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Gender variation during the occurrence of occupational burnout among health workers in Teaching Hospitals

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This study was conducted to investigate gender difference in the experience of burnout among four groups of health workers in Ekiti State University Teaching Hospital, Ado-Ekiti. One hundred and forty health workers were selected through purposive sampling from the Ekiti State Teaching Hospital comprising of 16 pharmacists, 30 health assistants, 36 doctors and 58 nurses. Maslach Burnout Inventory (MBI) was administered to test the level of burnout. Four hypotheses were tested using Student's Independent t-test. Results revealed that sex has a significant effect on burnout; female health workers are more vulnerable to burnout than their male counterparts. Findings were discussed in the light of previous literature on gender and burnout. Based on the findings, it was 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.

Key words: Gender, burnout, health workers, teaching hospital, Ado-Ekiti.

INTRODUCTION

A lot of attempts have been made to study burnout in health care professions (Miró et al., 2007; Moreno et al., 2006).

Health workers or health professionals are all 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). Health workers are usually and constantly exposed to risks like stress, alienation, over involvement, automatic behaviour and burnout (Nnamuchi, 2007; Chankova et al., 2007; Hargreaves, 2002).

Freudenberger (1974) conceived burnout to be the "over committed" or the "super achiever" sickness. According to Oxford Dictionary of Psychology, burnout is an acute stress disorder or reaction characterized by exhaustion, resulting from overwork, with anxiety, fatigue, insomnia, depression, and impairment in work

performance (Colman, 2003). Acute means critical symptoms that begin abruptly and subsides quickly (Colman, 2003). Going by this definition, it therefore stands that burnout is critical, begins abruptly but fortunately subsides quickly especially when attention is paid to it. Merriam Webster's Online Dictionary defines burnout as exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration.

Many factors have been implicated to influence burnout. Personal characteristics and social support (Rafi et al., 2004); role conflict (Kirk-Brown and Wallace, 2004); job autonomy, task identity and profession (Adebayo and Ezeanya, 2010); working hours and work load (te Brake et al., 2003) gender, shift work and relationship with superior (Maccacaro et al., 2011); gender (Ronen and Pine, 2008; Adekola, 2010, 2012) and work home conflict (Dyrbye et al., 2011). One of them is gender or sex of workers.

According to the Oxford Advanced Learner's Dictionary, gender is a state of being male or female with reference to social or cultural differences. Sex also is the fact of being male or female (Oxford English Mini dictionary, 2003). The word sex and gender are commonly used interchangeably but many linguists argue

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that their usage is quite distinct. Sex refers to biological and physiological characteristics while gender refers to behaviour, role, expectations and activities in the society. It is one of the universal dimensions on which status differences are based. There are many issues that are gender specific that is, connected with women only or men only. Women have always been seen as having lower self esteem than men. As the knowledge about gender increases, a growing consensus has emerged that the difference between the sexes are not as great as was once thought (Osagu, 2007).

Burnout is a state of physical, emotional and mental exhaustion caused by long term involvement in situations that are emotionally demanding (Pines and Aronson; 1988). Burnout is characterised by symptoms that include irritability, fatigue, changes in sleep patterns, loss of creativity, lack of motivation, withdrawal among others. 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.

Maslach and Leiter (1997) defined the antithesis of burnout to be engagement. Engagement is characterized by energy involvement and efficacy. 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 (Winefield and Anstey, 1991; Kirwan and Armstrong, 1995; Deary et al., 1996).

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 second theory is that burnout is the end result of long exposure to chronic job stressors. Consequently, burnout ought to occur later in people's careers, rather than earlier, and it should be relatively stable over time if people stay in the same job. There have been debates about whether burnout results from overload (too many

demands with too little resources) or from under-load (tedium and monotony) (Cedoline, 1982; Bernard and Krupat, 1994). The phase model of burnout proposed that each of the three dimensions (emotional exhaustion, depersonalisation and reduced personal accomplishment), be split into high and low scores, so that all possible combinations of the three dimensions resulted in eight patterns, or phases of burnout (Golembiewski and Munzenrider, 1988).

Research conducted during the development of the Maslach Burnout Inventory found burnout to be related to anxiety and depression. Subsequently, the distinction between burnout and depression was established empirically in several studies using the Maslach Burnout Inventory and various measures of depression (Leiter and Durup 1994; Glass and McKnight 1996, Bakker et al., 2000).

These researches 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.

