



Determinants of Health Workers' Level of Motivation in a Rural Hospital in Ghana

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Authors' contributions

This work was carried out in collaboration between all authors. Author JAA designed the study, performed the statistical analysis and wrote the first draft of the manuscript. Authors AMA, HI, FAA, FA and MC managed the data collection and participated in the analyses and interpretation of the data. Authors JAA, AMA, HI, FAA, FA and MC managed the literature searches. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJMAH/2017/36723

Editor(s):

(1) Maria Manuel Azevedo, Department of Microbiology, Faculty of Medicine, University of Porto, Porto, Portugal.

Reviewers:

(1) Ademola Samuel Sajuyigbe, Osun State Polytechnic, Nigeria.

(2) Victoria Pankevich, National Research University Higher School of Economics, Russia.

(3) Dragan Mijakoski, Institute of Occupational Health of R. Macedonia, WHO Collaborating Center, Macedonia.

Complete Peer review History: <http://www.sciencedomain.org/review-history/21421>

Original Research Article

Received 11th September 2017

Accepted 11th October 2017

Published 16th October 2017

ABSTRACT

This study examined the level of motivation of health workers in a rural hospital in Ghana and the factors affecting it. A cross sectional survey was employed to study one hundred (100) health professionals who consented to participate in the study. The results show that on a 10-point scale where 1 represents the least level of motivation and 10 being the highest level of motivation, the average level of motivation among the multidisciplinary health team was 4.88 (48.8%) (standard

deviation = 0.22). Many factors influenced health workers' level of motivation including supervision and management style (B = 0.869, P < 0.001); pay increase/incentives (B = 0.453, P < 0.001); opportunities for personal and professional growth (B = 0.577, P < 0.001) and challenging duties (B = 0.491, P = 0.003). Finally, the study found that professionals in the multidisciplinary health team preferred equality (55.8%) and performance-based equity (61.1%) approaches to motivating staff. On the other hand, the health workers rejected the use of academic qualifications (55.8%) or seniority (70.5%) as the basis for offering motivational incentives. It is recommended that hospital managers and policy makers pay particular attention to the factors that workers deemed important in motivating them. Furthermore, approaches to motivation in the health sector should be revisited by policy makers to address the concerns of equity and equality.

Keywords: Motivation; health workers; district hospital; determinants of motivation levels.

1. INTRODUCTION

Work motivation is a 'sine qua non' for initiating and maintaining an employee goal-directed performance [1]. In the light of this view, motivation is seen to rejuvenate employee thinking, energy, enthusiasm and coats both positive and negative emotional responses to work and life. Without motivation, therefore, even the most skilful individual could refuse to work hard. In the African context where inadequate human resources for health is widely reported [2], low employee motivation has been implicated in the brain drain phenomenon where health workers of poor countries or regions migrate to wealthier countries or regions in search of greener pastures [3–6].

Even in the developed world, health worker motivation continues to be a topical issue. For instance, in a cross continental study involving five countries [7], it has been found that a high proportion of health professionals especially Registered Nurses were dissatisfied with their jobs and that more than 40% of health workers working in hospitals in the US are reportedly not motivated. In the African context, it has been demonstrated that health workers are either demotivated or at least not quite satisfied with their working conditions [1,3,8,9].

It has therefore been argued that health professionals require massive motivation to be able to accomplish their responsibility of providing high-quality patient care [10] and contribute to the development of their respective professions.

Several factors including workload, salary levels, benefits, bonuses, workplace autonomy, and opportunities for professional growth among others are said to significantly contribute to the motivation levels of health professionals [1,8,10,11]. Lack of motivation has also been

identified in many studies as the key contributing factor to low productivity among health professionals [12–14]. Even though health worker motivation appears to be of huge concern to many, there appears to be limited literature on the subject particularly in the African context.

