

Influence of Professional Practice Environment and Burnout on Job Satisfaction among nurses in Ghana

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Abstract

Background: Research on professional practice environment (PPE) is necessary in determining nursing job outcomes in every health organisation. Insight at the health care facilities can, however uncover key factors which induce burnout and its associated job dissatisfaction. The study investigated the influence of PPE and burnout on job satisfaction in the Ghanaian context.

Materials and Methods: A cross-sectional approach with a sample of 232 Registered Nurses completed a questionnaire measuring PPE, burnout and job satisfaction. Descriptive, Pearson Correlation and Multilinear Regression analysis were done.

Results: *The findings revealed that nurses were generally satisfied with their PPE. Satisfaction with all aspects of their job were recorded except for pay/salary and standard of care given to patients. There were associations between PPE facets and job satisfaction. Multilinear models showed age of the nurse, years in nursing, staffing and resource adequacy, participation in hospital affairs, emotional exhaustion and personal accomplishment as predictors of nurses' job satisfaction.*

Conclusion: *The findings suggest that healthy PPE and reduced burnout improve the job satisfaction of nurses.*

Implications for Nursing Management: *Health managers must ensure adequate nurses' participation in hospital affairs and improvement in resource to reduce burnout and in effect enhance the overall PPE of nurses.*

Keywords: *“Burnout, Influence, Job Satisfaction, Nurses, Professional Practice Environment”*

INTRODUCTION

The influence of professional practice environment (PPE) on nurses' job satisfaction is a global challenge. Work environment in which nurses perform their duties has on recent times received increasing consideration in the global field of providing quality care due to the health care reform in many countries. This initiation is informed by increase reports job dissatisfaction among nurses; which creates unproductive, less inspired and higher intention of nurses leaving their job. The lasting effect of such unhealthy practice environments is job dissatisfaction, which has been found to have an important influence on poor quality of clients' care [1]. Though, there is a significant relationship between nurses' job satisfaction, positive practice environment and provision of quality health care; most hospitals lack the standard practices for constant quality assurance and total welfare of staff [2]. Limited attention has, however been given to this important component of health care delivery in Low-to-Middle-Income Countries (LMICs), despite significant role PPE plays on nursing job outcomes.

In LMICs such as Ghana, PPE made up of good leadership, prospects for continuing professional development and availability of material and human resources have been shown to predict the motivation of nurses to stay in the health care facilities [3]. The deplorable work environment in most health care settings usually cause newly qualified staff to lobby for posting to more remunerative work settings. This, they believe will ensure job satisfaction and assurance of continuous stay in these areas to provide quality care to the patient [4].

In Ghana, attaining job satisfaction to a larger extent is limited to adequacy of human and material resources, motivation of staff, healthy politics and maintenance of professionalism at the work place. It is nonetheless, significant to note that poor practice environment coupled with low staff motivation and inadequate equipment in the health facilities also account for nurses' job dissatisfaction [5] [6]. These important parameters are used to evaluate health professionals' outcomes. Even though studies on the effects of PPE on the nurses' job satisfaction in Ghana is still inadequate, it is imperative to know that, attainment of nurses' job satisfaction depends on a work environment that recognises and supports professional practice.

The key challenge from the phenomenon is higher nurses' turnover resulting in acute shortage of nurses with its increased episodes of poor provision of care to patient; as such facilities are not able to retain most of their skilled and experienced nurses [7] [8] [9].

Health care managers and providers can support in achieving positive PPE if adequate insight on the meaning and significance is adequately emphasized. Achieving positive PPE in Ghanaian facilities will help create the right climate capable of encouraging positive organizational behaviour by nurses that would impact positively on the quality of clients' care and, in effect improve on job satisfaction. There is, however, paucity of research assessing the influence of PPE and burnout on nurses job satisfaction [10]. The study, therefore sought to investigate the influence of PPE and burnout on job satisfaction among nurses in Ghana. In specific terms, the study sought to assess nurses' perception regarding PPE, and to ascertain the relationship between PPE and nurses' job satisfaction. Secondly, the study sought to determine the predictors of nurses' job satisfaction.

