ASSESSMENT OF SELF-REPORTED BURNOUT AMONG NON-CLINICAL WORKERS IN UNIVERSITY OF BENIN TEACHING HOSPITAL, BENIN CITY, EDO STATE

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IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARDS OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (MBBS), IN UNIVERSITY OF BENIN, BENIN CITY

JANUARY 2024

DECLARATION

We hereby declare that this work is original and was carried out by the under-listed researchers under the supervision of Prof. (Mrs) E. C. Isah and Dr N. Mokogwu and has not been published elsewhere for the award of a degree or certificate.

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CERTIFICATION

We certify that the study titled "**Assessment of self-reported burnout among non-clinical workers in university of Benin teaching hospital, Benin city, Edo State**" was carried out by **PATRICK IFUNANYA FAVOUR** with matriculation number **MED1505237 and SALAMI EMMANUEL DAVID** with matriculation number **MED1404734** under our supervision in the Department of Public Health and Community Medicine, School of Medicine, College of Medical Sciences, University of Benin, Benin City, Edo State, Nigeria as part of the requirements for the award of the degree Bachelor of Medicine, Bachelor of Surgery (MBBS).

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DEDICATION

This project is dedicated to the Almighty God, for His mercies and strength bestowed upon us to successfully complete this work. We also dedicate this project to our families whose moral and financial support have brought us thus far, to our esteemed teachers for their guidance through the years and to every non-clinical worker that participated in the survey.

LIST OF ABBREVIATION

BEIS	Brief Emotional Intelligence Scale
CWB	Counterproductive Work Behavior Checklist
DP	Depersonalization
EE	Emotional exhaustion
EI	Emotional Intelligence
ICD	International Classification of Diseases
ICT	Information and Communication Technology
MBI	Maslach Burnout Inventory
MEC	Medical Education Center
UBTH	University of Benin Teaching Hospital
UK	United Kingdom
US	United States
WHO	World Health Organization
SPSS	Statistical Package for the Social Sciences

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OPERATIONAL DEFINITION OF TERMS

Administrator: a person responsible for carrying out the administration of a business or organization

Burnout: This is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed.

Emotional Exhaustion: This is the feelings of being depleted, over-exerted and fatigued by one's work.

Emotional Intelligence: The ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior.

Medical Records: is a department organized to manage health information data by ensuring its quality, accuracy, accessibility, and securing in both paper and electronic systems.

Non-clinical roles: the roles that do not offer any sort of medical attention or testing.

Prevalence: This is the proportion of a population with a disease or a particular condition at a specific point in time (point prevalence) or over a specified period of time (period prevalence).

Reduced Personal Accomplishment: This is the negative appraisal of one's behavior and performance in one's work.

Resilience: The ability to bounce back from adversity; or thriving despite adversity.
Retirement: Withdrawal from one's position or occupation or from an active working life.

Secretary: a person employed by an individual or in an office to assist with correspondence, make appointments, and carry out administrative tasks.

Ward Orderly: a hospital attendant whose job consists of assisting medical and nursing staff with various nursing and medical interventions.

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ABSTRACT

Burnout is a prolonged psychological response to chronic emotional and interpersonal stressors in the workplace, characterized by three core dimensions: exhaustion, cynicism, and reduced professional efficacy. In healthcare settings, burnout has emerged as a significant global concern with far-reaching consequences at individual, interpersonal, and institutional levels. Among healthcare workers, including non-clinical staff, burnout is associated with decreased job

satisfaction, increased absenteeism, medical errors, and reduced quality of care, ultimately impacting patient outcomes and increasing mortality risks. Interpersonally, burnout contributes to emotional dissonance, while institutionally it leads to high staff turnover, reduced efficiency, and increased economic burden.

Despite its recognition since the 1970s, burnout remains a complex and evolving construct, formally classified as an occupational phenomenon in the International Classification of Diseases (ICD-11). Its conceptual overlap with related conditions such as depression and fatigue continues to generate debate in the literature. Evidence links burnout to numerous adverse health outcomes, including cardiovascular diseases, metabolic disorders, musculoskeletal issues, and mental health disturbances. Furthermore, job demands such as workload are strongly associated with burnout, whereas job resources like social support promote work engagement.

