3.3	.63		20	3.5	.61		37	3.4	.73		30	3.4	.72		37	3.4	.61		63	3.4	.56		75	3.5	.62		25	3.4	.76	3.5	.70	Accepted
32	*Do you perceived the impact of two-shift duties on patient care quality?*	13	3.4	.72		20	3.3	.73		37	3.3	.70		30	3.3	.70		37	3.3	.73		63	3.5	.61		75	3.6	.58		25	3.1	.83	3.4	.75	Accepted
33	I experience frequent fatigue due to working two shifts or moonlighting.	13	3.5	.63		20	3.3	.73		37	3.4	.72		30	3.4	.72		37	3.5	.61		63	3.4	.55		75	3.5	.60		25	3.3	.74	3.4	.70	Accepted
34	I struggle to maintain a healthy lifestyle due to time constraints caused by extra work.	13	3.4	.63		20	3.5	.51		37	3.6	.51		30	3.3	.70		37	3.3	73		63	3.4	.72		75	3.6	.61		25	3.3	.85	3.5	.63	Accepted
35	I feel emotionally drained or burned out due to the demands of two-shift duties or moonlighting	13	3.5	.63		20	3.4	.68		37	3.4	.73		30	3.4	.62		37	3.5	.51		63	3.4	.60		75	3.7	.48		25	3.6	.70	3.6	.51	Accepted

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Grand mean	**13**	**3.4**	**.36**	**20**	**3.4**	**.30**	**37**	**3.5**	**.22**	**30**	**3.5**	**.17**	**37**	**3.5**	**.39**	**63**	**3.4**	**.27**	**75**	**3.5**	**.29**	**25**	**3.5**	**.25**	**3.5**	**.28**							

Table 4.3 shows Mean and Standard deviation responses on perceived effects of two shift duties and moonlighting on health workers job performance. Analysis result shows that items 24-35 had mean scores of 3.6, 3.5, 3.5, 3.5, 3.4, 3.4, 3.4, 3.5, 3.4, 3.4, 3.5, and 3.6 with their corresponding standard deviations of .61, .64, .69, .76, .66, .70, .70, .75, .70, .63, and .51 respectively, all being greater than the criterion mean and were hence accepted. However, a grand mean of 3.5 cumulatively indicates a high acceptance to the item statements made in respect of research question three. The result of the analysis therefore reveals that all the items stated in table 4.3 with respect to research question three are truly perceived effects of two shift duties and moonlighting on health workers job performance.

Table 4.4: Mean and Standard deviation responses on the predicting factors affecting the coping mechanism of health workers in specialist hospital Umuguma

S/N	Item	Doctor			Midwives			Nursing off I			Nursing off II			Snr. Nursing off			Principal off			Asst. Chief Nur. Off			Chief Nurs. Off			Av. Ẍ	Av. SD	Remark
		N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD	N	Ẍ	SD			
36	I often feel overwhelmed balancing my professional and personal life due to extended shifts.	13	3.5	.63	20	3.5	.51	37	3.6	.51	30	3.4	.63	37	3.5	.61	63	3.4	.68	75	3.6	.50	25	3.6	.56	3.6	.60	Accepted
37	Working two shifts or moonlighting reduces my productivity during regular working hours.	13	3.4	.72	20	3.4	.59	37	3.4	.73	30	3.4	.62	37	3.3	.63	63	3.4	.65	75	3.4	.75	25	3.7	.48	3.5	.61	Accepted
38	My job satisfaction has decreased due to the demands of two-shift duties or moonlighting.	13	3.5	.52	20	3.4	.60	37	3.3	.70	30	3.3	.70	37	3.5	.51	63	3.4	.60	75	3.6	.76	25	3.6	.64	3.5	.64	Accepted
39	I feel socially isolated due to the demands of two-shift duties and moonlighting.	13	3.4	.62	20	3.5	.69	37	3.4	.73	30	3.3	.70	37	3.5	.61	63	3.5	.61	75	3.3	.92	25	3.4	.87	3.5	.69	Accepted
40	The additional income from moonlighting outweighs the challenges I face.	13	3.4	.72	20	3.3	.66	37	3.3	.70	30	3.3	.70	37	3.3	.73	63	3.5	.61	75	3.3	1.07	25	3.5	.73	3.4	.76	Accepted
41	*Do you perceived the impact of two shift duties and moonlighting on staff turnover rates?*	13	3.4	.72	20	3.3	.66	37	3.3	.70	30	3.4	.71	37	3.4	.68	63	3.4	.68	75	3.6	.60	25	3.3	.88	3.4	.66	Accepted
42	*Do you perceived the impact of two shift duties and moonlighting*	13	3.5	.52	20	3.4	.50	37	3.6	.51	30	3.5	.52	37	3.3	.66	63	3.4	.64	75	3.6	.61	25	3.5	.77	3.4	.70	Accepted

