



Relationships between job challenge and burnout among health workers in ekiti state university teaching hospital, ado-ekiti, Nigeria

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ABSTRACT

This study was conducted to investigate the relationship between job challenge and the experience of burnout among four groups of health workers in Ekiti State University Teaching Hospital, Ado-Ekiti, Nigeria. One hundred and forty health workers were selected through purposive sampling from the Ekiti State University Teaching Hospital. The sample consists of 16 pharmacists, 30 health assistants, 36 doctors and 58 nurses. Perceived Job challenge Measure and Maslach Burnout Inventory (MBI) were the instruments used for the study. Four hypotheses were tested using Pearson Product Moment Correlation Coefficient. Results from this study revealed that there was a significant relationship between job challenge and burnout among health workers in Ekiti State, Nigeria. Also, positive stimulation, a component of job challenge had a positive relationship with burnout. Competence testing, another component of job challenge was found to be significantly related to dehumanisation and global burnout. While there was no relationship found between the uncertainty, the last component of job challenge and burnout. Findings were discussed in the light of previous literature on job challenge and burnout and appropriate recommendations were made.

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Introduction

The world is full of numerous challenges. The work environment is not an exemption. Working in a hospital environment has so many challenges. Challenge according to the Oxford Dictionary of Current English is a demanding task or situation, while job is a paid position of regular employment or a task. Job challenge therefore is a demanding task or situations that workers encounter while working on a paid position of regular employment or task.

Health workers are people engaged in actions whose primary intent is to enhance health. They include doctors, nurses, pharmacists, laboratory technicians, community health workers, management and support workers such as financial operators, cooks, drivers and cleaners (WHO, 2006). For the purpose of this study, health workers will consist of doctors, pharmacists, nurses and health assistants.

Health workers are faced with a lot of job challenges. These challenges in one way or the other, affect them both in the way they attend to their duties and their emotional well-being. This is so because health workers must constantly provide empathy to those who need emotional support (MacDonald, Herbert, Regel & Stanbrok, 2011). Sleep deprivation is a big issue that affects practicing Physicians. Studies have linked lack of sleep on the part of physicians with higher rate of surgical complications. According to them, doctors might not be at their optimal levels as fatigue can affect mental acuity (MacDonald, Herbert, Regel & Stanbrok, 2011).

Health workers are usually and constantly exposed to risks like stress, alienation, over involvement, automatic behaviour and burnout (Nnamuchi, 2007; Hargreaves, 2002; & Chankova, Nguyen, Chipanta, Kombe, Onoja, & Ogungbemi, 2007). It is a psychological term for the experience of long term exhaustion

and diminished interest. Maslach and Jackson first identified burnout in the 1970s and developed a measure that weighs the effects of emotional exhaustion and reduced sense of personal accomplishment. The indicator later became the standard tool for measuring burnout in research on the syndrome.

Burnout is often found among those working in very demanding professions or those who work strenuous multiple jobs. Thus, the stress that health workers experience is an important topic for study. Health workers are usually involved in people work, and the helping relationship with patients or clients involves high interpersonal or emotional demands, which can lead health workers to feelings of emotional exhaustion and depersonalisation (Deary, Blenkin, Agius, Endler, Zealley, & Wood, 1996; Kirwan & Armstrong, 1995; Winefield & Anstey, 1991).

Many theories of burnout like the phase theory and Cedoline's theory include negative outcomes related to burnout, including job function (performance, output etc), health related issues outcomes (increases in stress hormones, coronary heart diseases, circulatory issues) and mental health problems (depression). One theoretical explanation of burnout for instance, the Phase theory, is that it is the best and most idealistic workers that experience burnout as captured in the common phrase, 'you have to be on fire in order to be burnt out'. The notion here is that, such dedicated people end up doing too much in support of their ideals, thus leading to exhaustion and eventual cynicism when their sacrifice has not been sufficient to achieve their goals.

A study conducted by Nwabuoku and Adebayo (2010) to investigate the influence of burnout syndrome and some job factors among women in the human services revealed that burnout syndrome, empowerment and job satisfaction have

impact both individually and collectively on attitude to work. Corey (1994) believes that burnout does not have a single cause but results from a combination of factors. He claims that one can understand burnout better when one considers the individual, interpersonal and organizational factors that contribute to the condition.