MATERIAL AND METHODS

Study Design and Setting

A cross-sectional survey was adopted to assess the respondents' views regarding the influence of professional practice environment and burnout on job satisfaction among Registered Nurses in Sunyani, Ghana. The study was undertaken at Sunyani Municipality, which is located in the middle belt of Ghana, West Africa and has six hospitals, twelve clinics, seven Community-based Health Planning Service (CHPS) compound, three maternity homes and three (3) health centres that provide health services to the municipal population of 138,073 [11]. The population involved Registered Nurses working in public health facilities who agreed to take part in the research. The Regional Hospital has a total nursing workforce of 280, while the Sunyani Municipal Hospital, a primary care facility has a nursing workforce of 166. In total, the two facilities have a total nursing population of Four Hundred and Forty Six (446) comprising of all categories of Registered Nurses [12].

Study Population

The target population for this study included all Registered Nurses (RN) working in public health facilities in the Sunyani Municipality, who consented to participate in the study. Registered nurses with at least one-year post qualification experience were recruited to participate in the study. Retired nurses on contract, rotation and students nurses, auxiliary nurses were however, excluded from the study.

Sample & Sampling Technique

The study employed the approach proposed by Yamane [13] in sample size calculation. With an error of 5% and a confidence coefficient of 95%, the calculation from a population of 446 was 211. To account for attrition rate, the sample size was adjusted by 10% to make it 232. A multi-stage sampling method was used to select respondents; where a simple random sampling technique was used to select two (2) hospitals for the study and a proportionate stratified sampling approach was used to apportion a number to each facility based on the strength of nursing staff to ensure unbiased representation. A simple random sampling was used to recruit the respondents throughout all the three shifts (8am to 2pm, 2pm to 8pm and 8pm to 8am) run by the nurses in the facilities to recruit respondents. The recruitment process lasted for three weeks. Two research assistants were recruited and trained to assist the researcher in the

distribution and collation of the questionnaires. The researcher and research assistants ensured that the questionnaires were adequately completed before collection. There was 100% response rate as all respondents recruited for the study returned completed questionnaires. Ethical approval was sought from Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB) and Clearance from The Ghana Health Service (GHS) Regional Health Directorate (Brong Ahafo) before the commencement of the research. The respondents were contacted in person to enlist their participation and to plan the date for administration of questionnaires. Only respondents who voluntarily consented to undertake the study were enlisted, after which a self-administered questionnaire was given to them for completion. Questionnaires were returned by participants on time when it was completely answered.

Data Collection Method

With the support of the nurse managers and ward in-charges, prospective respondents were contacted and enlisted for the data collection. Consent forms were signed by the respondents who met the inclusion criteria and expressed the willingness to partake in the study. After obtaining voluntary informed consent, a self-administered questionnaire was given to the nurses for completion. The purpose of the research was explained to the respondents and were given 30-45 minutes to fill out the questionnaire. The researcher and the assistants provided clarification questions which were unclear to respondents. Questionnaires were returned by respondents on time when it was completely answered.