In a South African study [15], it was found that extrinsic factors such as working conditions, supervision, management styles and salaries affected the employees' levels of job satisfaction and motivation by 58%. Participants in the study were found to be dissatisfied with interactions with their supervisors, remuneration and their working conditions at the hospitals. The researcher then concluded that the organisational climate was not conducive to foster high levels of motivation among the health workers. Consistent with this, a Rwandan study [16] reported that high turnover rate amongst nurses was due to lack of motivation. In particular, the authors reported that nurses were moderately motivated and satisfied with their job in some hospitals but not in others even though they received a relatively same salary. In a follow-up study, some researchers [17] lament the lack of opportunities for nurses to advance to higher levels which the researchers posit is the main source of demotivation among nurses.

It has been stipulated by that everyone works to be paid whether in the form of salary, benefits, bonus, in-kind compensation, or anything else. How these are managed have repercussions for the motivation of the employees [18]. When handled appropriately, salary or any other financial reward might help to increase health workers' motivation and retention levels [1,19]. However, others [17,18,20] revealed in various studies that opportunities for growth, working conditions and supervision help to increase the level of motivation of health professionals. Others have argued that fringe benefits, allowances and salaries also contribute to employee motivation

levels [8,19,21]. However, many questions are still left unanswered. For instance, which of these factors identified by the various researchers should be manipulated often to increase health professionals' level of motivation?

It is contended that to enhance motivation levels among workers, managers need to maximise their own levels of motivation so that they can exhibit positive and friendly leadership behaviours which are deemed as motivation stimulants [3,17,22,23].

In addition to that, a plethora of literature outline how to maximise the level of motivation of employees especially those in clinical health teams. These measures have been summarised to as increasing salaries; giving opportunities for education, training and professional development; enhancing working and living conditions; improving social recognition; improving benefits and allowances; developing decentralised structures; enhancing interpersonal relationships, communication and feedback; improving job descriptions, criteria for promotion and career progression; using a reward system; and improving supervision and management [8,17,18,24]. However, these studies were conducted within specific cultural and socioeconomic contexts. Thus, the application of these findings in a different socio-cultural context ought to be done with caution as the dynamics could considerably differ.

More so, experts and pundits have been asserting that health workers agitations for increased salaries are usually not commensurate with their level of productivity or output [14]. But health professionals, on the other hand, accuse employers of poor motivation that culminates in bad attitudes and lower productivity. It, however, remains yet to be known as to what motivation is sought by health workers and in what manner that motivation should be administered. In this circumstance, the questions left unanswered are: what will motivate health workers and how should it be administered? This study, therefore, investigated the level of motivation of health workers and the factors affecting it within the context of a rural Hospital in Ghana.

In summary, the empirical literature has shown that level of motivation among health professionals appear to be generally low but could be maximized by factors which are deemed to affect motivation levels. Unfortunately, there appear to be little or no

Ghanaian studies that examine the motivational needs of health workers and the factors that could be manipulated to maximise their level of motivation.

1.1 Purpose and Objectives of the Study

The purpose of this study was to examine the motivational needs of health professionals

The objectives of this study were:

1. To determine the motivation level of a multidisciplinary health team.
2. To determine the factors affecting the motivation of health workers.
3. To ascertain the preferred process of motivation among health workers.

1.2 Research Questions

1. What is the level of motivation of health workers?
2. What factors affect the motivation of health professionals?
3. What is the preferred process of motivation among health workers?

2. METHODOLOGY

2.1 Research Design

A quantitative approach using a correlational cross sectional survey design was employed to study one hundred (100) health workers in a rural district hospital in Ghana. This provides a quick but yet useful one-time information about a phenomenon [25]. Even though the design may not be able to establish cause and effect, it thus provides an opportunity to establish the various predictors of motivation among health professionals.