Various researches have linked burnout to increased level of depression, psychosomatic complaints, substance abuse, absenteeism and sick leave (Schaufeli and Enzmann, 1998). Burnout is often found among those working in very demanding professions or those who work strenuous multiple jobs. Thus, the stress that health workers experience is an important topic for study. Nurses and doctors are usually involved in people's work, and the helping relationship with patients or clients involves high interpersonal or emotional demands, which can lead doctors to feelings of emotional exhaustion and depersonalisation (Deary et al, 1996; Kirwan & Armstrong, 1995; Winefield & Anstey, 1991).

Research conducted during the development of the MBI found burnout to be related to anxiety and depression. Subsequently, the distinction between burnout and depression was established empirically in several studies using the MBI and various measures of depression (Bakker, Schaufeli, Demerouti, Janssen, Van der Hulst, & Brouwer, 2000; Glass & McKnight 1996; Leiter & Durup 1994). This research established that burnout is a problem that is specific to the work context, in contrast to depression, which tends to pervade every domain of a person's life. These findings lent empirical support to earlier claims that burnout is more job-related and situation-specific than general depression (Freudenberger 1983, Warr 1987). However, as noted later, individuals who are more depression-prone (as indicated by higher scores on neuroticism) are more vulnerable to burnout.

Rafi, Oskouie, & Nikraves (2004) while investigating the factors involved in nurses' response to burnout discovered that Nurses and patients' personal characteristics and social support influenced nurses' responses to burnout. Meltzer and Huckabay (2004) discovered from their study of the relationship between critical cares perceptions of futile care and its effect on burnout that feelings of emotional exhaustion in these nurses were involved in life sustaining interventions that conflicted with the nurses values and standard in terms of what the nurses thought are ethically appropriate and could result in improvement in a patients' condition and outcome.

A study conducted by Kirk-Brown and Wallace (2004) on the antecedents of burnout and job satisfaction among counselors employed in workplace settings, showed that role conflicts was a significant predictor of the experience of burnout and that intrinsic job satisfaction was significantly predicted by the counselors' perception of job challenge, as well as by the level of organizational knowledge.

Adebayo & Ezeanya (2010) carried out a research to examine how some job characteristics (job autonomy, task identity and profession) moderate the experience of burnout among health workers in Jos, Nigeria. They made use of one hundred and thirty six health workers (57 doctors and 79 nurses) drawn from two public hospitals (Jos University teaching Hospital and Plateau Specialist Hospital) and two missionary hospitals (Our Lady of Apostle Hospital and Evangelical Church of West Africa Hospital) who responded to Job Diagnostic Survey and Maslach Burnout Inventory. The data collected were analysed with three-way ANOVA statistics. Findings revealed

significant main effects of job autonomy (low job autonomy workers, $M = 64.24$ significantly scored higher than high job autonomy workers, $M = 49.24$, $F(1/128) = 53.90$, $P < .001$), task identity (low task identity workers, $M = 64.93$, significantly scored higher than high task identity workers, $M = 51.84$, $F(1/128) = 37.99$, $P < .001$) and profession (nurses, $M = 62.37$, significantly scored higher than medical doctors, $M = 51.26$, $F(1/128) = 17.89$, $P < .001$) on burnout. This study did not consider the relationship between job challenge and burnout.

Adebayo and Ezeanya (2011) also published a study that investigated the relationships between task identity, job autonomy and burnout of nurses in Jos, Nigeria. 79 nurses selected from three health institutions in Jos responded to Job Diagnostic Survey and Maslach Burnout Inventory. Three hypotheses were tested using Pearson Product Moment Correlation Statistics. Findings showed that task identity had negative significant correlation with nurses experience of burnout ($r(77) = -0.59$, $p < .01$) and job autonomy had a negative significant correlation with nurses experience of burnout ($r(77) = -0.46$, $p < .01$). The study suggests that stimulating professional experience of nurses may reduce their experience of burnout and this may be achieved by improving the physical, psychological, social, and organizational aspects of their job and concluded that even though burnout is a negative work and organization outcome, its negative effects can be ameliorated or totally avoided by job designs that promote task identity and job autonomy and employees' growth and development. There was no mention of the relationship between the experience of burnout and challenges at work also, only a group of health worker was considered.