Tools for Data Collection

Standard tools were adapted for the study. The instrument was divided into three parts with the socio-demographic data. The Practice Environment Scale of Nursing Work Index (PES-NWI) was used to measure PPE [14]. The scale was made up of 5 sub-scales (nurse manager ability, leadership and support, collegial nurse-physician relations, staffing and resource adequacy, nurse participation in hospital affairs and nursing foundations for quality care) with sum of 32 items on a four Likert scale 1-4 (1=strongly disagree; 4=strongly agree). The Maslach Burnout Inventory (MBI) Scale developed by Maslach, Jackson, and Leiter [15] which was made up of 21 items on a seven Likert scale (1=Never; 7=Everyday). A subset of five items from Measure of Job Satisfaction (MJS) scale developed by Traynor and Wade [16] measured nurses' job Satisfaction. It had a five Likert scale of 1-5 (1=Very Dissatisfied; 5=Very Satisfied). In order to validate the tool, a pre-test of the standardised questionnaire was conducted on 10 nurses from SDA Hospital, Sunyani who met the inclusion criteria. This exercise was done to ascertain the appropriateness of the questionnaire, whether it is difficult to understand or whether questionnaire contained culturally insensitive questions. To ensure reliability of the tool, the various part of the questionnaire was adapted except socio-demographic data. The Cronbach's alpha coefficient for the scale was estimated as 0.86 after the study with component subscales as follows: PES-NWI - 0.88, MBI - 0.77, and MJS - 0.90.

Statistical Analysis

Data was analysed using SPSS version 23.0 (SPSS Inc., Chicago, IL). Descriptive statistics were used to summarise the collected data. Multiple regression analyses was adopted to determine the predictors of job satisfaction. Data analysis was conducted at a significance level of 0.05 and power of 95%.

RESULTS

Nurses’ perception about professional practice environment

Table 1 provides information on nurses’ perception about PPE. The total mean score for professional practice environment was 65.87 (SD=9.68); and it suggests that the nurses had moderately good perception about their PPE. However, regarding nurse manager ability, leadership and support, most of the nurses (60.3%, n=140) were not satisfied. Again, 59% of nurses (n=137) had poor perception about the nurse-physician relationship while 55.6% (n=129) of the nurses perceived inadequacies of staffing and resources. Moreover, little over half of the nurses (50.9%) were not satisfied with nurses’ participation in hospital affairs; and approximately 62% (n=143) of the nurses agreed that the foundation for quality nursing care was not available in their place of work.

TABLE 1: Nurses’ perception about their professional practice environment

PES-NWI SUB-SCALES	FREQUENCY	PERCENT	MIN	MAX	MEAN	SD
Nurse Manager Ability, Leadership and Support	140	60.3	11	44	21.98	3.56
Dissatisfied	92	39.7				
Satisfied						
Collegial Nurse-Physician relations			7	28	15.17	4.19
Poor	137	59.1				
Good	95	40.9				
Staffing and resource adequacy			7	28	15.47	3.78
Inadequate	129	55.6				
Adequate	103	44.4				
Nurses participation in hospital affair			3	12	7.03	1.68
Dissatisfied	118	50.9				
Satisfied	114	49.1				
Nursing foundation for quality of care			4	16	8.71	2.07
Availability	89	38.4				
Non availability	143	61.6				
Total PES score			32	128	65.87	9.68
Dissatisfied	100	43.1				
Satisfied	132	56.9				

(Field Data, 2017).

Nurses’ Job Satisfaction

Table 2 below shows nurses’ satisfaction with their job. The total mean score for nurses’ job satisfaction was moderate (mean=117.25, SD=35.10) indicating that nurses were satisfied with their job. The mean score was high for the job satisfaction scales of personal satisfaction (mean=20.81, SD=4.49), satisfaction with workload (mean=18.88, SD=5.21), satisfaction with professional support (mean=42.99, SD=10.14) and satisfaction with prospects (mean=14.56, SD=4.92). This means nurses were satisfied with personal, workload, professional support, and prospects. However, the mean score of satisfaction with pay (mean=8.43, SD=4.17) and satisfaction with standards of care was low (mean=13.75, SD=5.45), suggesting that nurses were dissatisfied with their pay/salary and standards of care provided to patients.