Recent global challenges, particularly the COVID-19 pandemic, have intensified workplace stressors, placing healthcare workers at an increased risk of burnout. This study highlights the multifaceted nature of burnout and underscores its significant implications for both employee well-being and organizational performance, emphasizing the need for effective intervention strategies and supportive work environments.

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CHAPTER ONE

INTRODUCTION

Background

Burnout is a prolonged response to chronic emotional and interpersonal stressors on the job, comprising three dimensions: exhaustion, cynicism, and inefficiency. These dimensions are further defined as follows: exhaustion of emotional or physical capacity due to stress, a degree of

indifference or detachment from various aspects of work, and a sense of inadequacy or reduced personal accomplishment, respectively[1].

In healthcare settings, burnout negatively impacts outcomes at the individual, interpersonal, and institutional levels[2,3]. At the individual level, burnout is associated with reduced job satisfaction, increased absenteeism, medical errors, sickness, injury, and accidents among healthcare providers. These individual-level impacts may lead to reduced care quality and higher mortality among patients. From an interpersonal perspective, burnout is associated with emotional dissonance due to chronic exhaustion and cynicism. Emotional dissonance is described as a conflict between personal emotions and organizational demands. On an institutional level, burnout is linked to a higher turnover of healthcare workers and decreased workforce efficiency, posing a substantial economic burden on the healthcare system[2,3].

Non clinical workers are defined as individuals who work collaboratively to deliver routine and essential healthcare services, excluding physicians and nurses.[4]

Although the burnout syndrome was first noticed in the 1970s, it is still a global issue such that the 11th revision of the International Classification of Diseases of World Health Organization (ICD-11) defines it as an occupational phenomenon with risk of harming health.[5] The adopted definition of burnout in the ICD-11 comprises three factors (exhaustion, cynicism, and reduced professional efficacy) as the framework proposed by Maslach et al.[5] However, the conceptualization of burnout is somewhat controversial; for example, a meta-analytical study on the physicians' burnout found 142 unique definitions of burnout with at least 47 unique definitions using MBI.[2] Some constructs, such as depression and fatigue, are conceptually linked to job

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burnout. These phenomena are potentially part of the process of long-term sick leave.[7] At the core of burnout lies severe fatigue (i.e., exhaustion); however persistently fatigued workers are not necessarily (by definition) in burnout, nor must burned-out workers necessarily report fatigue as the main complaint.[8] Occupational fatigue has been linked to an imbalance between the intensity and duration and timing of work with recovery time. Studies over decades have shown evidence that burnout syndrome predicts various negative consequences to individuals and organizations, such as cardiovascular diseases, hypercholesterolemia, type 2 diabetes, coronary heart disease, musculoskeletal disorders, prolonged fatigue, headaches, gastrointestinal issues, mood disturbance, depressive symptoms, absenteeism, poor performance, insomnia, depressive symptoms, and life and job dissatisfaction[9,10]

Research shows that job demands (e.g., work overload) are more associated with job burnout, while job resources (e.g., co-worker support) are more related to job burnout's antipode, i.e., work engagement.[11] Nowadays, researchers claim the COVID-19 pandemic has posed strain and increased workload and job stress, particularly in healthcare workers, who have presented a higher risk of burnout than other occupations.[12] Going beyond the individual consequences of burnout, recent research has also investigated burnout in a large range of occupations, organizations, and countries. The literature has firmly established that burnout is not only detrimental for workers' health but also has negative effects at the organizational level[13].

Statement of problem.