Adebayo and Ezeanya (2010) investigated the influence of task identity and job autonomy on burnout among doctors in Jos. 57 participants responded to, Job Diagnostic Survey and Maslach Burnout Inventory. Three hypotheses were posited and were tested using Pearson's Correlation Statistics. The results indicated that task identity had negative significant relationship with doctors' experience of burnout ($r(I) = -0.34$, $P < .01$) and job autonomy also had negative significant relationship with doctors' experience of burnout ($r(I) = -0.45$, $P < .00$). No significant relationship was observed between task identity and job autonomy. Only a group of health worker was also studied here and there was no mention of a relationship between the challenges experienced by the group and their level of burnout syndrome.

It is on the basis of the studies discussed above that the current research is conceived to test the following hypotheses:

1. There will be a significant relationship between positive stimulation and burnout of health workers.
2. There will be a significant relationship between competence testing and burnout of health workers.
3. There will be a significant relationship between uncertainty and burnout of health workers
4. There will be a significant relationship between job challenge and burnout of health workers;

Method

Research Setting

The study was carried out at the Ekiti State University Teaching Hospital, Ado- Ekiti, Ekiti State.

Research Design

Purposive sampling was used because the researchers were interested in only four groups of health workers: the doctors, nurses, pharmacists, and health assistants.

Research Procedure

Participants were randomly selected from the various departments in the hospital and a purposive selection of four groups of health workers was made to include only doctors, pharmacists, nurses and health assistants. Research participants were approached individually and a questionnaire containing three sections was administered on each of them. Section A contained the demographic information like Sex, Age, Marital Status, Position, Profession, Years of practice, etc. Section B contained the Perceived Job Challenge Measure (PJCM), while section C contained the Maslach Burnout Inventory (MBI). Two hundred (200) copies of the questionnaire were administered but only one hundred and fifty (150) completed questionnaires could be retrieved. Out of these retrieved questionnaires, only one hundred and forty were properly filled, thus these were scored and analysed.

Research Participants

One hundred and forty research participants were drawn from the Ekiti State University Teaching Hospital Ado- Ekiti for the purpose of this research. The breakdown is as follows: thirty six (36) Doctors, sixteen (16) Pharmacists, fifty eight (58) Nurses and thirty (30) Health Assistants. Further breakdown revealed that eighty-eight (88) were females while fifty-two (52) were males. 90 of them were married, 2 widowed and 48 single. 133 were Christians while only 7 of them were Muslims.

Variables

Two variables were used for the purpose of this study, Job challenge and burnout

Instruments

Two instruments were used to carry out this research work: Perceived Job Challenge Measure (PJCM) and Maslach Burnout Inventory (MBI)

Perceived Job Challenge Measure

This instrument was developed by Preenen (2010). The instrument was designed to measure workers perceived job challenge. It comprises 17 items divided along three sub scales, positive stimulation (6- items), competence testing (6- items) and uncertainty (5- items).

Reported Cronbach Alpha Coefficients for the three subscales are positive stimulation (.95), competence testing (.89) and uncertainty (.86). Test retest (six months), positive stimulation (.95), competence testing (.90) and uncertainty (.89). To revalidate the instrument, a pilot study was conducted using forty health workers. Cronbach alpha reliability of .63 was found for the measures' overall.

In scoring Perceived Job Challenge Measure, items 1 to 12 were scored directly while items 13 to 17 were given an indirect score. Mean scores higher than the norms indicate high levels of job challenge

Maslach Burnout Inventory

The scale was developed by Maslach in 1983 to measure burnout syndrome, mental fatigue and physical exhaustion. The instrument contains 22 items designed to measure or assess burnout syndrome (BOS) which is a state of physical and emotional depletion resulting from conditions of work.

Maslach and Jackson (1986) provided the original psychometric properties for the American samples while Coker (1999) provided the properties for Nigerian samples. The normative scores obtained by Coker (1999) are Emotional Exhaustion, male (17.32), female (19.38), Dehumanisation, male (2.52), female (1.61), Reduced Personal accomplishment, male (12.12), and female (9.19).

Reliability coefficients reported are Cronbach Alpha, American sample (.71 - .90), Nigerian sample (.86). Test retest (one month), American sample (.60 - .80). Split-half and Odd Even, .57 and .92 respectively for Nigerian sample.