	on hospital's financial performance ?																													
43	*Do you perceived the balance between two shift duties and moonlighting in your organization ?*	13	3.4	.62		20	3.4	.75		37	3.4	.72		30	3.4	.62		37	3.4	.75		63	3.4	.69		75	3.5	.61		25	3.4	.83	3.5	.70	Accepted
44	Personality traits can affect the coping mechanism of health workers	13	3.4	.62		20	3.4	.70		37	3.4	.72		30	3.4	.72		37	3.3	.57		63	3.4	.65		75	3.3	.73		25	3.3	.92	3.4	.75	Accepted
45	Rotational shifts create challenges in maintaining my physical and mental health..	13	3.3	.70		20	3.5	.61		37	3.4	.72		30	3.4	.72		37	3.4	.75		63	3.4	.60		75	3.4	.67		25	3.2	.99	3.4	.70	Accepted
46	High workload impacts my ability to cope with professional demands.	13	3.3	.60		20	3.4	.60		37	3.3	.78		30	3.4	.50		37	3.5	.61		63	3.5	.61		75	3.4	.59		25	3.4	.69	3.5	.63	Accepted
47	My physical health influences my ability to cope with work stress.	13	3.3	.70		20	3.4	.59		37	3.5	.52		30	3.4	.72		37	3.4	.75		63	3.4	.60		75	3.6	.51		25	3.7	.54	3.6	.51	Accepted
48	I seek professional help to maintain my mental well-being when needed.	13	3.4	.72		20	3.3	.66		37	3.5	.63		30	3.4	.50		37	3.5	.61		63	3.4	.72		75	3.7	.54		25	3.6	.66	3.2	.90	Accepted
49	I receive adequate support from colleagues to handle workplace stress.	13	3.5	.52		20	3.4	.60		37	3.3	.75		30	3.4	.63		37	3.4	.59		63	3.5	.65		75	3.6	.55		25	3.6	.64	3.2	.73	Accepted
50	Moonlighting helps me cope with financial pressures but affects my overall well-being.	13	3.4	.62		20	3.4	.75		37	3.5	.63		30	3.4	.62		37	3.4	.75		63	3.4	.64		75	3.6	.50		25	3.5	.70	3.5	.66	Accepted
51	I have received training in stress management and coping strategies.	13	3.4	.72		20	3.3	.66		37	3.3	78		30	3.4	.63		37	3.6	.51		63	3.4	.68		75	3.4	.55		25	3.6	.59	3.2	1.01	Accepted
52	Communication skills help me navigate challenging situations effectively.	13	3.4	.62		20	3.3	7.4		37	3.3	.70		30	3.4	.72		37	3.5	.61		63	3.4	.60		75	3.3	,67		25	3.3	.82	3.2	.93	Accepted
53	I make time for hobbies and leisure activities to unwind after work.	13	3.4	.72		20	3.4	.50		37	3.4	.51		30	3.5	.50		37	3.3	.80		63	3.5	.61		75	3.4	.60		25	3.4	.66	3.4	.96	Accepted
54	Unpredictable work schedules affect my	13	3.4	.72		20	3.3	.66		37	3.4	.63		30	3.3	.79		37	3.4	.60		63	3.4	.64		75	3.2	.62		25	3.5	.64	3.2	1.14	Accepted

	personal and professional balance.																												
55	Individual preferences for problem focused or emotion-focused coping can influence how stress is managed.	13	3.6	.50	20	3.4	.67	37	3.4	.62	30	3.3	.78	37	3.6	.50	63	3.4	.69	75	3.4	.63	25	3.5	.62	3.5	.88	Accepted
56	Strong personal relationship and support networks can provide emotional and practical assistance.	3.4	13	.63	20	3.5	.51	37	3.4	.51	30	3.6	.50	37	3.4	.59	63	3.5	.56	75	3.7	.48	25	3.6	.58	3.5	.88	Accepted
57	Supportive and positive work culture can enhance coping mechanism	13	3.3	.79	20	3.4	.68	37	3.4	.73	30	3.4	.72	37	3.4	.75	63	3.4	.73	75	3.6	.49	25	3.5	.60	3.5	.88	Accepted
58	Effective leadership that promotes open communication and providing resources that can help health workers cope better.	13	3.4	.63	20	3.4	.67	37	3.4	.62	30	3.3	.79	37	3.4	.60	63	3.3	.71	75	3.5	.51	25	3.6	.61	3.3	.86	Accepted
59	Availability of mental and health resources	13	3.4	.72	20	3.4	.68	37	3.4	.73	30	3.4	.73	37	3.4	.67	63	3.4	.69	75	3.6	.49	25	3.7	.48	3.7	.48	Accepted
	Grand mean	**13**	**3.4**	**.36**	20	**3.4**	**.30**	37	**3.5**	**.22**	30	**3.5**	**.17**	37	**3.5**	**.39**	67	**3.4**	**.27**	75	3.5	.29	25	3.5	.25	**3.5**	.28	Accepted