TABLE 2: Nurses’ Job Satisfaction

Job satisfaction	Frequency	Percent	Min	Max	Mean	SD
Personal satisfaction			6	30	20.81	4.49
Dissatisfied	38	16.4				
Satisfied	194	83.6				
Satisfaction with workload			7	35	18.88	5.21
Dissatisfied	103	44.4				
Satisfied	129	55.6				
Satisfaction with professional support			13	65	42.99	10.14
Dissatisfied	26	11.2				
Satisfied	206	88.8				
Satisfaction with pay			4	20	8.43	4.17
Dissatisfied	203	87.5				
Satisfied	29	12.5				
Satisfaction with prospects			6	30	14.56	4.92
Dissatisfied	57	24.6				
Satisfied	175	75.4				
Satisfaction with standards of care			6	30	13.75	5.45
Dissatisfied	175	75.4				
Satisfied	57	24.6				
Total Nurses’ Job Satisfaction score			37	207	117.3	35.10

(Field Data, 2017)

Predictors of nurses’ job satisfaction

The results of multilinear regression done to determine factors that predict job satisfaction of nurses is shown in table 3 below.

In the model, all the variables together accounted for 40.7% of the variance in job satisfaction ($R^2=.407$, $F_{(11, 220)}=13.75$, $p=.000$). Staffing and resource adequacy in the facility significantly contributed to the model; for one point increase in staffing and resource adequacy, the nurses’ job satisfaction is increased by 0.331 point ($B=0.331$, $p=.016$) while one point increase in nurses’ participation in hospital affairs also contributed 0.125 points in the nurses’ job satisfaction ($B=0.125$, $p=.035$). Additionally, emotional exhaustion and personal accomplishment significantly contributed -0.216 ($B=.216$, $p=.005$) and 0.271 ($B=.271$, $p=.002$) respectively to the model. In the case of emotional exhaustion; an increase of one point in emotional exhaustion, there is a reduction of 0.216 in job satisfaction. Therefore, the predictors of nurses’ job satisfaction include staffing and resource adequacy, nurses’ participation in hospital affairs, emotional exhaustion and personal accomplishment.

TABLE 3: Predictors of nurses' job satisfaction

		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
Model 1	(Constant)	134.516	44.722		3.008	.003
	Age of nurse	-.809	1.858	-.117	-.435	.664
	Years in Nursing	.441	2.356	.059	.187	.852
	Number of years in hospital	1.121	2.562	.098	.437	.662
Model 1 Summary: R²=.003, F_(3, 228)=.230, p=.875						
Model 2	(Constant)	80.884	37.202		2.174	.031
	Age of nurse	-.899	1.500	-.130	-.599	.550
	Years in Nursing	1.058	1.897	.143	.558	.578
	Number of years in hospital	.272	2.075	.024	.131	.896
	Nurse Manager Leadership, Ability and Support	.418	.261	.093	1.602	.110
	Nurse-Physician Relation	.145	.697	.025	.209	.835
	Nurse Participation in Hospital Affairs	-2.911	1.259	-.140	-2.311	.022
	Staffing and Resource Adequacy	2.703	.815	.448	3.317	.001
	Nursing Foundation for Quality Care	1.998	1.036	.175	1.927	.055
Model 2 Summary: R²=.373, F_(8, 223)=16.58, p=.000						
Model 3	(Constant)	88.319	36.859		2.396	.017
	Age of nurse	-.670	1.475	-.097	-.454	.650
	Years in Nursing	.923	1.864	.124	.495	.621
	Number of years in hospital	.167	2.033	.015	.082	.935
	Nurse Manager Leadership, Ability and Support	.342	.260	.076	1.315	.190
	Nurse-Physician Relation	-.100	.691	-.017	-.144	.885
	Nurse Participation in Hospital Affairs	-2.620	1.236	-.126	-2.120	.035
	Staffing and Resource Adequacy	2.000	.825	.331	2.424	.016
	Nursing Foundation for Quality Care	.697	1.079	.061	.646	.519
	Emotional Exhaustion	-.745	.262	-.216	-2.840	.005
	Depersonalisation	-.063	.365	-.011	-.173	.863
	Personal Accomplishment	.399	.129	.271	3.094	.002
Model 3 Summary: R²=.407, F_(11, 220)=13.75, p=.000						