Further support for this distinction comes from an analysis of various conceptualizations of burnout, which notes five common elements of the burnout phenomenon (Maslach and Schaufeli 1993).

- There is a predominance of dysphoric symptoms such as mental or emotional exhaustion, fatigue and depression,
- The emphasis is on mental and behavioural symptoms more than physical ones.
- Burnout symptoms are work-related.
- The symptoms manifest themselves in "normal" persons who did not suffer from psychopathology before.
- Decreased effectiveness and work performance occur because of negative attitudes and behaviours.

Most of these elements are represented in the diagnosis for job-related neurasthenia (WHO 1992); current researches have been utilizing this diagnosis as the psychiatric equivalent of burnout. A new study has found that burnout scores on the Maslach Burnout Inventory can distinguish psychiatric outpatients diagnosed with job-related neurasthenia from outpatients diagnosed with other mental disorders, and that the former group shows a less pathological profile than the latter (Schaufeli and Van Dierendonck, 2000).

According to Tracy (2000) burnout should not be seen only as a personal or private issue because it is basically an organisational issue caused by long hours, little down time, and continual peer, customer and superior surveillance

. The way individuals process stressful events or situations differ. An individual can experience few stressors and be unable to process them well and thus, experience burnout, while another may experience a significant amount of stressors but process each well and avoid burnout. This is why McManus et al. (2004) suggest that stress is not a characteristic of jobs but of doctors. Different doctors in similar jobs are not more similar in their susceptibility to burnout than different doctors in different jobs (McManus et al., 2004).

DIMENSIONS OF BURNOUT

Maslach and Jackson (1986) identified three burnout dimensions. They are: Emotional exhaustion, depersonalization or dehumanisation; and a reduced sense of personal accomplishment.

Emotional exhaustion

This is the central dimension of burnout, and it is characterized by a feeling that one's emotional resources are used up. It refers to the feelings of over-extension and exhaustion resulting from daily conflict in work environment. Emotional exhaustion can occur when, "a worker's resources are depleted and they feel that they are no longer able to give themselves at a psychological level" (Maslach et al., 1996).

Depersonalization

This is a cynical, callous and detached attitude toward clients, co-workers, organization and even self. It indicates the development of negative attitudes and impersonal behaviors to people in relation to the profession. It is also the emotionally dry and detached manner of relating to others.

Personal accomplishment

The sense of personal fulfillment coming with self-esteem that is negatively related to burnout; the more people suffer from burnout, the worse they feel about their personal accomplishment. The lack of feeling of success and accomplishment among workers is defined as reduced professional efficacy, which is the negative belief of ones' self. It is marked by a sense of ineffectiveness and inadequacy in relation to job performance accompanied by negative self-evaluation (Togia, 2005)

Both practitioners and social commentators have identified burnout as a social relational problem long before it became a focus of systematic study of researchers (Maslach et al, 2001). Burnout research had its root in care giving and service occupation in which the core of the job was the relationship between provider and recipient (Maslach et al, 2001).

Many scholars subscribe to the notion that depersonalization is one of the three primary causes of job burnout. The other two often cited are emotional exhaustion and reduced sense of personal accomplishment (Carola, 2010). Burnout was formally studied in terms of an individual's relational transaction in the work place and not as an individual stress response.

Maslach and Leiter (1997) also saw burnout as the index of the dislocation between what people are and what they have to do. They feel it represents an erosion of human values, dignity, spirit and will, an erosion of the human soul. According to Cedoline (1982) burnout is a consequence of the perceived disparity between the demands of the job and the resources (both material and emotional) that an employee has available to him or her. Cedoline (1982) offered seven causes of burnout which include; lack of control over one's destiny, lack of occupational feedback and communication, work overload or under load, contact overload, role conflict or ambiguity, individual factors, and training deficits.

Burish (1993) conceived burnout as a psychological construct. To Schaufeli and Enzmann (1998) burnout is a persistent negative, work related state of mind that is characterized by exhaustion, a sense of reduced effectiveness, decreased motivation and the development of dysfunctional work attitudes and behaviour. Tracy (2000) feels burnout should not be seen as a personal and private issue since it is largely an organizational issue caused by long hours, little down time and continual peer, customer and supervisor surveillance.

Cherrus (1980) observed that burnout resulted from inconsistencies implicit in the role of a service professional. During the process of training and initial placement, human service workers build unrealistic expectations regarding what it means to be a professional. These unrealistic expectations in the long run make them susceptible to burnout (Nwabuoku and Adebayo, 2010). Maslach et al. (2001) concludes that how individuals' process stress is dependent on the level of stress felt and how close the individual is to burnout. To them, an individual can experience few stressors but be unable to process the stress well and thus experience burnout. Another individual may be exposed to a significant large amount of stressors and be able to handle each well and avoid burnout.