Table 4.4 shows Mean and Standard deviation responses on the predicting factors affecting the coping mechanism of health workers in specialist hospital Umuguma. Item No. 36-59 had mean scores of 3.6, 3.5, 3.5, 3.5, 3.4, 3.4, 3.4, 3.5, 3.4, 3.4, 3.5, 3.6, 3.2, 3.2, 3.5, 3.2, 3.2, 3.4, 3.2, 3.5, 3.5, 3.5, 3.3 and 3.7 with their corresponding standard deviations of.60,.61 .64, .69, .76, .66, .70, .70, .75, .70, .63, .51, .90, .73, .66, 1.01, .93, .96, 1.14, .88, .88, .88, .86 and .48 respectively all expressing acceptance. The grand mean of 3.42 is a clear indication of acceptance of all the item statements in the table in respect of research question four. The result of the analysis therefore reveals that all the item stated in respect of research question four are predicting factors affecting the coping mechanism of health workers in specialist hospital Umuguma.

Discussions

On the causes of two shift duties and moonlighting among health workers in specialist hospital Umuguma, result analysis reveal that respondents from across the departments or units under study on their majority accepted the items stated in the table concerning the research question. The above findings indicated that there was no association between age and educational qualification of health workers in the study. This is to say that age has no influence on educational qualification of health workers and invariably does not belong with the causes of two shift duties and moonlighting stated. The finding of this study could not hinge support from any of the authors whose books or articles were reviewed for this work and could therefore be a novel area of study.

Concerning the influence of moonlighting and two shift duties on educational performance of health workers in Umuguma specialist hospital, majority of the respondent accepted that most of the items stated in respect of research question two where influential to help workers in the study area. They finding of this study films to the nearly in line with the study of [20] who examined the health system consequences of agency nursing and moonlighting in South Africa using a cluster random sample of 80 hospitals selected from four South African provinces and using a weighted analysis of STATA 13. They are finding was that although moonlighting did not emerge as a statistically significant predictor, the reported heart system consequences are serious. A combination of strong nursing leadership, effective management and consultation with and buy-in from frontline nurses is needed to counteract the potential negative health system consequences of agency nursing and moonlighting.

Talking of the perceived effects of two shift duties and moonlighting on how to workers' job performance in Umuguma specialist hospital, result of defined as revealed that item statements made a respect of research question three where perceived effects of two shift duties and moonlighting on health workers' job performance. They finding indicated that there was a significant difference in the opinion of respondents to the above effect. This differences in response opinion may not be unconnected with the finding of [] on their study of moonlighting and teachers job performance in public primary schools in selected local government areas of Ogun state using descriptive survey Design and a sample of 150 primary school teachers drawn using simple random sampling technique. Their regression analysis result showed that moonlighting significantly influenced teachers job performance in public primary schools. Conclusively, their study clarified that moonlighting significantly impacted teachers' job performance.

On the predictive factors affecting the copy mechanism of health workers in Umuguma specialist hospital. The result of the analysis also revealed that all the item statements in respect to research question for received acceptance by great majority of the respondents. Though minority must have rejected the item statements but the great majority opinions made the way and their average mean/grand mean were upheld for decision making. Nevertheless, they finding corroborates the finding of [21] who conducted research on an examination of the factors that influence moonlighting and its potential effect and employees' health, well-being and productivity. Their findings where that most of the employees resorted to moonlighting not only to meet their financial needs but also to satisfy their hedonic needs as it was also found that the employees' skills, immensely improved because of moonlighting. It also has helped them to keep themselves abreast of the latest policies and strengthened their network. Lastly, theirs was found that the employees were subject to prolonged stress which impacted their overall health and well-being.

Conclusion

They study has been well investigated for strong Revelations. Following what has been done to it and they discussions so far me about it there is such has made serious inevitable inside into some of the predictive factors that affect the copy mechanisms of health personnel in the area of this study. There is such a is therefore hopeful that the findings of the study would be very beneficial to a large group of workers in the health institution being studied, the largest society as a whole for with the revelations made, the nursing crew and they students are like will develop greater or higher interest into the two shift duties and moonlighting styles of rendering their services. They are should be strong apathy to carry on the moonlighting even by the midwives who sometimes feel reluctant to join the moonlighting and two shift duties. Health personnel should whole and entire see the moonlighting as a duty performed to supplement one's primary job assignment/income and nothing more than that. The management of institutions should let the health personnel know that they should not take moonlighting activities as their first priority because sometimes public officials forget to perform they are given primary assignments responsibly. It is true that employees who have fresh blood to work and assiduously at their ages engage in two shift duties to balance their sources of income due to burden of expenses the face especially in today's fast-paced environment, the offer should not be bastardized at the expense of the main job for which one is employed.

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