UNIVERSITY OF CAPE COAST

EXAMINING THE IMPACT OF CLINICAL WORKLOAD ON HEALTH WORKER PERFORMANCE

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EXAMINING THE IMPACT OF CLINICAL WORKLOAD ON HEALTH WORKER PERFORMANCE IN GHANA

BY

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MARCH, 2018

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature: …… Date: …….

Name: ……

Supervisor Declaration

I hereby declare that the preparation and presentation of the dissertation was supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature …… Date …….

Name: ……..

ABSTRACT

A number of studies have been conducted regarding workload and have established some correlation between workload and health worker outcomes. The present study sort to examine the relationship between clinical workload and health worker (nurses, midwives and doctors) performance at the Ridge Hospital, using quality of output as indicator for performance. Specifically, the study sort to examine workload levels, examine factors influencing workload and test the relationship between clinical workload and health worker performance. The objectives were achieved using quantitative approach and descriptive research design. Questionnaires were used for data collection from the selected institution with a sample size of 274. The study found that workload was high at the hospital. Moreover, the study found that organizational process and work interruptions are key predictors, contributing about 8% variation in the dependent variable. In view of the findings of the present study, it is recommended that administrators, human resource managers, agencies in charge of health and government organizations should ensure that organizational processes are properly structured to aid workers' performance.

KEYWORDS

Clinical workload

Health worker

Performance

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DEDICATION

To my wife and children:

Mrs. Emma Judith Agbedanu-Hottordze,

Bismark, Innocence, Lordsmark, Maurice, Ian, Eureka and Rene Hottordze.

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INTRODUCTION

Background to the Study

Health and related issues are important concerns to human life. This is so because of the discomfort ill-health brings and its attendant consequences. It has therefore become important to first of all identify issues relating to health service provision and then implement appropriate interventions to address these issues. Workload has been identified by (Hollet-Haudebert, Mulki, & Fournier, 2011; Cimiotti, Aiken, Sloane, Wu, 2012) among others as one of the factors inhibiting adequate health service provision. To this end, the study attempts to clarify the relationship between clinical workload and the performance of the health service providers.

For most organizations, particularly, profit oriented organizations, employee performance is a critical success factor. For instance, there are suggestions that organizations are only as good as their employees. Thus, to maintain a competitive advantage, human resource managers are expected to ensure effective human resource planning, attracting, recruiting, selecting, developing and retaining an effective workforce that will fit well into the overall organizational strategy (Ramesh & Gokulakrishan 2013).

Yet, in all of these important human resource activities to ensure optimum employee performance, studies by Hollet-Haudebert et al. (2011) have reported workload as one of the variables among such other variables as employees' intellect and physical capabilities, qualifications, training, experience, reward,

career progression opportunities organizational structure that influence the performance of employees in an organization.

The health service is one of the sectors that has been found to be faced with workload challenges over the years (Dieleman & Harnmeijer, 2006). Clinical workload has therefore become an important field of study among scholars. Neill (2011) noted that the report "To Err is Human" by the Institute of Medicine in 1999 has resulted in an increasing interest in ascertaining the nature and effect of clinical workload among care givers. Again, the attempts at complying with government regulations by hospitals has to a large extent resulted in changes (Nell, 2011) that require reexamination of the care health workers provide.

In Africa, the inability of governments to train, retain and adequately motivate clinical officers has resulted in the "brain drain" crisis which commenced sometime in 2003 which in turn has resulted in human resource shortages (Dieleman & Harnmeijer, 2006), mainly among nurses and doctors. The evidence of the brain drain is revealed, for instance, in the World Health Organization Report (2006). The report suggests that only three percent of the estimated global health workforce of 59.2 million is found in Africa and with 2.3 per 1000 health sector workforce density (World Health Organization Report, 2006).

Specifically, studies have shown that Ghana's inability to attain the health sector targets is a consequence of understaffing in health facilities, inadequate distribution of health sector human resource, demotivation among staff and inadequate health care infrastructure (Bell, Rominski, Bam, Donkor, & Lori,

2013; Aninanya, Howard, Williams, Apam, Prytherch, Loukanova, & Otupiri, 2016). Again, Ghana's doctor and nursing population ratio of 1:10,451 and 1:1,251 respectively (Ghana Shared Growth Development, 2012) is far below the set standards by the World Health Organization. Furthermore, research has shown that labour costs constitute over 50% of hospital expenses (Hurst & Williams, 2012). The focus of hospitals has therefore been to cut labour cost mostly by downsizing. Thus, much like the brain drain, efforts at reducing labour costs result in labour shortages which in turn have significant impact on clinical staff load.

It is evidently clear that human resource shortages in the health sector which directly influences workload are not the only causes of clinical workload among health sector workers. Other critical issues relate to inadequate healthcare infrastructure, the environment, the organization's philosophy of providing care and individual characteristics (Hegney, Plank & Parker 2006; Page, 2004; Stone et al., 2003). Performance of clinical workers on the other hand is important to the extent that it leads to accessibility of health care, appropriate care and contributes to improved health outcomes. People will not use health services when they are poorly treated (Dieleman & Harnmeijer, 2006). It is therefore imperative that to ensure productivity and effective health care outcomes, employees' number, quality and the type of professionalism are given the needed attention.

Statement of the Problem

The brain drain crisis and the need for leaner budgets have been identified as key contributors to fewer health sector workers (Hurst & Williams, 2012; Dieleman & Harnmeijer, 2006) and in turn influence performance. Health workers' poor performance has been linked to fewer workers, sub-standard health care provision and lack of responsiveness to the needs of patients. Thus, the few existing workers are often burdened with too much work and or work interruptions. Consequently, studies continue to report problems relating to health service provision due to poor performance of health workers (Garcia-Prado & Chawla, 2006, WHO, 2006).

In Ghana, there seemed to be varied results relating to the relationship between health outcomes and human resource performance for health care provision. Evidence exist that qualified, sufficient and motivated human resources are essential for adequate health service provision (Aninanya, Howard, Williams, Apam, Prytherch, Loukanova & Otupiri, (2016). Darawad, Al-Hussami, Saleh, Mustafa & Odeh (2015) also remarked on a World Bank assessment in Ghana which highlighted low health worker performance accross the regions and districts. Again, a study of district hospitals in Ghana rated health worker performance to be moderate in the face of escalating clinical workload (Asamani, Amertil & Chebere, 2015).

Yet, surveys in other parts of Ghana, particularly in the Eastern Region, reported high performance levels among nurses and midwives (Asamani et al., 2015). The inconsistencies in the literature regarding the level of health worker

performance provide a basis for additional studies to enable comparison in order to establish workload related performance among health workers, particularly in Ghana. The present study therefore intends to fill this gap by providing evidence based study relating to workload and health workers' performance.

Purpose of the Study

Workload among nurses is well-researched in other parts of the globe, yet not much attention has been given to its study, particularly, in Ghana and how it influences performance of health sector workers. The present study, seeks to assess the relationship between workload and health workers' performance among nurses, midwives and doctors at the Ridge Regional Hospital within the Accra Metropolis.