Burnout has been identified to be caused by lack of accomplishment, lack of intellectual feedback and debate, lack of praise or support for a job well done and lack of criticism and evaluation by someone whose judgment is respected (Pines et al., 1981).

A survey conducted among Nurses revealed three factors that lead to burnout. These factors are:

- 1). the amount of daily hassles causing frustrations,
- 2). Lack of support, and
- 3). A feeling of helplessness due to lack of authority to change things (Nwabuoku and Adebayo 2010).

Freudenberger and North divided burnout into twelve phases which do not necessarily follow sequentially nor is in any sense relevant or exist other than as an abstract construct (Kraft, 2006).

Deary et al. (1996) explored the contributions of personality, coping style and organisational change to burnout among Scottish medical personnel using structural equation modelling. They found out initial strong correlation between neuroticism and emotional exhaustion and depersonalisation.

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. Although Nwabuoku and Adebayo studied women vis-à-vis burnout, failure to include men for comparative purpose did not make it possible to see the possible effect of gender on burnout.

Rafi et al. (2004) investigated nurses' perceptions of the factors affecting their responses to burnout using grounded theory as a method. Thirty eight participants were used and data were generated using unstructured interview, twenty one sessions of participant observation and constant comparison was used for data analysis.

They discovered that Nurses and patients' personal characteristics and social support influenced nurses' responses to burnout.

Meltzer and Huckabay (2004) using a descriptive survey design with sixty critical care nurses who were measured on the Moral Distress Scale and Maslach Burnout Inventory. Their data was analysed using Pearson product moment correlational analysis 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 and 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. Although this study included women in its sample. The researchers were however more interested in comparing health workers across the profession and were silent on the effect of gender. It is however plausible to suggest the effect of gender on burnout since there is higher preponderance of women in nursing than in medical profession.

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 ($r(77) = -0.59$, $p < 0.01$) and job autonomy had a negative significant correlation with nurses' experience of burnout ($r(77) = -0.46$, $p < 0.01$). 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.

Again this study fails to compare male and female nurses on burnout in order to find out the effect of gender.

In another study, Adebayo and Ezeanya (2010) examined task identity and job autonomy as correlates of burnout among doctors in Jos. It made use of 57 participants that 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 ($r(1) = -0.34$, $P < 0.01$) and job autonomy also had negative significant relationship with doctors' experience of burnout ($r(1) = -0.45$, $P < 0.00$).

No significant relationship was observed between task identity and job autonomy. This study was also silent on the issue of gender on burnout making it difficult to see the possible effect of sex on burnout in Nigeria work situation.

Gender does not seem to be a constant predictive factor for burnout because various in the literature on male-female difference have produced inconsistent results regarding the strength and direction of this relationship. Some studies have shown that women suffer more from burnout than men (Weckwerth and Flynn 2006; Ronen and Pines, 2008; Adekola, 2010; Caccese and Mayerberg, 2010; Dyrbye, et al., 2011), while others have proved that males report higher burnout scores (te Brake et al., 2003; Purvanova and Muros, 2010; Maccacaro et al., 2011). Some other studies have also detected no difference in their level of burnout (Adekola, 2012).

te Brake et al. (2003) conducted a study to determine the differences between sexes in the manifestation of burnout among dentists and to identify possible concomitant factors. They made use of 411 males and 81 females making use of the Dutch version of the Maslach Burnout Inventory together with several health and work related questionnaires. Their results showed that male dentists had higher score on the depersonalisation dimension than the female dentist and no gender difference were found on the other dimensions (emotional exhaustion and personal accomplishment. However, it was discovered that male dentists put more working hours and see more patients per week when compared to the females. They concluded that although there exists gender differences in burnout, underlying factors such as working hours, have a profound effect on these differences.

Maccacaro et al. (2011) also carried out a research to investigate whether gender might be among the relevant variables in job burnout. The study conducted at the Health care Trust in northern Italy using Job content Questionnaire (JCQ) and MBI. A total of 1604 participants comprising of physicians, administrative staff and auxiliary personnel of hospital department and local service were used. Results of logistic regression showed that gender, shift work and low score in relationships with superiors were significantly associated with burnout. There was higher percentage of burnout in males than in females. Thus it was concluded that gender is significantly associated with a burnout condition. However, Ronen and Pines (2008) findings negate te Brake et al. (2003) and Maccacaro et al. (2011) work. They found out gender difference in burnout with women engineers reporting higher levels of burnout than men. They pegged this result on the fact that women have greater tendency to utilise emotion focused coping, their smaller peer support and greater work-family conflict.