Burnout, a multidimensional psychological syndrome characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, has gained recognition as a pervasive

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issue in various work settings, including healthcare.[14] Non-clinical workers, who play vital roles in supporting the functioning of a teaching hospital, are not immune to the detrimental effects of burnout. As these individuals contribute to the hospital's administrative, operational, and logistical aspects, their well-being is closely intertwined with the hospital's overall efficiency and quality of patient care.[15]

Burnout among non-clinical workers has emerged as a pressing issue within various organizations, with far-reaching consequences for both individual employees and the broader workplace environment. This problem is characterized by a state of chronic physical and emotional exhaustion, cynicism, and reduced professional efficacy among non-clinical employees who are not directly involved in patient care or clinical roles. The consequences of burnout in this specific occupational group pose a significant challenge to both employees and organizations, necessitating comprehensive investigation and intervention.[16]

Non-clinical workers, including administrative staff, office managers, customer service representatives, and various other support personnel, are experiencing high levels of stress, exhaustion, and a growing sense of disillusionment with their jobs. This burnout epidemic is detrimental not only to the affected employees but also to the organizations they serve, leading to decreased productivity, increased absenteeism, and a higher turnover rate.[17]

In their boundary-spanning role, non-clinical healthcare workers face many challenges. One such challenge is job burnout which is a syndrome characterized by emotional exhaustion, a tendency to depersonalize others and diminished perceptions of ability on the job.[18] In healthcare, it is refer to a myriad of antecedents of job burnout including emotionally demanding patient contacts, lack of time to plan and prepare work, frequent interruptions, and responsibility in the absence of

decision-making authority. Collectively these are known as job demand stressors and are defined as “those physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort”.[19]

The negative implications of burnout are often profound for both the individual frontline employee as well as for the organizational healthcare provider, and can involve substantial costs due to turnover, absenteeism, job dissatisfaction, lower organizational commitment and compromised job performance.[20]

Justification

Burnout among healthcare professionals has gained substantial attention due to its negative impact on well-being, job satisfaction, and patient care quality. While burnout has been extensively studied in clinical staff, non-clinical workers in healthcare settings, especially those in teaching hospitals, have received limited research focus. Non-clinical staff, including administrative personnel, support staff, and maintenance workers, form a vital part of the hospital ecosystem, contributing to its efficient functioning. Despite their crucial roles, the potential burnout experiences and related implications in this group have remained relatively unexplored.

Gap in the Literature: The majority of burnout studies in healthcare have concentrated on clinicians, with insufficient attention given to non-clinical employees. This research gap calls for an in-depth examination of burnout among non-clinical workers to ensure a comprehensive understanding of well-being challenges within the hospital setting.[21]

Underserved Population: Non-clinical workers, including administrative staff, janitors, security personnel, and support staff, constitute a substantial portion of the hospital workforce. Despite their pivotal contributions, their experiences with burnout have received limited attention.[22]

Unique Work Environment: Teaching hospitals are distinct environments that combine patient care, medical education, and research. The dynamics of such an environment introduce specific stressors that may affect non-clinical staff differently compared to those in other settings.[23]

Organizational Implications: Burnout can negatively impact job performance, job satisfaction, and overall organizational health. In a teaching hospital, where seamless coordination is critical for effective patient care and education, burnout among non-clinical staff can have far-reaching consequences.[23]

Patient Care Quality: Non-clinical workers contribute indirectly to patient care by maintaining a functional and safe hospital environment. Burnout in this group might indirectly affect patient outcomes by influencing the hospital's overall functioning.[24]

Intervention Opportunities: Understanding the specific factors contributing to burnout among non-clinical staff allows for targeted interventions to enhance well-being, job satisfaction, and overall hospital efficiency.[25]

By conducting this study, insights can be gained into the prevalence, contributing factors, coping mechanisms, and potential organizational interventions related to burnout among non-clinical workers in a teaching hospital. The findings can inform hospital management, policymakers, and practitioners about the specific needs of this understudied group and facilitate the development of targeted strategies to mitigate burnout and enhance overall hospital performance.

Research Question

1. What is the prevalence and severity of burnout among non-clinical workers in the University of Benin Teaching Hospital (UBTH).

2. What is the knowledge of burnout among non-clinical workers in UBTH?

3. What are the key contributing factors to burnout among non-clinical workers in UBTH?

4. What is the effect and coping mechanism utilized by non-clinical workers in UBTH?

AIM AND OBJECTIVES

General Objectives

To determine the prevalence, contributing factors and effects of self-reported burnout among non-clinical workers in University of Benin Teaching Hospital (UBTH), Benin City, Edo State and to make recommendations to improve their health and safety.