Research Objectives

1. Examine the extent of clinical workload levels at the Ridge Regional Hospital.
2. Examine the factors that influence workload at the Ridge Regional Hospital.
3. Test the relationship between clinical workload and staff performance at Ridge Regional Hospital.

Research Questions

Based on the research objectives, three research questions were formulated to guide the study. The research questions include:

1. What is the extent of workload levels at the Ridge Regional Hospital?
2. What factors influence workload at the Ridge Regional Hospital?
3. Is there a relationship between clinical workload and staff performance at the Ridge Hospital?

Significance of the Study

Studies on clinical workload have largely suggested that health facilities are the ultimate beneficiaries as study outcomes help to facilitate a reorganization process to manage staff workload and ensure that staff are performing at their optimal level. For instance, and as indicated in the present study, issues relating to staff absenteeism which is occasioned by workload can be eliminated through strategic human resource activities. More specifically, the study provides insight into how workload impacts staff performance and so supervisors, hospital administrators, human resource managers and institutions responsible for health are able to ensure that workload and related issues are properly managed to avoid any negative consequences.

For further studies on workload, the present study provides additional source of reference.

Delimitations

The study focused on the impact of workload on staff performance. Workload levels at the Ridge Hospital were examined. Factors influencing workload levels were particularly examined and additionally, the impact of workload on the performance of nurses, midwives and doctors at the Ridge Regional Hospital.

Limitations

The major limitation of this study was that the study was undertaken in one hospital in Ghana and so may not necessarily represent the overall picture of workload and its impact on staff performance in all hospitals across the ten regions. The study was also conducted within a limited period of time under financial constraints and the researcher had to attend lectures alongside. Additionally, respondents did not have enough time to respondent to questions. Respondents had to use break periods to respond to questions along with other personal issues that equally required attention. This however did not affect the quality of work since the time allotted was effectively utilized, taking cognizance of the time–challenge. According to Babbie (2005) virtually all research studies contain some flaws and this study is certainly no exception.

Definition of Terms

Health Worker: This includes nurses, midwives and medical doctors at the Ridge Hospital. Clinical workload: This relates to indicators of organizational process,

volume of work, work interruptions and resources. Performance: This relates to the quality of health worker output.

Organization of the Study

The study is structured under five main chapters. Chapter one consists of the background to the study, statement of the problem, purpose of the study, significance of the study, delimitations, limitations, definition of terms and organization of the study. Chapter two reviewed literature which was organized under the sub headings; introduction, theoretical review, factors influencing workload, the relationship between workload and performance and conclusion. The chapter also provides a framework for the study.

Chapter three discusses the research methods adopted for the study and includes the study area, population, sampling procedure, data collection instruments, data collection procedure, data processing and analysis and the chapter summary. Chapter four presents findings of the primary study including introduction, biodata and analysis based on the research questions. Chapter five concludes by summarizing the key findings, drawing conclusion, presentation of recommendations and suggestions for future studies.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The study seeks to examine the relationship between workload and health workers' performance at the Ridge Hospital. The chapter commences by establishing the theoretical basis for the study and discusses critical components of the variables relating the factors that influence workload. The chapter also reviews literature on the relationship between the two variables. The chapter is concluded with a summary of the key points that emerged from the literature review.

Theoretical Review

The underlying basis for the present study is explained mainly by the consequences of workload on performance. In this respect, a number of theories underline human behaviour including the demand-control-social support model, the effort-reward model and the activity-analysis model.

Demand-control-social support model

As explained by Montreuil et al (2011), the demand-control-social support model contends that a work situation characterized by high psychological demands and low decision latitude generates consequences for individuals in the

form of stress and various physical and psychological health problems (Olofsson, Bengtsson & Brink, 2003). Berland, Natvigi and Gunderson (2008) reported a third dimension as social support concept. Thus, the three dimensions of this model are interconnected; psychological demand, decision latitude and social support at work. In this dimensional relationship according to Montreuil et al (2011), 'psychological demand' refers to the intensity, speed and quantity of work, time constraints, interruptions and contradictory requirements. This interacts with the 'decision latitude' which depends on both the decision-making autonomy available and the opportunity available to utilize one's existing skills and develop new ones. The role of social support is also crucial in the interaction. Social support at work refers to the recognition given to ones work by the organizational hierarchy and support from co-workers.

Karasek and Theorell's model (1990) is probably the one that has received the most international attention and been the most frequently assessed, often positively. Criticisms are leveled, however, at the fact that it underestimates the individual factors and that the concept of decision latitude confuses two heterogeneous dimensions (ability to cope with the work environment and personal development). Moreover, as this model was developed using very large population samples for epidemiological purposes, it is difficult to apply in the context of a microanalysis of work situations.

Effort-reward model

Building from the concept of social support, Siegrist (1996) proposed that an imbalance between efforts and rewards acts as a source of stress at work. Efforts may be extrinsic in origin: they concern time constraints, interruptions, task-related requirements, number of responsibilities and physical restraints. They correspond somewhat to the definition of psychological demands proposed by Karasek and Theorell (1990). Intrinsic efforts are made when workers overcommit themselves to their tasks, reacting as to a challenge, or out of a desire to control or a sense of duty. Rewards may involve, for example, recognition from management or co-workers, or satisfactory remuneration.

According to Siegrist (1996), three symptoms may appear when efforts are high but rewards are low: these are:

i. Burnout: workers feel they have exhausted their emotional resources;
ii. Dehumanization or withdrawal from relationships: workers detach themselves from the people they are supposed to help, for whom they have developed negative feelings;
iii. Lower sense of personal accomplishment at work: workers evaluate their own job performance negatively, regarding it as a failure.

Activity-analysis model

An ergonomics model, in particular, an activity-analysis model, was put forward in an attempt to position the concept of workload from the perspective of the actual work activity. The actual work activity is seen as the context where

constraints and resources take concrete form in a given situation (Guérin, Daniellou, Duraffourg, &Rouilleault, 2006). This means that in order to properly understand work constraints, it is essential to analyze the forms they take in daily work. Work activity is described as being constructed gradually by the worker (who has life experience) in interaction with dynamic situations (Lamonde, 1992). During this process of gradual construction and depending on both individual and collective actions, the compromises possible and the situations encountered, the work activity thus has impacts on the individuals involved as well as on the work.

The above theories relate to the present study to the extent that work situations such as demand and decision, efforts and rewards and resources explain challenges that are placed a worker which may have consequences for the worker's performance.

Definition of Workload

The term workload generally refers to the quantity of physical and cognitive works that workers can perform without endangering their own health and safety or that of others but remain efficient (Ramírez-Fernández et al. 2015).

According to Shah et al. (2011) workload could be grouped into three levels to include prescribed workload (constraints), actual workload (restraints) and perceived workload. Shah et al. (2011) also considered workers' resource as an aspect of workload which refers to workers' physical and psychological condition when they are carrying out a certain workload, will influence their

perception of the workload. Shah et al. (2011) again describe workload as the intensity of job assignments and that it is a source of mental stress for employees.