Weckwerth and Flynn (2006) examined sex differences in the experience of social support and frequency of

burnout among university students in Northern Ontario University using an altered version of the Maslach Burnout Inventory Human Services Survey (MBI-HSS) (Maslach and Jackson, 1996) termed the AMBI-HSS, and the Social Provisions Scale (SPS) (Cutrona and Russell, 1987). Sex differences were observed for variety of support received, with men scoring significantly lower than females on support indices of Reliable Alliance, Attachment and Guidance. Males scored significantly higher than females on the burnout index of Depersonalization and females reported lower levels of Personal Accomplishment than males. This suggests that gender influences different dimensions of burnout and its effect is equally moderated by different dimensions of social support available to both male and female workers.

Adekola (2010) carried out a research to examine gender differences as a factor in the experience of work-burnout among University Staff. She made use of 1040 respondents (549 male and 491 female). Maslach Burnout Inventory was used as an instrument to assess the level of differences in the emotional exhaustion, depersonalisation and reduced personal accomplishment of staff of both sexes. Three hypotheses were posited and were tested using t-test statistics. Results indicated that there was no significant difference in the levels of emotional exhaustion and depersonalisation of both male and female staff. However, the mean of the scores on the reduced personal accomplishment of both sexes show a significant difference. It was confirmed also that female staff experienced higher level of reduced personal accomplishment than their male counterparts.

Adekola (2012) also examined gender as a factor in the experience of work-burnout among University Non-Teaching Staff making use of 496 respondents (272 male and 224 female). The instrument used to assess sex differences on the different dimensions of burnout was Maslach Burnout Inventory. Three hypotheses were tested using Z-test statistics. Results suggested no significant difference in the levels of emotional exhaustion and reduced personal accomplishment of both male and female staff. Though, the mean of the scores on the depersonalisation of both sexes shows a significant difference. It was confirmed also that male staff experienced higher level of de-personalisation than their female counterparts. Again, Adekola has successfully demonstrated that gender differences on burnout exists for two dimensions of burnout; reduced personal accomplishment and depolarization in 2010 and 2012 studies respectively. And the conclusion is that biological factor of gender may not be a reasonable starting point for understanding and explaining burnout among staff of Nigerian Universities.

Linzer et al. (2002) undertook a research to determine if there are sex differences in physician burnout in the Netherlands and if not to determine why they are present in the United States. Two physician survey were conducted in United States (n = 2.326) and in the neither-

lands ($n = 1,426$). US respondents had 33% of them as females (adjusted respond rate 52%) while Netherland respondents were 18% female (adjusted respond rate 63%). Standardized mean sex differences were calculated and compared across nationality. Results indicate that US women experienced more burnout compared to their men (28 Vs 21%, $P < 0.01$) but sex differences in burnout among Dutch physician was not significant. In both countries, women worked lesser hours than their men, (48 Vs 56) for US and (44 Vs 56) for Netherlands. Even though in both countries, women reported less work control than men, the effect size of the sex difference in the United States was more than double that of the Netherlands (34 US Vs 15 NL, $P < 0.01$). Thus they concluded that gender parity in physician burnout in the Netherlands may be due to fewer work hours and greater work control if compared to those in the United States.

Dyrbye et al. (2011) also conducted a research to evaluate differences in burnout and career satisfaction between men and women surgeons and to determine the relationships among personal factors, professional characteristics and work-home conflicts. This study was a cross sectional study with data collected through a survey in the United States making use of the members of the American College of Surgeons. Approximately 24,922 sampled surgeons, 1,043 women and 6,815 men returned surveys (31.5% response rate). Results indicated that women surgeons were younger, less likely to be married, less likely to be divorced and less likely to have children (all $P < 0.001$). No differences between men and women in hours of work or number of nights on call per week were observed. Women surgeons were more likely to believe that child rearing had slowed their career advancement (57.3 Vs 20.2%, $P < 0.001$), to have experienced a work-home conflict in the past three weeks (62.2 Vs 48.5%, $P < 0.001$). More women than men surgeons had burnout (43.3 Vs 39.0%; $P = 0.01$) and depressive symptoms (33.0 Vs 29.5%; $P = 0.02$). Independent factors associated with burnout on multivariate analysis were generally similar for men and women and included recent experience of work-home conflict, resolving the most recent work-home conflict in favour of work and hours worked per week. Their conclusion on the study was that work home conflicts appear to be a major contributor to surgeon burnout and are more common among women surgeons even though the factors contributing to burnout were similar among women and men surgeons, women surgeons were more likely to experience work home conflicts than were their male colleagues.