2.2 Research Setting

The study was carried out in a rural district hospital in Ghana (name withheld for ethical reasons) which is located in the eastern region of Ghana. It was a one hundred and twenty (120) bed capacity hospital comprising of ten (10) clinical departments/wards and a staff compliment of 219 at the time of the study. However, only 112 were clinical health professionals. This hospital was selected for this study because it is faced with attrition of skilled

health workers as compared with other rural hospitals in the region. However, the infrastructure, staff remuneration and working conditions in the hospital are similar to other publicly funded district hospitals in the country. Thus, the findings from this setting may provide a basis for developing hypotheses for a nationwide study.

2.3 Study Population

The target population of this study included all health professionals in the hospital. The inclusion criteria were all full-time clinical health workers of the hospital who have been working in the hospital for at least six months. Trainees and health workers who were not directly involved in clinical teamwork were excluded.

By the inclusion criteria, 103 health professionals qualified to participate in the study. A convenient sample of one hundred (100) health professionals was recruited for the study using a census approach but ninety-seven (97) completed questionnaires were usable for analysis. These consisted of 2 doctors, 15 Midwives, 10 laboratory workers, 3 Dispensing Technicians, 4 Physician Assistants (2 Anaesthetist, 2 Medical), 21 Enrolled Nurses and 42 Registered Nurses.

A census approach was employed because health professionals in the hospital are few and hence there was the need to include all those who were available and consented to participate.

2.4 Data Gathering Tool

A questionnaire constructed-for-purpose was used as the tool for the data collection. The design of the questionnaire was guided by the objectives of the study and the literature reviewed. The questionnaire consisted of 24 questions mostly of the Likert's scale type exploring the motivation of health workers and the factors affecting their motivation. The questionnaire was given to participants to answer and collected by the researcher a day after.

Questionnaires remain the often used instrument for recording data [26]. The advantage of using questionnaires is that they are simple, relatively inexpensive and yet can provide accurate information from a large number of subjects [25]. However, it is conceded that questionnaires depend on personal reporting and harbours bias tendencies [27]. In this study, the questionnaires

were designed with caution to elicit the true opinions of the participants.

2.5 Data Gathering Procedure

Official permission was sought from the General Manager of the Hospital and the researchers conveniently administered the questionnaire to health professionals at their various duty posts. Each participant was approached individually and the nature, purpose of the study as well as confidentiality and right of withdrawal were explained to the latter. The participant was given the research questionnaire to complete upon eliciting the necessary consent.

2.6 Data Analysis

The data collected were analyzed with the aid of the statistical package for social sciences software version 18 (SPSS 18). In analyzing the data, descriptive statistics such as percentages and means were calculated with regression analysis done to draw inferences.

2.7 Validity and Reliability

Validity relates to the degree to which research instrument measures what it is designed to measure [26]. Reliability denotes the degree of consistency or dependability with which the instrument measures the attributes it is designed to measure. In this study, the validity of the instrument was ensured by including all the key concepts relevant to the topic. A pre-test was also done with five health workers which were used to inform critical revisions of the questionnaire. The Chronbach alpha of the scale was calculated to be 0.78 which is conventionally deemed to be good [28].

2.8 Ethical Considerations

Official permission was sought and obtained from the Management of the hospital before the commencement of the study. This study was approved by the Ethics Committee for the Humanities of the University of Ghana as part of a larger study in 2014.

The purpose of the study, assurance of confidentiality and the right of withdrawal was explained to participants. The statement of consent was written on the first page of the questionnaire and informed consent of the participant was implied by the completion of the

questionnaire. The names of the participants or identifying data were not collected to ensure anonymity of the data.

none possessed a master's degree or higher. See details in Table 1.

3. RESULTS AND DISCUSSION

3.1 Demographic Characteristics of Participants

The age of participants ranged from 20 to 49 years; the majority (55.7%) of whom were within the 20 – 29-year bracket. Furthermore, a large majority (87.6%) of the participants are females as opposed to 8.2% who were males. The data is skewed towards females probably due to the fact that participants were largely nurses and midwives who are predominantly females. In the context of this study, the hospital where the study was conducted had limited number of doctors, pharmacists and laboratory workers as compared to nurses and midwives. This according to the African Health Workforce Observatory, is the trend of the human resources for the health situation in Ghana [2].