Workload is also seen as the amount of work assigned to a worker in a specified time period (Karaaslan, Yildiz & LVN, 2016).

Health Worker Performance

The concept of employee performance is often defined in terms of the ability of an employee to accomplish his or mission based on the expectations of an organization (Blay, Duffield, Diers, O'Brien-Pallos & Aisbelt, 2011) or the contribution made towards an organizational end result in relation to the amount of resources consumed (McNeese-Smith, 1997). Globally, there is a plethora of empirical work that examines employee performance especially in relation to healthcare delivery (Rahmati, Esmaily & Bahrami, 2017; King et al., 2013; Crowley & Mayers, 2015; Kambarami, Mbuya, Pelletier, Fundira, Tavengwa & Stoltzfus, 2016; Asamani et al., 2016; Asamani, Amertil & Chebere, 2015; Asabir, Witter, Herbst & Dedzo, 2013). The growing interest in health worker performance and productivity partly stem from the need to enhance efficiency of health care institutions in the wake of increasing healthcare cost and dwindling resources (Awases et al, 2013; Letvak & Buck, 2008). Studies suggest that a marginal improvement in health performance could reduce the demand for new staff by about 20%.

Furthermore, substantial literature has blamed health professionals for not producing the desired output in terms of health interventions, which has become a

source of concern for the World Health Organization (WHO) and other policy and decision makers (Barnard, Street & Love, 2006). Health workers on the other hand have blamed staff shortages, logistical challenges, organizational factors, low motivation, lack of technology and medical equipment among others as the contributory factors for non-achievement of health care targets (Awases, Bezuidenhout, & Roos, 2013; Letvak & Buck, 2008; Rajan, 2014). In the Ghanaian healthcare context, there appear to be a lack of consensus about the performance level of health workers (Asabir et al., 2013; Asamani et al., 2016; Vujicic, Addai & Bosomprah, 2009, Darawad et el., 2015). For instance, Asabir et al. (2013) assert that health worker performance is sub-optimal due to a myriad of challenges.

Relatedly, an assessment of the health sector in Ghana by the World Bank also highlighted low health worker performance across regions, districts and cadres culminating in substandard care (Darawad et al, 2015). According to the assessment report, the highest health worker performance was recorded in the Ashanti, Brong Ahafo, and Central regions; the lowest was in Greater Accra which ironically habours the largest proportion of the health workforce in Ghana (Darawad et al., 2015). Also, in an institution-based study in a rural district hospital in Ghana, health worker performance was self-rated moderate despite escalating clinical workload (Asamani et al.,2015). In contrast, however, a cross-sectional survey of nurses and midwives in the eastern region of Ghana found that nurses and midwives within one month of the study, perceived their performance levels to be high (8.39 on a 10-point scale) and 10% more than their peers. Also,

nurses and midwives believed that their performance improved by about 1.8% over the preceding six months (Asamani et al. 2016b).

The seeming contradictions in the literature regarding the level of health worker performance appear to fundamentally stem from a lack of intellectual consensus about a universally accepted 'gold standard' measure of health workers performance (Vujicic, Addai & Bosomprah, 2009; Asamani et al., 2016; Asabir et al., 2013). As a result, different analysts have used varying tools and methods for measuring the performance of health workers. Absenteeism and presenteeism from health facilities, count of clinical activities and performance self-rating have all been tried in bid to measure health worker performance (Maestad, Torsvik & Aakvit, 2010; Asamani et al., 2016; Kurowski et al., 2007).

In Ghana, Vujicic et al (2009) developed a measure of health workforce performance by aggregating the total amount of health care provided into a Composite Services Index (CSI) against an aggregated Composite Human Resources for Health (CHRH) measure. This method appeared to give a health system-level performance measure rather than individual staff contribution to the attainment of organizational goals. Whilst the method appeared fit for purpose at the time, its use for decision-making has been cautioned (Darawad et al., 2015; Asabir et al., 2013). From the foregoing, health worker performance remains an important debacle for the Ghanaian health sector but its measurement tools and methods lacks consensus.

Factors Influencing Workload

Shah et al (2011) examined workload among customer representatives and identified, three levels of workload including prescribed workload (constraints), actual workload (restraints) and perceived workload. The researchers also took into account different factors having an impact on the workload: the workers' resources, the consequences of the work activity and the organizational processes. The workers' "resources," which refers to their physical and psychological condition when they are carrying out a certain workload, will influence their perception of the workload. They further contend that the consequences of the activity transform the individuals and their resources, either positively or negatively, as well as the organization and its expectations. Lastly, organizational processes are the result of contemporary changes (e.g. new technologies and work organization) that considerably change the nature of the work and work activities.

According to Hollet-Haudebert et al. (2011), the concept of workload does not refer solely to the quantity of work, but more importantly to the conditions under which the work is carried out. Certain factors inherent in the way the work is organized thus constitute sources of restraint that require additional actions and coping strategies, which in turn have consequences for both the individuals and their effectiveness at work (Hollet-Haudebert et al., 2011). Studies suggest that factors such as responsibility, uncertainty, time pressure and work interruptions serve to increase mental and physical workload (Cazabat et al. (2008); Cazabat, Barthe & Cascino, 2008). In this light, the converse is also important to be considered in any workload considerations. Thus, same factors that may increase

workload could substantially also reduce workload given the appropriate manipulation.

Traditionally, the study of workload focused specifically on the limitations of individuals' physical and information-processing capacities (Coeugnet, Forrierre, Naveteure & Dubreucq, 2016). Workload was therefore essentially approached from two distinct angles: physical workload and mental or psychological workload. Hollet-Haudebert et al. (2011) argue that the traditional concept of workload, which can be broken down into physical and mental components has become obsolete, and a broader approach encompassing the complexity of the work activity performed in a dynamic environment is needed.

Workload must therefore be approached holistically, thus, through activity analysis that take into account the overall activity seen as the result of a combination of factors inherent in the work situation that lead to a cost (psychological and physiological) for the individual. From this perspective, making changes in the workload means making changes in the working conditions (Theureau, 2002). Thus, Fournier and colleagues explained that both the individual's overall situation of work activity and the organizational environment should be taken into account.

Montreuil et al (2011) report that organizational factors take different forms and impact workload in different ways. Sprigg and Jackson (2006) asserted that, changes in work design bothering particularly on how the work is organized tend to significantly impact on workload. In the work of Montreuil and colleagues (2011), Bartlett (2004) was cited to buttress their claim that, new forms of work

organization are leading to an expansion of tasks, which translates into an increased workload, especially given that there is lack of sufficient resources to perform the tasks. Another critical source of workload is the boundary between personal life and work life, brought about by allowing individuals to work from home at all hours (Fournier, Montreuil & Villa, 2013), which has been described as 'virtual-office or workplace'. This situation has its own impact on both work life and family life (Ilies, Dimotakis & De Pater, 2007).