Dependent variable: Nurses' Job Satisfaction

Criterion level: 0.05

DISCUSSION

Perception of Nurses on PPE

The influence of PPE is fundamental to nurses' job outcomes. Professional Practice Environment is related to job satisfaction, intention to leave job and delivery of quality care to patients [17], and therefore, ensuring such supportive environment will help improve nurse and patient outcomes. Though the study reported nurses generally having positive perception about their PPE, the nurses were dissatisfied with the component of nurse manager's ability, leadership and support. This position supports the findings of [18], and gives an indication that when nurse managers are unsupportive in their role, it can greatly influence nurses' job satisfaction. The vital role of nurses in building nursing settings that support quality in nursing care will not be possible if there are inadequate support and leadership from managers [19]. As a way of reducing this challenge, managers must maintain leadership and support, thereby instituting strategies that will mentor and empower nursing staff on leadership roles.

Quality job outcome can be achieved through positive nurse-physician relationship; it is however noted to be poor (59%). This supports the finding which suggested that nurses and physicians are unable to agree to similar opinions relating to the usefulness of their communication and the nurses' obligation in decision making pertaining to the clients' care [20]. The cause of this poor relation between nurses and physicians may be as a result of physician's inability to acknowledge nurses as professionals in the past. The nature of nurse-physicians relation may have also been prejudiced by conventionally engrained orthodox standards that people place on their individual roles; where physicians are seen as the higher authorities in the health care delivery team whereas nurses are often seen as maids of the physician [21]. The dangers associated with this negative relationship are usually avoidable errors and lapses in client care. It must be agreed that teamwork is a very essential component in ensuring a positive practice environment and therefore should be acknowledged as an important facet of health care delivery. Importantly, the association between physicians and nurses must be seen as complementary; and that nurses must be recognised as partners in the provision of quality health care to the client.

The current study also found the perception of nurses on human and material resources in their practice environment to be poor. Similar findings were reported by [22] which agreed with the assertion that, material resources are often lacked in most health facilities. This explain why most of the materials used in nursing patients are improvised in our work settings; hence, nurses are unable to deliver efficient nursing care to clients. With respect to the human resource, it is as a result delay in processing of financial clearance of newly recruited nurses by the government. Solutions to such challenges lie on hospital authorities developing a resilient administrative approach for managing essential medical and human resources by purposely allocating substantial amount in their budget for these resources.

The delivery of health care to patient hinges on teamwork. Most nurses are of the view that physicians have appropriated the management of the health facilities to themselves. With their large numbers in health care settings, nurses initiating and partaking in decision making should have been the appropriate administrative tool to ensure competence and quality care delivery to the patient. The finding of this study contradict work done by [23] which projected nurses' participation in hospital affairs as being positive. This challenge as identified in low- and middle-income countries is possibly due to having most nurse leaders promoted through long service with less attention to adequate leadership training to prepare them adequately and meaningfully to contribute to decision making in health facilities. This negative perception

of nurses on their participation in hospital affairs often results in lack of support from nurses for decisions made by hospital management.

Hospitals that have a clear statement of nursing foundation for quality care are considered as having positive PPE and as such improves nursing job and patient outcomes [24]. When nurses are clear in the mind of the high standards of nursing care expected from management, there is an increase in the quality of care provided to patients. The current study reported non-availability of foundation for quality nursing care. This finding is, however, inconsistent with the study by [25] which indicated the availability of the foundations of quality nursing care in Australian hospitals. With this background, it suggests that most Ghanaian nurses provide care without reference to any standards set by hospital management. This may explain the reason for the low quality of care provided to patients in our health care institutions [6] [9]. Even though the current study and that of [25] both employed a quantitative approach, differences in settings might have accounted for the differing outcomes.