In addition, the majority (52.6%) of the participants had diplomas followed by those with post-secondary school certificate (21.6%). Only 8.2% of the participants had a first degree whilst

3.2 Health Professionals' Level of Motivation

The level of motivation of participants was measured using a self-rating scale of one (1) to ten (10) where 1 represented the least level of motivation and 10 represented the highest level of motivation. The data obtained from participants is descriptively summarised and presented in the Table 2.

From Table 2, the level of motivation among the health professionals ranged from 1 to 8 on a 10-point scale. The average level of motivation was 4.88 (SD=2.1) on the 10-point motivation scale. With a 95% confidence interval, the level of motivation could be as low as 4.45 or as high as 5.31 on the 10-point scale. This translates to an average of 48.8% (95% CI: 44.5% - 53.1%) level of motivation among the health workers in this study which is low. Similar low-to-moderate levels of health worker motivation have, however, been observed across the world, in both developed and emerging economies [7,9,17]. This suggests that low motivation among health workers is a global issue which has a potential of compounding the global health workforce crisis.

Table 1. Demographic characteristics of participants

Variable		Frequency	Percent (%)
Age	20-29 years	54	55.7
	30-39 years	35	36.1
	40-49 years	8	8.2
	Total	97	100.0
Gender	Male	8	8.2
	Female	85	87.6
	Missing	4	4.1
	Total	97	100.0
Qualification	Certificate	21	21.6
	Diploma	51	52.6
	Advanced Diploma	12	12.4
	First Degree	8	8.2
	Missing	5	5.2
	Total	97	100.0
N = 97			

Table 2. Summary of health workers' perception of their own motivation level

	N	Minimum	Maximum	Mean	Std. error	95% CI
On a 10-Point Scale, How Would You Rate Your Level of Motivation as a Health Worker?	91	1	8	4.88	0.22	4.45 – 5.31

Health worker motivation level was measured on a 10-point scale: Higher score reflects higher motivation level

In the African context, it has been documented that health workers are suffering significant levels of low motivation with wide dissatisfaction for their jobs [14,17–19,23,29]. This has constantly been underscored as a major causal factor in the brain drain phenomena in Africa [4,5]. In the same vein, it is contended that, despite tremendous Governmental efforts in increasing salaries to motivate health workers in Ghana, they appear to be unmotivated [14]. Thus, there are factors which appear to be ignored or are at least not adequately addressed by existing systems and strategies put forward by Government; which factors are widely and constantly undermining the efforts to motivate health workers.

3.3 Determinants of Health Workers' Motivation

One of the specific objectives of the study was to identify the factors affecting the level of motivation of the health workers. A Likert's scale was used to elicit responses from the participants about the extent to which they agreed or disagreed with statements of factors affecting their level of motivation. The data was symmetrically distributed and a regression analysis was used to determine the extent to which the factors (predictors) explained the level of motivation of health workers. Selection of the predictor variables was guided by literature and the researchers' experience in managing human

resources in the health sector in Ghana. The regression matrix is presented in Table 3.

The predictors entered in the regression model together explained 85.3% of the observed variance in health worker motivation which was statistically significant ($R^2 = 0.853$, $p < 0.001$). When the predictors were assessed for their individual contribution to the explanatory power of the model, it was evident that those that made the greatest impact were supervision and management contributed ($B = 0.869$, $P < 0.001$) followed by opportunities for personal growth ($B = 0.577$, $P < 0.001$) and assigning challenging duties ($B = 0.491$, $P = 0.003$). In addition, pay increase/financial incentives substantially contributed to the explanatory power of the model ($B = 0.453$, $P < 0.001$). Surprisingly, however, in an African milieu where the family is of huge value, the family was not regarded as a significant determinant of work-related motivation among the participants ($B = 0.127$, $P = 0.27$). Perhaps, it reinforces the long held view that employees are preoccupied with what they would get from the workplace rather than what they would bring to the workplace.