According to Montreuil et al (2011), the new reality has caused workload to continue to grow, even in the worker's absence. Organizations also expect a bigger commitment from their employees. They count on their workers accepting the constraints they face as organizations, by imposing quality, time and service demands on them that are sometimes hard to reconcile (Fournier et al., 2013).

Empirical Studies on the Impact of Workload on Performance

Indeed the concept of workload has received significant attention from researchers and thus there is compelling evidence that suggests a relationship between workload levels and staff performance (Ballet & Kelchtermans, 2009), even though the level of relationship vary in many of these studies. Powell et al (2012) reported that increased workload has a negative effect on performance and service quality. Powell and colleagues noted that as workload increases, the accuracy of hospital discharge coding deteriorates. Similarly, Green et al. (2013) reported that increases in workload leads to nurses' absenteeism and with a deteriorating patient outcome (Needleman et al., 2013; Kuntz et al., 2014).

Moreover, Oliva and Sterman (2001) suggested that hospital staff often cut corners in performing their tasks as workload increases. Supporting this argument, Freeman, Savva and Scholts (2014) hinted that when organizational processes provide latitude for discretion, workers are able to find convenient ways of going about their tasks.

KC and Terwiesch (2009) suggest that in some hospital activities staff are able to manage workload by reducing service time, yet, a sustained workload pressure eventually has a detrimental effect on performance. In their estimation of workload on mortality in a cardiothoracic unit, KC and Terwiesch (200) found that increased workload is significantly correlated with higher mortality rates. Needleman et al. (2002) in their study were able to show that increased numbers of health workers leads to improvement in patient outcomes.

In a later study, Needleman et al. (2011) showed that when staffing levels reduce below their acuity-adjusted targets, it increases mortality rates. Cho et al. (2003) suggested that a unit increase in the ratio of registered nurses per patient per day can lead to a reduction of acquiring pneumonia among surgical patients. Again, relating to hospital specific functions, Freeman et al. (2014), measured system load and how it impacts performance. They found that workload has a positive and significant effect in the case of perineal tears as midwives take care of more patients simultaneously.

Other aspects of work that trigger workload include transitionary periods. Typically, most post-transition periods are characterized with a large number of tasks being imposed on staff with very limited timeframes. These tasks are often

characterized by the description of high workload. Although workload and performance are clearly related, however relationship between these two is much complex. Some studies suggest that participants using a visual task find it to be more stressful than those using other types of tasks, such as auditory, possibly due to the added tensions of eyestrain and posture (Boore, Jenkins, PE-Liu & Yang, 2009).

A study to examine the sudden changes in workload level was designed and carried out by Cox Fuenzalida (2006). The purpose of the study was to make direct comparison between sudden increase and decrease in workload situations. Results indicated that performance was significantly impaired for both conditions. Findings suggested that either a sudden decrease (High to Medium) or increase (Low to Medium) workload could result in impaired performance (Dhanani, Kirsh & Cox, 2004). Furthermore, the study suggested that a sudden decrease may result in greater detrimental effects.

According to Musau et al. (2008) as reported by Hollet-Haudebert, et al, (2011) the notion of high performance work systems was originally developed to capture an organization's architecture that integrates technical and social aspects of work. Primary principles that support high performance work systems are shared information, knowledge development, performance reward linkage, and egalitarianism. In many ways these principles have become the building blocks for managers who want to create high-performance work systems. More importantly, they are also quickly becoming the foundation for current theories of human resources management.

People may intentionally or unintentionally pursue outcomes that are beneficial to them but not necessarily to the organization as a whole. A corollary of this idea, however, is that things tend to go more smoothly when there is some way to align employee and organizational goals. When rewards are connected to performance, employees will naturally pursue outcomes that are mutually beneficial to themselves and the organization. At a general level, the broad process of performance management requires that managers do three things well; define performance, facilitate performance, and encourage performance. Hall and Mirvis (1995) suggested that distinctions between the work and non-work life that have blurred. Theoretically, performance and arousal have an inverted U relationship; performance increases with arousal up to an optimal point and then declines as workload and the arousal associated with it continues to build. This point or, more broadly, optimal operating range, will vary with differences in operator capacity and other individual and situational factors (Hollet-Haudebert, et al, (2011).

On the basis of available literature and previous researches, we may say that workload has significant impact on the performance of employees. For high performance, workload on employees must be according to their abilities and potential to cope with the stress. Extensive high workload and extremely low workload correlate to low performance. It is the job of the leader to create culture in the organization, where optimum workload productivity correlation exists. If an individual has low workload in relation to his abilities, he is under-utilization and his workload must be raised to an appropriate level (Asamani et al. 2015). This

will give satisfaction to the individual and the organization will also gain optimum production. Conversely if workload is high, it is the leader's job to reduce this workload level.

Moreover, sudden increase or decrease in workload both lead to impaired performance. However, sudden increase in workload curve is more sensitive and it badly affects the performance of the employees. Workload should be periodically evaluated in terms of new organizational priorities and initiatives. It is more desirable if employees are involved in this evaluation process and workload is determined as per their demand and potential. However, organizational priorities and norms cannot be ignored while establishing this process.

Employees should be permitted to raise their workload issues with their supervisors or Executive Managers. If they fail to satisfy the employees, they might be permitted to resolve this issue directly with their boss. If it is requested by the employees, review of the job purpose, duties, key performance indicators and performance measures should be carried out by a manager or supervisor from a different division, section or team as deemed appropriate and approved by the CEO. Key requirement and standard operating procedure may be defined by the organizations to run this system smoothly. An audit of the skills and training required to undertake the identified tasks and actions may also be carried out at this stage. The resulting review will identify areas that are exceeding expected workload, or other factors that are infringing on effective time and work efficiency. A strategy be formulated to assist the employees and their line

management to resolve the arising issues related to workload management. The strategy may include work assignment, required training of employees, duty statement revision and workload adjustment etc. Monitoring of the performance after change in workload on monthly, quarterly, semiannually and annually basis is also required to evaluate the performance and workload correlation.

Chapter Summary

In summary, there is evidence from literature regarding the correlation between clinical workload and health worker performance. Studies suggest that increased workload leads to reduced performance which in turn increases patients' mortality. Increased workload also leads to health workers cutting corners to enable them complete assignments. Again, workload leads to staff absenteeism and affects service quality. Literature also revealed that increases in staff numbers leads to improvement in patient outcomes whiles reduced staff levels affects workload and in turn performance. Other conditions such as organizational processes, work interruptions, luck of resources and skill competency serve to increase staff workload.

Conceptual Framework

A conceptual framework relating to the variables of the present study is provided below. Per the framework, the independent variables; volume of work, organizational processes, work interruptions and resources will predict the employee performance (quality of work).

Conceptual Framework

Clinical Workload **Performance**

Figure 1: Relationship between clinical workload and health worker performance as conceptualized in the study.

Source: Author's construct (2017)

CHAPTER THREE

METHODOLOGY

Introduction

The study seeks to examine the relationship between clinical workload and health worker performance. This chapter discussed the research procedures that were adopted to carry out the study. The chapter is organized into seven main sub-headings including research design, study area, study population and sampling procedure, data collection instruments, data collection procedures, data processing and analysis and chapter summary.