Maslach and Jackson obtained convergent validity coefficient ranging from (.20 - .56) by correlating MBI scores with the peer rating scores for different samples. By correlating the subscales of MBI with Psychological Symptoms Checklist (PSC) by Omoluabi (1987), Coker (1999) obtained concurrent validity coefficients in the range .01 - .36.

In scoring Maslach Burnout Inventory, items on the first two subscales (Emotional exhaustion and Dehumanization) were scored directly while items on the Reduced Personal Accomplishment subscale received reversed scoring. Scores higher than the norms indicate that the participant is manifesting burnout syndrome or a specific dimension of it, while scores lower than the norm indicate the absence of burnout syndrome. The norm is Emotional Exhaustion, male (17.32), female (19.38), Dehumanisation, male (2.52), female (1.61), and Reduced Personal accomplishment, male (12.12), and female (9.19).

Statistical Techniques

Pearson Product Moment Correlation was used to test the hypotheses.

Result

Correlation matrix table showing the relationship between components of Job Challenge and Burnout

	Emotional exhaustion	Depersonalisation	Reduced Personal Accomplishment	Burnout
Positive stimulation	.15	.13	.12	.19*
Competence Testing	.09	.23**	.07	.18*
Uncertainty	.04	-.11	-.01	-.04
Job challenge	.14	.10	.10	.17*

** df (138), $P < 0.01$, two-tailed test * df (138), $P < 0.05$ two-tailed test

The table shows that Positive stimulation has a significant relationship with the global burnout score but not with any of its subscales $r, (138) = .19, P < .05$. Competence testing is significantly related to Dehumanisation $r, (138) = .23, P < .01$ and Burnout $r, (138) = .18, P < .05$.

It also shows no significant relationship between Uncertainty and global Burnout score $r, (138) = -.04, P > .05$. or any of its subscales. The table also revealed that global Job challenge score has a significant relationship with global Burnout score $r, (138) = .17, P < .05$.

Discussion

Job challenge has always been an issue in the health sector, linked with burnout syndrome. This present study hypothesised that: There will be a significant relationship between positive stimulation and burnout of health workers, there will be a significant relationship between competence testing and burnout of health workers, there will be a significant relationship between uncertainty and burnout of health workers and, there will be a significant relationship between job challenge and burnout of health workers;

Job challenge has a significant relationship with burnout. Positive stimulation, a subscale of job challenge has a significant positive relationship with global burnout but not with any of the dimensions of the subscales of burnout. A plausible explanation for this is that the health workers, particularly the participants in

this study engage in the same kind of stimulating work over and over again because it is fascinating or even mandatory. There is every tendency that they would like to keep working and thus get over-worked. This, in turn, might lead to a state of burnout. Maslach and Leiter (1997) model of burnout, "the person within concept of burnout" can be used to explain this assertion. According to them, there are degrees of match and mismatch between a person and six domains of his or her job environment. The greater the gap, or mismatch, between the person and the job, the greater the likelihood of burnout. For instance, a mismatch in workload is generally found as excessive overload, through the simple formula that too many demands exhaust an individual's energy to the extent that recovery becomes impossible.

This result also follows the same pattern with that of Paton & Goddard (2003) who demonstrated that employees in the helping professions are particularly vulnerable to the experience of burnout probably because helping profession is a stimulating job and therefore they are motivated to keep working even when it is not convenient for them to do so. Maslach-Pine and Yafe-Yanai (2001) also opined that health workers are susceptible to emotional and behavioural sequel of both burnout and lowered job satisfaction. The consequence of professional burnout for health workers especially nurses and doctors are serious because it involves emotional withdrawal or indifference and also reduces the limit of their activities and their contact with patients.