Given the low level of motivation (4.88 on a 10-point scale) reported in this study, it suggests that perhaps sufficient attention has not been paid to the afromentioned factors that substantially influenced health workers' level of motivation. Nonetheless, within existing

Table 3. Regression matrix of factors affecting health worker's level of motivation

Predictors of health workers' motivation	Unstandardized coefficients		Standardized coefficients	t	P value
	B	Std. Error	Beta		
(Constant)	-21.481	3.789		-5.669	<0.001
Opportunities for personal growth	1.253	0.197	0.577	6.351	<0.001
Supervision and Management style	2.456	0.603	0.869	4.075	<0.001
Recognition, Reward and appreciation	1.233	0.360	0.343	3.427	0.001
working conditions	0.660	0.327	0.192	2.018	0.048
Relationship with Colleagues	-1.520	0.260	-0.538	-5.855	<0.001
Family relationship	0.304	0.274	0.127	1.111	0.271
Pay increase/incentives	0.982	0.164	0.453	5.975	<0.001
Challenging duties (tasks)	1.137	0.371	0.491	3.063	0.003
Model Summary: Adjusted $R^2 = 0.853$; $F_{(12, 71)} = 28.555$; $P < 0.001$					

literature, these findings are not in isolation. A plethora of literature makes the case that managerial style, salary levels, benefits, bonuses, workplace autonomy and opportunities for professional growth significantly contribute to the motivation levels of health professionals [10,12,13,22,30–33].

However, the health systems in many developing countries including Ghana have been blamed for not recognising and rewarding hard-work [34,35]. Health workers continue to work under challenging conditions whilst resources for effective management and facilitative supervision continues to dwindle. It appears that the focus of employers regarding employee motivation has been on just salary and remuneration to the neglect of other equally important factors that are identified in this study. In the Ghanaian context, this is reflected in the fact that following the 2010 implementation of the new Government Pay Policy (Single Spine Pay Policy) which led to colossal increases in workers' salary, there appears to be no commensurate increase in productivity. Thus, mere salary increment might not be the panacea for motivated health professionals in the absence of holistic motivational packages underpinned by positive and stimulating work environments. Perhaps it is about time that employers put the premium on the other non-monetary elements of motivation. This view has also been corroborated by others, concluding that health workers were unmotivated not merely because of dissatisfaction with

remuneration but also because of dissatisfaction with the lack of opportunities for growth and promotion; improved working conditions; recognition, rewards and appreciation [17,18].

Indeed, employee motivational needs and expectations are such a complex subject to be dealt within a single study based on a single organizational setting as in the case of this study and some of the previous ones [9,17,36]. However, these findings thus provide the baseline empirical data for further research and set the agenda for policy discussions towards a holistic programme of employee motivation in health organizations in Ghana and for that matter developing countries.

In the opinion of the researchers, a holistic motivation of health workers requires a unique systematic plan that underpins motivation packages with performance to ensure value for money. However, some studies [37,38] found inadequate planning capacity among some health care managers in Ghana as a key factor which culminated in poor planning practices. Even though the link between planning practices and employee motivation was not explored in this study, it should not be taken for granted since a good organizational plan ought to address issues bothering on employee motivation. Therefore future studies in this area would invaluablely enrich the discussion of the holistic measures required to motivate health professionals for improved productivity.