Research Design

The study adopted a quantitative approach using descriptive design because the study was mainly based on numerical analyses that were drawn from primary data. Precisely, a cross-sectional approach was employed since the study measured units from the sample of the population at one point in time. The quantitative approach, using descriptive design provides the basis for applying statistical tests for averages and enables the use of inferential techniques. Moreover, the basis for the choice of the quantitative approach using descriptive design was guided by the research objectives and questions, one of which sort to investigate relationships and effect between the variables.

Study Area

Located at the heart of Accra city, the GARH started as a Hospital for the European expatriates around 1928. The hospital situated at North Ridge (along the castle road) in the Osu-Klottey Sub-Metro of the Accra Metropolitan Area in the Greater Accra Region (GAR). The immediate catchment area, however, includes the following suburbs: Ridge, Nima, Maamobi, Kanda, Accra New Town, Kotobabi, Osu, La, Adabraka, Achimota, Airport Residential Area and Central Accra.It became a District Hospital after Ghana's independence in 1957 and was later designated as the Ridge Regional Hospital in 1997. It is now been developed and transformed into an ultra-modern 620 bed capacity hospital with the full complement of specialist services that reflect.

Population of the Study

The population for the study consists of nurses, midwives and medical doctors including specialists. This consists of a total of 572 staff of various departments within the Ridge Hospital. The following criteria was used:

- A staff with established employment status
- A minimum of one year working experience in the hospital.

Sampling Procedure

A sample size of Two Hundred and Seventy Four (274) was obtained using Krejcie and Morgan, (1970) sample size determination table from a

population of Five Hundred and Seventy-Two (572) which constitutes critical services including nurses, midwives and doctors. Participants were selected by simple random sampling. The choice of Krejcie and Morgan, (1970) ensured a representative sample and allowed for accurate estimates that reflect characteristics of the population and also ensured that the choice of the sample size is empirically established in literature and consequently provide the basis for generalization of results across the entire population of study. Probability sampling, using simple random sampling was adopted for the present study as indicated above. Thus, the selection process of the health workers was wholly left to chance. Probability sampling ensures the avoidance of sampling biases as much as possible.

Data Collection Instrument

Data collection is pivotal for obtaining reliable research findings and hence must be objective, systematic and repeatable (Colligan, Potts, Finn & Sinkin, 2015). Duffield et al. (2011) maintain that a researcher should use the simplest manner of collecting the data to get answers to the research question and should not collect any more data than necessary. This, according to Jones and Rattray (2010) it is a quick, convenient and inexpensive method of collecting standardized information for quantitative research. However, according to Enarson et al (2001) questionnaires depend on personal reporting and harbours bias tendencies but nonetheless, Awases (2006) asserts it is appropriate for studies of this kind.

Thus, the present study adopted the survey method using questionnaire. The questionnaire comprised four (4) sections. Section A focused on Socio-demographic data, section B focused on the staff workload level, section C focused on determinants of staff workload and section D identified the impact of workload on performance. The questionnaires were given to respondents at the beginning of their work shifts for completion and collected at the end of the shift. This strategy was employed to prevent subjects taking questionnaires home to refer to literature before responding. Data collection was within three days, covering all three shifts run, including weekends. BRADY, Byrne, Horan & Griffiths (2007) observed that, questionnaires tend to have a low return rate so the researcher overcame this problem through the following:

(i) A cover letter was sent with the questionnaire explaining the aim of the research study and guaranteeing confidentiality of the responses.

(ii) According to BRADY et al. (2007) 'respondent burden' puts a pressure on respondents through the time and effort necessary to complete a questionnaire. To reduce this burden, closed-ended questions which are more efficient and less time consuming for respondents was used and the instructions were clear (Covell & Ritchie, 2009).

Measurement of health worker performance was based on the indicator, Quality of output. Studies including WHO (2006), Buchan (2005), Hornby & Forte (2006) proposed Quality of output as one of the key indicators for measuring performance. Quality was therefore measured on a five point likert

scale consisting of four items including accuracy of work, relationship with patients, innovation and absenteeism.

Measurement for workload was based on indicators proposed by Montreuil et al (2011), Olofsson, Bengtsson & Brink (2003) and Siegrist (1996). Workload indicators included organizational processes, work interruptions, lack of resources and volume of work with one item measuring each indicator. Workload was also measured on a five point likert scale.

As indicated, both the dependent and the independent variables were measured on a five point likert scale. All variables in the study had a minimum of 1 (for strongly disagree) and a maximum of 5 (for strongly agree). The options included the following;

(1) Strongly Disagree

(2) Disagree

(3) Neutral

(4) Agree

(5) Strongly Agree

Data Collection Procedures

The data was collected in accordance with the ethical codes of conduct in social science research as a guideline. Voluntary participation, anonymity and confidentiality of respondents are encouraged when ethical considerations are factored in any research (Biney, 2017). Respondents voluntarily took part in answering the questionnaires and that none of the respondents was selected or

called upon to answer the questionnaire without his/her full consent. The purpose of the research was fully explained to the respondents. Data collection was done over a period of one month.

Ethical Considerations

It is essential to gain the permission of people in authority to provide access to participants in a study (Bell & Bryman, 2007). Consequently, a letter from the Department of Human Resource Management of the University of Cape Coast was presented to the schools to seek approval to conduct the study. Moreover, the questionnaire for the study was designed to equally seek the consent and approval from the respondents in order to meet ethical requirements as proposed by Bell and Bryman (2000). Thus, the nature and purpose of the research was explained to respondents. Respondents were informed that their participation was voluntary and that each one was to grant the interview without any compulsion.

Furthermore, names of the respondents were not required so as to meet the anonymity of research participants. Confidentiality was ensured by keeping data secure and using it only for the purpose for which it was collected. The study was conducted in line with the guidelines of the academic community to which the researcher belongs.

Data Processing and Analysis

According to BRADY et al. (2007), data analysis is "an integral part of the research design", and it is a means of making sense of data before presenting them in an understandable manner. Data preparation was done by editing, coding and converting the raw data collected into actual variables of interest. Data were analysed using Statistical Package for the Social Sciences (SPSS) 22 to generate the descriptive statistics as well as run regression analysis respectively.

Reliability and Validity

When conducting a research, it is important that secondary sources are viewed with the same caution as primary sources. It is also important that the dissertation collect empirical findings that reflect the reality of situations. According to Saunders (2007) one needs to be sure that the data will answer the research questions or objectives and the data will be easily accessible. One way to evaluate primary and secondary sources is to use the concepts of validity and reliability. The degree of reliability measures the extent to which extent data collection can be trusted (Saunders, 2007).

Chapter Summary

The study adopted a quantitative approach using descriptive design, precisely, a cross-sectional approach. The probability sampling using simple random sampling technique was employed to select the health workers. Data were collected mostly by closed ended questions which consisted four (4) sections.