From the researches discussed above, it can be observed that;

1. There is equivocality in the findings of studies that have investigated the influence of sex on burnout.
2. The profession may moderate the influence of gender

on burnout.

3. Different work schedules may moderate the effect of sex on experience of burnout.
4. Work-home conflict which may be higher for females than males make females to experience higher burnout than male.
5. Influence of gender on burnout may be influenced by the dimensions of burnout with females being more likely to score higher on reduced sense of personal accomplishment and depersonalisation than males.
6. There is paucity of research in Nigeria investigating the influence of gender on burnout.
7. The country of region where the workers are located moderate the influence of gender on burnout.

It is on the basis of the above that the present study is conceived to investigate gender differences among health workers on burnout in a teaching hospital in Ado-Ekiti, Nigeria. This is with a view to comparing male and female on the three dimensions of burnout as measured by Maslach's Inventory.

HYPOTHESES

The following hypotheses were tested:

1. There will be a significant difference in the level of emotional exhaustion of health workers along gender.
2. There will be a significant difference in the level of dehumanisation of health workers along gender.
3. There will be a significant difference in the level of reduced personal accomplishment of health workers along gender.
4. There will be a significant difference in the global burnout score of health workers along gender.

MATERIALS AND METHODS

Research setting

The study was carried out within the premises of the Ekiti State University Teaching Hospital, Ado-Ekiti, Ekiti State.

Research procedure

A survey design was used and 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 giving questionnaires containing two sections. Section A contained the demographic information like Sex, Age, Marital Status, Position, Profession, Years of practice, while section B contained the Maslach Burnout Inventory (MBI). When it became difficult administering the question-

Table 1. An independent t-test summary table showing the effect of sex on emotional exhaustion of health workers.

	Variables	N	X	SD	t
Emotional	Male	52	19.71	8.29	-3.13**
Exhaustion	Female	88	24.67	9.47	

df (138), **P<0.01.

naire due to complaints from the participants, incentives like drinks and writing materials were introduced. Despite this, only one hundred and fifty (150) completed questionnaires could be retrieved out of two hundred (200) questionnaires administered representing 75% response rate. Out of these retrieved questionnaires, only one hundred and forty were properly filled, thus these were scored and analysed.

Research participants

The breakdown of the participants are 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 - Sex and Burnout were used for the study. Sex was the independent variable while burnout the dependent variable.

Instruments

Maslach Burnout Inventory (MBI) was used to collect data on experience of health workers burnout. 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 emotion 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 (0.71 - 0.90), Nigerian sample (0.86). Test retest (one month), American sample (0.60 - 0.80). Split-half and Odd Even, 0.57 and 0.92 respectively for Nigerian sample.

Maslach and Jackson obtained convergent validity coefficient ranging from (0.20 - 0.56) by correlating MBI scores with the peer rating scores for different samples. By correlating the subscales of MBI with PSC by Omoluabi (1987), Coker (1999) obtained concurrent validity coefficients in the range 0.01 - 0.36.

Scoring and interpretation

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), Reduced Personal accomplishment, male (12.12), and female (9.19).

Statistical techniques

Student's independent t-test was employed to find out the effect of sex on the dimensions of burnout and global Burnout score.

RESULTS

The data collected were scored and analysed and the results are as follows;

Table 1 shows that there is a significant difference of gender on emotional exhaustion (Male, 19.71 and Female 24.67), $t(138) = -3.13$, $P < 0.01$. The hypothesis is accepted.

Table 2 shows a significant difference of gender on Dehumanisation (Male, 8.09 and Female 10.23), $t(138) = -2.31$, $P < 0.05$. The hypothesis is accepted.

Table 3 shows no significant difference of gender on reduced personal accomplishment (Male, 18.09 and Female 18.64), $t(138) = -0.36$, $P < 0.05$. The hypothesis is rejected.

Table 4 shows a significant difference of gender on the global burnout scores (Male, 46.38 and Female 53.53), $t(138) = -2.70$, $P < 0.05$. The hypothesis is accepted.