Predictors of Job Satisfaction

The study has shown that socio-demographic characteristics of participants (age of nurse, the number of years in nursing and number of years in the hospital) accounted for only 0.3% of the variance in job satisfaction. However, none of the demographic characteristics significantly predicted job satisfaction. This position is inconsistent with [26] which projected age to be a major determinant of job satisfaction. The practice environment of the nurse explains 37.3% of the variance in nurses' job satisfaction with staffing and resource adequacy and nurses' participation in hospital affairs statistically explaining 0.448 and 0.140 respectively of the predictive power of the regression. This finding is similar to [27] and [28] in their studies on nurses in China and United State respectively about job satisfaction which also projected professional practice environment as a predictor of job satisfaction. According to [29], when nurses have freedom over their own practice and are involved in client care decisions, they have a greater forms of satisfaction on their job. This means that professional practice environment can increase over a third of the nurses' job satisfaction in every establishment. This result offers further policies for nurse managers to reflect on a healthier involvement of nurses in decision making and adequate resources at the work environment.

Burnout in the workplace (lack of personal accomplishment and emotional exhaustion) also explained 40.7% of the variance in nurses' job satisfaction in the third model. Personal accomplishment and emotional exhaustion of the nurse significantly contributed 0.271 and -0.216 respectively to the model. This finding is in line with studies that have concluded on the various dimensions of burnout being important predictor of nurses job satisfaction worldwide [30] [31].

These factors; inadequate human and material resources, inadequate participation in hospital affairs by nurses, lack of personal accomplishment and emotional exhaustion were all predictors of nurses' job satisfaction. In order to improve this phenomenon, health administrators should find innovative ways of improving the professional practice environment and also reduce the rate of burnout as the two constructs have been found to be contributors to job satisfaction among Ghanaian nurses.

Implications for Nursing Management

The nurses' job satisfaction and standard of care delivered to patients are influenced by the quality of the professional practice environment. Work setting without adequate use of the foundations for quality nursing care set by the health facilities can compromise quality of care provided to patients. Judicious implementation of developed work place protocols and standards in the provision of nursing care to clients

can be enforced by Nurse Managers to reduce burnout thereby enhancing job satisfaction. Adequate resource and workforce support the care provided to patients and nurse job satisfaction, however, having these resources to work depends on the Nurse Manager's support and leadership abilities. Nurse Managers can help improve on job satisfaction by understanding their strategic role in attending to the dimensions PPE such as their leadership abilities and support and adequate staffing and resource. Innovative and human resource policy interventions such as strict adherence to the norming system are needed to overcome the balance distribution of staff and also to retain the experience few in the work place. For Nurse Managers to have motivated nursing workforce, they must facilitate conditions that promote positive PPE by involving nurses in all decision making process in health facilities, reduce emotional exhaustion while ensuring personal accomplishment of the nurse; as such environment improves nurses' job satisfaction and quality care delivery to patients.

CONCLUSION

Most health facilities in Ghana do not possess the positive PPE that promotes job satisfaction. The study found that though nurses had positive perception about their practice environment, they experienced burnout. The nurses, however, had a poor perception of the various aspects of their PPE. Participants were satisfied with all the dimensions of the job except for pay/salary and standards of care. Safeguarding job satisfaction among nurses call for frequent engagement with nurse leaders to deliberate on the factors that enhance job satisfaction. Policy making initiatives such as proper allocation of human and material resources is required from the Human Resource Directorate of the Ministry of Health of Ghana to improve the practice environment of nurses. This will go a long way to improve nurses' job satisfaction and quality of care provided to clients.

Limitations of the study

The tools were not absolutely and culturally sensitive to determine the true opinions of respondents; it was however, made clear so as to obtain the needed data.

Ethical approval

Ethical approval was sought from the appropriate Research Institutional Review Board. Only respondents who consented to undertake the study were recruited.

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