Voluntary participation with the assurance of anonymity and confidentiality of respondents was employed mainly to overcome the limitation of respondents providing wrong answers to questions.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

This chapter presents primary field data collected from the 274 respondents comprising nurses, midwifes and doctors of the ridge hospital. Data were analysed using SPSS 22 to generate the descriptive statistics as well as run the regression analysis respectively. Data was processed and presented in tables and charts. The study sort to examine the extent of workload at the ridge hospital, examine factors influencing workload and then test the relationship between workload and health worker performance. Regression was used to analyse the research question 3. The chapter is presented in two sections; first, the demographic characteristics of the respondents and second, analysis and discussions relating to the research questions.

Demographic data

A representative sample of about 50% was drawn for the study out of the total number of Five Hundred and Seventy-Two (572) health workers. Of the 274 respondents, only 269 questionnaires were retrieved for analysis. Table 1 gives a breakdown of respondents by age groups.

Table 1: Distribution of Respondents by Age Groups

Age Groups	Frequency	Percentage (%)
20 – 24	21	8.0
25 – 29	48	18.4
30 – 34	36	13.8
35 – 39	30	11.5
40 – 44	54	20.7
45 – 49	39	14.9
50 Above	33	12.6
Total	261	100.0

Source: Field data (2017)

The larger portion of the respondents that is 20.7% of respondents were in the age group of 40 to 44 years. This is followed by the age group of 25 to 29 years which constituted 18.4% of respondents. The age groups 45 to 49, 30 to 34, 35 to 39 and then 50 above constitute 14.9%, 13.8%, 11.5% and 12.6% respectively. The age group 20 to 24 constituted the least (8%) of respondents among the various age groups.

Table 2: Gender Distribution of Respondents

Gender	Frequency	Percentage (%)
Male	76	28.3
Female	193	71.7
Total	269	100.0

Source: Field data (2017)

The data highlighted that there were 76 male respondents, representing 28.3% while female respondents were 193 representing 71.7%. This is a reflection of the gender distribution of respondents as shown in Table 2.

Table 3: Educational Level of Respondents

Level of Education	Frequency	Percentage (%)
Diploma	79	29.4
Degree	62	23.0
Master's Degree	46	17.1
Medical Degree	69	25.7
Ph.D.	9	3.3
Other	4	1.5
Total	269	100.0

Source: Field data (2017)

A total of 79 respondents, representing 29.4% of the respondents hold Diploma certificates. Degree holders represent 23% while Master's Degree represent 17.1% of the respondents. The majority, representing 25.7% were holders of Medical Degrees with only 9 respondents, representing 3.3% with Ph.D. The remaining 4 of the respondents indicated that they held other certificates either the list provided.

Table 4: Professional Background of Respondents

Professional Background	Frequency	Percentage (%)
Nurse	128	47.6
Midwife	72	26.8
Medical Doctor/Specialist	69	25.7
Total	269	100.0

Source: Field data (2017)

Table 4 presents details of the professional backgrounds of the respondents. Majority of the respondents, representing 47.6% were nurses and Midwives represented 26.8% while Medical Doctors/Specialists represented 25.7% of the respondents.

Table 5: Respondents' Length of Service

Length of Service	Frequency	Percentage (%)
1 – 10	91	33.8
11 – 20	81	30.1
21 – 30	42	15.6
Above 30	55	20.4
Total	269	100.0

Source: Field data (2017)

From table 5, 33.8% of the respondents had worked in the service for years ranging from 1 to 10, while 30.1% had been in the service for years ranging from 11 to 20. The remaining 20.4% had been in the service for 30 years and beyond.

Workload Levels

Table 6: Respondents' Level of Workload

Workload Level	Frequency	Percentage (%)
High	129	48.0
Moderate	96	35.7
Low	44	16.4
Total	269	100.0

Source: Field data (2017)

Table 6 presents analysis of data on the level of workload. Close to 50% of the respondents indicated that workload at the Ridge Hospital was high. Thirty-six percent of the respondents reported that workload was moderate while the remaining 16.4% of the respondents reported that workload was actually low.

Factors Influencing Workload

Table 7: Factors influencing Workload

Workload Level	Frequency	Percentage (%)
Work interruptions	258	95.9
Number of workers per day	189	70.3
Number of patients per day	243	90.3
Service type required by patients	240	89.2
Procedures and processes involved in providing the service	237	88.1
Poor condition of service within the Hospital	243	90.3
Time to perform required assignments	228	84.8
Efficiency of colleague workers	144	53.5

Source: Field data (2017)

Table 7 presents results relating to factors that influence health worker workload. From table 7, eighty-six of the total respondents, representing 95.9% indicated that work interruptions influence clinical workload. Others include number of workers per day representing 70.3%, number of patients per day representing 90.3%, service type required by patients representing 89.2%. Also included are procedure and processes involved in providing services which represents 88.1%, poor condition of service representing 90.3%, time to perform required assignment representing 85.4%. Also significant from table 7 is efficiency of colleague workers representing 53.5% of the respondents.

Impact of Workload on Health Worker Performance

The analysis examines the relationship between clinical workload and health worker performance. The dependent variable, health worker performance, is measured by the quality of output of the worker (Y); whilst the independent variables comprise a set of four (4) variables related to workload: organizational process (X_1), volume of work (X2), work interruptions (X3), and lack of resources (X_4). A complete description of the variables used in the model is presented in Table (9).

Table 9: Variable Description

Variable name	Variable label	Variable type	Variable description
Y	Quality of output	Dependent variable	
X1	Organizational process	Independent variable	
X2	Volume of work	Independent variable	
X3	Work interruptions	Independent variable	
X4	Resources	Independent variable	

Source: Field data (2017)

The purpose of the model is to explain how the independent variables can help predict staff performance (Quality of output). In other words, how much variation in the quality of output can be explained by these five independent variables? And to further examine which of the independent variables is the best predictor of the quality of output of the worker. To achieve this, a standard multiple regression model is employed.

Model evaluation and description

Variance Inflation Factor (VIF)

According to Hair, Black, Babin, Anderson, and Tatham (1998), Variance Inflation Factor (VIF) above 5.00 indicates high multi-collinearity among latent variables. In table 10, analysis of the data shows that the VIF values for the variables used in this study are below 5 hence, the latent variables for the six clinical workload indicators have no problem of multi-collinearity. The results are presented in table 11.

In addressing issues of multicollinearity, Bryman and Cramer (2001) viewed that multicollinearity is when correlation exceeds 0.80. Whereas Anderson, Sweeney and Williams (1990) used 0.70 and Kennedy (2008), stated that correlation is high when its value is above 0.90. In the event that there is the problem of multicollinearity, it is not advisable to include variables that are highly correlated in the same model. From table 11, it can be seen that the correlation between the independent variables and the dependent variables does not violate any of the standard set (Bryman & Cramer, 2001, Anderson et al., 1990 & Kennedy, 2008).