Table 3. An independent t-test summary table showing the effect of sex on reduced personal accomplishment of health workers.

	Variables	N	X	SD	t
Reduced personal Accomplishment	Male	52	18.09	9.77	-0.36 ^{NS}
	Female	88	18.64	7.77	

df (138), ^{NS}P>0.05.

Table 4. An independent t-test summary table showing the effect of sex on global burnout score of health workers.

	Variables	N	X	SD	t
Burnout	Male	52	46.38	14.52	-2.70*
	Female	88	53.53	15.48	

df (138), *P<0.05.

DISCUSSION

From the results, it can be seen that there is a significant effect of sex on the experience of emotional exhaustion. Females had higher mean score in the emotion exhaustion dimension of burnout. This finding concurs with that of Caccese and Mayerberg (2010) who found out in their study of college athletic coaches that female coaches reported significantly higher levels of emotional exhaustion and lower level of reduced personal accomplishment than the male coaches in terms of both frequency and intensity of response.

There was a significant effect of sex on dehumanisation. Females had higher mean score than the males. This result negate that of Purvanova and Muros (2010) who found out that males are more depersonalised or dehumanised than the females in their meta-analysis study of gender differences in burnout.

Also, there was no significant difference observed in the sexes mean scores on reduced personal accomplishment dimension of burnout. The researchers are of the opinion that no sex difference was observed in this subscale because both female and male health workers involved in this study were equally exposed to the same educational training and both understand the task or the job they have to do. They have the same qualifications. There was a significant effect of sex on the global burnout score of health workers. Females scored higher than the males.

The result of this study correlates with that of Ronen and Pines (2008) who found a significant gender difference in burnout among women engineers reporting higher levels of burnout in women than men, and also that of Weckwerth and Flynn (2006) who examined sex differences in the experience of social support and frequency of burnout among university students in Northern Ontario University using an altered version of the Maslach Burnout Inventory Human Services Survey (MBI-HSS) (Maslach and Jackson, 1996) termed the

AMBI-HSS, and the Social Provisions Scale (SPS) (Cutrona and Russell, 1987). Sex differences were observed for variety of support received, with men scoring significantly lower than females on support indices of Reliable Alliance, Attachment and Guidance. Males scored significantly higher than females on the burnout index of Depersonalization and females reported lower levels of Personal Accomplishment than males.

However, the result of this study negate that of Maccacaro et al. (2011) who found out a higher percentage of burnout in male than in female in their study of 1604 participants comprising of physicians, administrative staff and local service personnel of hospital department and local service, making use of logistic regression. Also the study conducted by te Brake et al. (2003) among dentists revealed that male dentists had higher scores on the depersonalisation/dehumanisation dimension than the female dentists.

These results of te Brake et al., 2003; Maccacaro et al., 2011 and Purvanona and Muros, 2010 challenge the common help belief that female employees are more likely to experience burnout than the male employees, revealing instead that women are slightly more emotionally exhausted than men while men are somewhat more depersonalised than women. Purvanova and Muros (2010) have even suggested the discontinuation of the use of overall burnout measures because they are highly consistent with the emotional exhaustion dimension of burnout only.

A critical look at the results reveal that the health workers that participated in this research work are all experiencing high level of burnout. The norms of the burnout scale for both male and female 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), as compared with the result , Emotional exhaustion (Male, 19.71 and Female 24.67), dehumanize-

Dehumanisation (Male, 8.09 and Female 10.23), Reduced personal accomplishment (Male, 18.09 and Female 18.64).

The variations in the results of this study may be due to gender related stereo types or could even reflect the predominance of specific gender in some jobs especially in professions like Medicine, Nursing and Pharmacy. Medicine and Pharmacy are predominantly male profession in Nigeria while Nursing and Health Assistant are predominantly female dominated professions as observed in the sample of this research population.

Another reason for females showing higher scores in their level of burnout is that females are more emotionally imbalanced, they have higher negative self concept and because of the gender role. Men will not want to show that they are burnt-out on the job. It might also be due to the unequal participants since males were fifty two (52) in number while females were eighty eight (88) in number. Women also often face the problem of work-family life balance since family demand may collaborate with work demand to induce burnout.

CONCLUSION AND RECOMMENDATION

This study concludes that female health workers are more vulnerable to the experience of burnout than their male counterpart. Based on this findings, it is recommended that management should employ more hands in other to reduce work overload and that they should organise seminars and social activities to help workers loosen up. Findings cannot be generalised to the population of health workers because only four groups of health workers were used.

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