Furthermore, this study revealed that competence testing, another subscale of job challenge, is significantly related to dehumanisation, a subscale of burnout and the global burnout score itself. Thus confirming hypothesis two. Dehumanisation is a tendency to depersonalise oneself and/ or those with whom one is forced to interact with so that they are seen as less individuals and situations become simply part of a routine. If the reward system is poor and one has a feeling that one's competence is being tested, no matter how fascinating the job is, one might still experience burnout especially if the work environment is not conducive, one easily gets emotionally drained and this in turn degenerates into burnout. The health workers in this study believe that their pay does not commensurate with the effort and energy they apply to their work and also that their hard work are not really appreciated since they are expected to carry out such assignments. Maslach and Leiter (1997) model also support this result. Reward, the third domain of the model involves a lack of appropriate rewards for the work people do. Sometimes these may be insufficient financial rewards, as when people are not receiving the salary or benefits commensurate with their achievements. Even more important at times is the lack of social rewards, as when one's hard work is ignored and not appreciated by others. This lack of recognition devalues both the work and the workers. In addition, the lack of intrinsic rewards (such as pride in doing something of importance and doing it well) can also be a critical part of this mismatch. Lack of reward is closely associated with feelings of inefficacy. This lack of intrinsic reward was observed among the health assistants during the test administration.

The above assertion also concurs with that of Maslach and Schaufeli (2001) who saw burnout as a prolong response to chronic emotional and interpersonal stressor on the job, and Cedoline (1982) who saw burnout as both an occupational hazard and a phenomenon induced by distress. The reason for this is probably due to the fact that they (health workers) come

across new medical cases they have not attended to before in which they might be seen as success or failures depending on the outcome of the situation. They then struggle to prove themselves as competent and capable of handling the situation which might drain their energy and lead to burnout. This assertion is supported by some of the health workers who during the course of administering the instruments said that almost on daily basis; they come across new and challenging cases that they have to deal with. As portrayed by perceived job challenge measure items 13 through 17, (in my work, I perform tasks of which I am not sure I can accomplish them, in which I run the risk of failure, that are difficult, that are hard to accomplish and in which I have to deal with new issues and situations).

Competence testing has a significant relationship with dehumanisation and burnout because health workers especially doctors, nurses and health assistants engage in jobs that put their abilities to test, they actually have to prove themselves as capable and also have to go further than usual in carrying out their work or duties, these in turn put a lot of pressure, stress and workload on them and lead to burnout. Freudenberger and North (1985) phases of burnout lends credence to this finding. This theory sees burnout as a process and posits that burnout occurs in 12 phases which necessarily do not follow sequentially or in any sense relevant other than as an abstract construct (Kraft, 2006). The first three phases, the compulsion to prove oneself, which is often found at the beginning as excessive ambition. It is ones desire to prove one's self while at the work place, which later turns into determination and compulsion. This leads to the second phase working harder. People establish higher personal expectations because they have to prove themselves to others and in other to meet up to these expectations, they tend to focus only on work. They take on more work and become obsessed with doing everything. This also leads to the third phase whereby their needs become neglected. At this phase they have no time for anything else since they have devoted everything to work. Friends and family, eating and sleeping start to seem unnecessary an unimportant.

Participants in this study are faced with a lot of work load probably because it is a teaching hospital. For instance, a doctor on weekend call will have to work from Friday evening till Monday evening or from Saturday morning till Monday evening depending on the department. Such a doctor might end up getting burnt out and treating some patients as if they were objects, become more callous and blame them for their sickness or even care less about what happens to them because of the work overload. This also might be the reason why most nurses are seen as aggressive and abusive by patients, because nurses are under the directives of both their superiors and the doctors and sometimes they test their competence and whenever they feel tested they vent their frustrations on the patients and their care givers.

Hypothesis three was not confirmed. There was no significant relationship observed between Uncertainty the last subscale of job challenge and the subscales of burnout or its global score. One plausible reason for this result is the ego of the professionals involved in the health sector most especially the doctors, nurses and pharmacists. They feel they can handle all situations, so they don't see their jobs as difficult, hard to accomplish or uncertain and as they can deal with any new medical issue and situation. Their training also contributes to this because they leave no room for the unknown; they are expected to know almost all about their job since they deal with

human lives. And finally, during the course of administering the questionnaire, the researchers noted that the health assistants feel it is the job they have chosen so it cannot be difficult. Therefore, whenever they encounter any difficult situation, this form of reasoning or defence mechanism helps them not to perceive the situation as difficult or stressful.

Conclusion and Recommendation

Based on the findings of this study, it can be concluded that challenges that health workers are faced with are related to the rate at which these set of workers experience burnout. Thus, it is recommended that management should employ more hands in order to reduce work overload and that they should organise seminars and social activities to help workers loosen up. Also, health workers remuneration should also be considered as it is another major source of challenge they encounter.

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