An evaluation of the variables before the application of the linear regression model was carried out. It was observed the independent variables were not highly correlated with each other. None of the correlation coefficients for the independent variables exceeded 7 as is recommended, whilst they showed

moderate correlation with the dependent variable. Table 9 presents the correlation coefficients.

Table 10: Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.281[a]	.079	.064	.708

The model as represented in Table 10 indicates that about 8% of variation in the output of the worker is caused by the independent variables. This is moderately high since many other factors affect employee output apart from workload.

Table 10: ANOVA

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.949	4	2.737	5.457	.000[b]
	Residual	127.913	255	.502		
	Total	138.862	259			

Table 10 presents a description of the entire model and explains that the model is significant as shown in Table 10.

Table 11: Person Correlation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4.371	.284		15.407	.000	3.812	4.929					
	Organizational processes	-.184	.050	-.221	-3.649	.000	-.283	-.085	-.215	-.223	-.219	.987	1.014
	Volume of work	-.096	.072	-.120	-1.330	.185	-.238	.046	-.059	-.083	-.080	.444	2.250
	Work Interruptions	.168	.060	.190	2.803	.005	.050	.287	.120	.173	.168	.784	1.275
	Lack of resources	-.012	.058	-.018	-.216	.829	-.126	.101	-.084	-.014	-.013	.527	1.898

a. Dependent Variable: Quality of output

Source: Field data (2017)

Among the independent variables, as indicated in table 11, organizational process and work interruptions are the two predictors of worker output and are also the only variables that make statistically significant unique contribution (alpha=0.001) and (alpha = 0.005) respectively in predicting quality of work. It is important to note that whilst the other variables do not make a statistically significant unique contribution, their prediction is in the expected direction. It shows that increase in volume of work and lack of resources have a declining (-) effect on the quality of output even if they are not statistically significant. The complete coefficients table is presented in Table 11.

Discussion of Results

The present study in relation to the level of workload is supported by previous studies such as Dieleman and Harnmeijer (2006) and Neill (2011) who have identified increased workload within medical facilities. Dieleman and Harnmeijer (2006) have linked the exodus of health workers into Europe for greener pastures to health worker shortages which in turn affects health worker performance negatively.

The research question two, sort to identify factors that influence workload among health workers. It is important to note that all of the factors indicated in the study were identified to contribute to workload at the Ridge Hospital. Significantly, work interruptions, number of patients per day, poor condition of service were highly linked to workload. The study is supported by Powell et al. (2012). Again, from the perspective of organizational resources, organizational

processes and work activity, the study is supported by Shah et al (2011). Hollet-Haudebert et al. (2011) also identified organizational processes and work conditions contributing to the level of work in organizations. The present study is also supported by Cazabat, Barthe & Cascino (2008) who noted time pressure and work interruptions as contributing to workload in organizations. The implication of the present study is that the identified factors including work interruptions, staff non-availability, number of patients, organizational processes and procedures, poor condition of service time pressures among others continue to contribute to staff workload at the ridge hospital.

The research question three, sort to test the relationship between clinical workload and health worker performance. Given that the study explains about 8% variation in the dependent variable gives an indication that workload influences health worker performance. Specifically, organizational process and work interruptions were found to predict performance, though in different directions. While organizational processes predict performance significantly but negatively, work interruption was found to predict performance significantly but positively. The significant but negative prediction by organizational process of performance gives an indication that a unit increase in organizational process will lead to a decline in performance. The study, thus, implies that the Ridge Hospital is engaged in organizational practices i.e. initiative, reporting lines, discretion in decision making process among others that do not motivate staff to perform their duties effectively and efficiently.

Again, work interruption was found to predict performance significantly but positively, suggesting that a unit increase in work interruptions will lead to an increase in performance. It should be noted that the present study was not in the expected direction. It was expected that work interruptions will predict performance negatively. This notwithstanding, a study by Jett and George (2003) explained that work interruptions could have either positive or negative consequences on work. In discussing the consequences of multiple kinds of work interruptions, Jett and George (2003) distinguished work interruptions into four different kinds including intrusions, breaks, destructions and discrepancies and suggested for instance that interruptions by instructions often do provide the one being interrupted the opportunity to have access to some information that hitherto may elude him or her. It is therefore possible that there are some organizational factors that are helping to overcome the negative effect of work interruptions at the Ridge Hospital.

Over all, it is imperative to note that the present study is supported by previous studies. For instance, Shah et al. (2011) and Hollet-Haudebert et al. (2011) both reported that organizational process is a significant contributor to employee performance. The study is also supported by Montreuil et al. (2011) who noted that organizational factors take different forms in predicting worker performance. In relation to the absence of significant relationship between lack of resource and performance, the study contradicts previous literature by Shah et al (2011) and Hollet-Haudebert et al. (2011) who found that organizational resource is an important predictor of performance.

In conclusion and from the present study, output of workers at the Ridge Hospital is mostly affected by organizational process and work interruptions

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter provides a summary of the outcome of the research findings, proposed recommendations regarding the subject under study and also made conclusive statements on the bases of the findings obtained. The study sort to examine the impact of clinical workload on health worker performance at the Ridge Hospital. The study was guided by three main objectives namely to: examine the extent of clinical workload levels at the Ridge Hospital, examine the factors that influence workload at the Ridge Hospital and then test the relationship between clinical workload and health worker performance.

The study adopted a quantitative approach using descriptive design. Specifically, a cross-sectional approach was employed. Participants for the study comprising a total of Two Hundred and Seventy Four (274) were selected using the simple random sampling technique. A well-structured questionnaire was used to solicit information from the respondents. The study ensured that ethical considerations were adhered to before, during and after the data collection procedure. The study made use of SPSS 22 to generate the descriptive statistics in addition to regression analysis.

Summary of findings

The results of the study have to a large extent confirmed the underlying impact of workload on health worker performance. Of the total of 274 respondents of which 269 questionnaires were retrieved, majority, representing 71.7% were females. About 48% of the respondents were nurses, midwives represented 26.8% while the remaining 25.7% were doctors. The age distribution of the respondents ranged between 20 to 50 years and above. Examining the level of workload, the findings of study indicated that workload was high at the Ridge Hospital. Consequently, staff indicated that they were often overburdened with work, they had not enough time to complete assignments and these resulted in less leave and holidays for them.

Regarding research question two which sort to examine factors influencing workload at the Ridge Hospital, the study revealed that work interruptions, number of patients per day and poor condition of service within the Hospital were the most influencing factors. Other factors included service type required by patients, procedures and processes involved in providing the service, time pressures and efficiency of colleague workers. From the results of the study relating to research question three, the study found organizational processes and work interruptions to be the only significant predictors of performance (Quality of work output). Organizational process was significant and negative whereas work interruptions was significant but positive. The remaining two workload indicators including volume of work and lack of resources were not found to be significantly

correlated with performance. The two indicators were however found to negative though insignificant.

Conclusion

The present study examined the relationship between clinical workload and health worker performance. An important feature of the present study is that it emphasizes the impact of clinical workload on staff performance and mostly confirms previous studies, particularly relating to the topic. That is, even though uncertainties exist regarding the predictive nature of clinical workload on performance as evidenced in previous studies (Aninanya et al., 2016; Darawad 2015; Asamani et al., 2015; Asamani et al, 2016), it is important to note that findings from the present study confirm high workload among clinical staff.