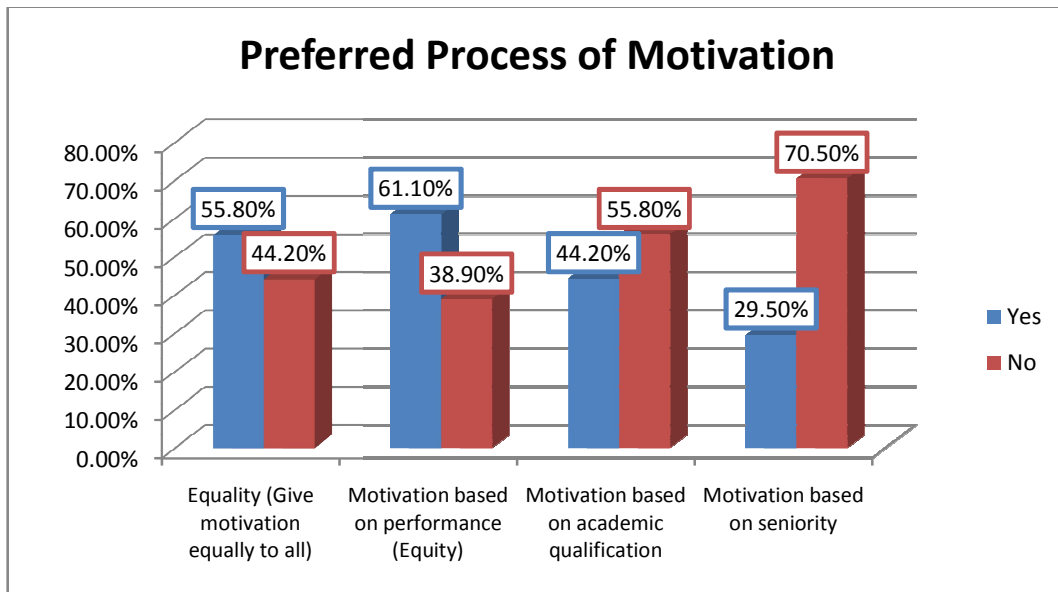


Fig. 1. Health workers preferred process of motivation

3.4 Preferred Process of Motivation

Fig. 1. shows that a slight majority (55.8%) of the participants would prefer a process of motivation that caters equally for all members of the team. A more convincing majority of 61.1% preferred a more equitable process of motivation taking into consideration the individual's level of performance. Conversely, 55.8% of the respondents do not prefer a motivation process based on academic qualifications. Similarly, a huge majority (70.5%) do not also approve of a motivation process based on seniority.

In effect, the findings of this study revealed that the equality and equity principles of motivation are those deemed suitable for motivating a multidisciplinary health team. This finding is consistent with the argument that has been made severally by different authors that for a motivation regime to be effectively implemented and accepted by employees, the principles of equity and equality must take centre stage instead of academic qualifications and seniority [2,39–41].

4. SUMMARY AND CONCLUSION

The study revealed that health workers' motivation was low (48.8%) and within a 95% confidence interval could range from 44.5% to 53.1%. Their preferences in terms of approaches to motivation were equality and performance based equity. Majority of them, however, frowned upon the use of academic qualifications and/or seniority as the basis for motivation; implying that perhaps not much attention has been paid to the factors that substantially influence health workers level of motivation.

The study further revealed opportunities for personal growth, supervision and management, challenging duties and salary increase/incentives were the factors that affected the motivational levels of the multidisciplinary health workers. Surprisingly in an African context where family systems are paramount to individuals, the family relationship was not regarded as a contributory factor to health workers motivation.

It is recommended that hospital managers and policy makers should pay particular attention to the factors that workers deemed important in motivating them. Importantly, managers should strengthen performance management and supervision within all units of a hospital which have been shown in the current study to influence motivation. Also, opportunities for

personal growth including continuous professional development and further education should be afforded to the health workers to build their capacity to take up more challenging duties which have been shown in this study to significantly influence the level of health worker motivation. Finally, policy makers and hospital managers should institute awards, incentives and recognition schemes in bid to soar up the motivation and commitment of health workers especially those in the rural health facilities.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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