Additionally, as evidenced from the findings of the present study, workload is influenced by certain organizational and individual factors that continue to remain a major concern for a number of hospitals. Thus, the findings would impact decisions of hospital administrators regarding measures to ensure that such factors are dealt with for optimal performance of health workers. For instance, the provision of resource by management would help to reduce the difficulties staff go through the performance of their work.

Organizational process and work interruptions have been two of workload indicators found in previous studies to predict workload and in turn influence performance. The theoretical underpinnings of organizational processes suggest that workers have decision latitude in respect of the decision making autonomy

available and opportunity available to utilize one's existing skills and develop new ones. Again, social support is an aspect of organizational process relating to how workers are recognized by organizational hierarchy and supported by colleague workers. It is therefore not surprising to find that organizational processes impact performance. The absence of a significant relationship between organizational resources and performance on the other as evidenced in the present study is in contrast with most previous studies. Guerin et al. (2006) from a theoretical perspective suggest that constraints arising from work activity (resources) would generally impact performance.

Findings, from the present study relating the insignificant indicators could, to some extent be traced to a number of reasons including the size of sample and the source of assessment. Previous studies that were reviewed and captured in the present study used much larger samples compared to the sample size of the present study. Moreover, Aykler (2010) suggested that the source of assessment is an important determinant of research findings. Over all, the study anticipated based on the previous findings that staff workload would be high at the Ridge Hospital, all the identified factors as per research questions two would influence workload and that organizational processes, volume of work, work interruptions and lack of resources per research question three will predict employee performance (quality of output). Largely, the present study has achieved its objectives.

Recommendations

Following from the conclusion drawn regarding the relationship between clinical workload and health worker performance, the following recommendations are proposed to the nurses, midwives, doctors, hospital owners and administrators, human resource experts and most importantly, government institutions in charge health.

An important argument that predominantly underlay the continued studies of clinical workload is the theoretical underpinnings that clinical worker impacts health worker performance. Administrators, human resource practitioners, Ghana Health Service, the Ministry of Health and the government of Ghana should focus on ensuring adequate staffing in order to reduce the burden of work on the few existing staff as staff shortages have been linked to increased workload and in turn poor staff performance. Moreover, conditions of service within the health facilities should be properly designed to motivate staff to perform in spite of the daunting challenges relating the health sector. Additionally, as work interruptions remain an important feature within the health sector, it is important that the nurses, midwives and doctors are continuously trained to appreciate this aspect of their profession in order to reduce the stresses staff go through with work interruptions.

Similarly, Administrators, human resource practitioners, Ghana Health Service, the Ministry of Health and the government of Ghana should ensure that organizational processes and procedures are properly structured to support workers rather than frustrate them. Finally, findings from the present study have

shown that organizational process is a major predictor of performance. It is therefore important that health administrators pay particular attention to this important factor by ensuring an improvement in organizational processes such as reporting lines, bureaucratic processes and levels of authority among others.

Suggestions for Future Research

A number of possible areas exist for future research. Researchers are encouraged to continue this line of study by exploring the relationship between workload and performance among clinical staff. Literature on workload will be further expanded by exploring the significance of the variables among a much larger population. The present study adapted predefined scales to obtain responses. In as much as the individual constructs may be appropriate and best practice, they may not specifically relate to the respondents. Future research could thus focus on developing organization specific scales of measurement to ensure the effectiveness of scales in measuring accurately. Other options in this category may include observations and interviews.

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APPENDIX

University of Cape Coast
School of Business
Department of Human Resource Management

Dear Sir/Madam,

I am Alex Gabby Hottordze, a graduate student from the Department of Human Resource Management, University of Cape Coast. I am carrying out my graduate dissertation on the topic: **'The influence of clinical workload on hospital staff performance**. I would be grateful if you could spend some minutes of your time to complete the questionnaire for the study. Please, be informed that information shared in this regard is strictly for academic purposes and will be treated with **CONFIDENTIALITY**.

INFORM CONSENT
I have read the above introduction to the questionnaire and agree to complete the questionnaire under the stated conditions. Please tick (√) if you agree to participate in the study.

SECTION A- SOCIO- EMOGRAPHIC DATA

(Please tick boxes provided or write where required)

1. **Gender :** [ ] Male [ ] Female
2. **Age (in years):**

   [ ] 20-24 [ ] 25-29 [ ] 30-34 [ ] 35-39 [ ] 40-44 [ ] 45-49 [ ] 50 and above

3. **Marital Status:** [ ] Married [ ] Single [ ] Divorced/separated

   [ ] Widowed

4. **Level of education:**

   [ ] Nursing Certificate

   [ ] Diploma/HND

   [ ] First Degree

   [ ] Postgraduate Degree

5. **Professional background:**

   [ ] Medical Doctor

   [ ] Midwife

   [ ] Nurse

   [ ] Other, please specify:……

6. **How long have you been working in this hospital?**

   [ ] 1 – 10 years

   [ ] 11 – 20 years

   [ ] 21 – 30 years

   [ ] Above 30 years

SECTION B: CLNICAL WORKLOAD LEVELS

Guidelines for question 1-7: the table below shows alternative responses; evaluate each statement and tick in the appropriate box using the following scale

1 = Strongly Agree

2 = Agree

3 = Neutral

4 = Disagree

5 = Strongly Disagree

7. Overall, I feel my workload level is

[ ] Very Low

[ ] Low

[ ] Moderate

[ ] High

[ ] Very High

SECTION C: FACTORS INFLUENCING WORKLOAD

Guidelines for questions 1-9: the table below shows alternative responses; evaluate each statement and tick in the appropriate box using the following scale

1 = Strongly Disagree

2 = Disagree

2 = Neutral

3 = Agree

5 = Strongly Agree

	STATEMENT	RESPONSE				
		1	2	3	4	5
1	Work interruptions account for much of my workload					
2	My workload depends on number of workers on duty					
3	My workload level usually depends on the number of clients per day					
4	My workload level often depends on the type of services required by clients					
5	The procedures and processes involved in serving clients compound my workload level					
6	The efficiency of other workers affects my workload.					
7	Poor conditions of service affects my workload					
8	Pressure influence my perception of workload level					

SECTION D: IMPACT OF WORKLOAD ON STAFF PERFORMANCE

	STATEMENT WORKLOAD INDICATORS	RESPONSE				
		1	2	3	4	5
1.	Organizational processes					
2.	Work interruptions					
3.	Resources					
4.	Volume of work					

STATEMENT WORKERS' PERFORMANCE (QUALITY)		RESPONSE				
		1	2	3	4	5
1.	Workload reduces the quantity of my work output					
2.	Workload reduces the amount of work I can put out within a period					
3.	Workload reduces the accuracy with which I am expected to work					
4.	Workload affects my relationship with patients					

THANK YOU VERY MUCH