Specific Objectives

1. To determine the prevalence and severity of burnout among non-clinical workers in UBTH.
2. To identify the key contributing factors to burnout among non-clinical workers in the teaching hospital, including workload, job demands, role ambiguity, and interpersonal relationships.

3. To find out the effect of burnout and coping mechanisms utilized by non-clinical workers to manage burnout and explore their effectiveness in reducing burnout symptoms.

CHAPTER TWO

LITERATURE REVIEW

2.1 PREVALENCE OF BURNOUT AMONG NON-CLINICAL WORKERS

A descriptive cross-sectional study was carried out in Shiraz, Iran, among 300 employees (150 administrative staff and 150 health care staff) on aimed to evaluate occupational burnout among administrative and healthcare staffs of Shiraz University of Medical Sciences. The results showed no significant difference between men and women employees in terms of occupational burnout and its three dimensions. Moreover, a significant difference between administrative and medical staffs were found only in the dimension of emotional exhaustion. The mean score of emotional

exhaustion in the administrative staff was significantly lower than that of their peers in the healthcare sector (2.03±0.84vs. 2.36±1.00) (p=0.03).[26]

A study was carried out in Ghana, among 95 nonclinical faculty and staff aimed to explore the prevalence of burnout among non-clinical faculty and staff working at a local Medical Education Center (MEC) and to identify predictors of burnout using job satisfaction dimensions—supervision, coworkers, contingency rewards, and nature of work. The results showed 1% of nonclinical workers reported high, 35% medium, and 64% low burnout. Sixty-two percent of faculty and 65% of staff reported low burnout respectively. In calculating the prevalence of job satisfaction among the participants, 76% of all respondents, 79% of faculty, and 75% of staff reported high satisfaction rates.[27]

A study was carried out among 186 clinical staff and 184 non-clinical staff, aimed at assessing the levels of burnout among clinical and non-clinical staff of two tertiary health institutions in Maiduguri, North Eastern, Nigeria. The results showed that 144 (77.4 %) and 117(63.6%) of the clinical and non-clinical participants suffered from emotional exhaustion respectively; 69 (37.1%) and 56 (36.6%) of the clinical and non-clinical staff manifested with depersonalisation respectively while 101 (54%) and 89 (48.4%) of the clinical and non-clinical participants manifested with low personal accomplishment scores respectively.[28]

2.2 DETERMINANTS OF BURNOUT AMONG NONCLINICAL WORKERS IN UBTH

A study was carried out in Ghana, among 95 non-clinical faculty and staff aimed to explore the prevalence of burnout among nonclinical faculty and staff working at a local Medical Education Center (MEC) and to identify predictors of burnout using job satisfaction dimensions—supervision, coworkers, contingency rewards, and nature of work. The results there was a statistically significant relationship between job satisfaction and burnout (r[93]=-.66; P<.001). Multiple regression analysis showed that nature of work (job tasks; b=-.49) and coworkers (b=-.30) were significant predictors of burnout (R=0.74; F[4, 90]=26.81; P<.001).[27]

A study was carried out among 141 administrative personnel aimed to assess burnout levels and associated risk factors among health workers in Emergency Departments in Palestinian hospitals. The results revealed that a high degree of burnout was significantly higher among workers in the West bank hospitals than among those who worked in the Gaza Strip (OR 2.02, 95% CI = 1.11–3.69, p = 0.019), and higher among younger workers (aged ≤ 30 years old) compared to their older counterparts (OR 2.4, 95% CI = 1.302–4.458, p = 0.005). In addition, burnout was significantly associated with exposure to workplace violence. Workers who had been exposed to physical violence in the last year were 2 times more likely to experience a high degree of burnout (OR 2.017 95%CI 1.121–3.631, p = 0.019), but no association was observed with regards to exposure to verbal violence (p > 0.05).[29]

A study was carried out among 3537 health care workers in the UK and Poland aimed to describe the prevalence and predictors of burnout, anxiety and depression in healthcare workers during the

Covid-19 pandemic. The results showed significant factors associated with anxiety and depression, included burnout, gender, safety attitudes and job role. The findings demonstrated a significant burden of burnout, anxiety, and depression amongst healthcare workers. A strong association was seen between SARS-CoV-2 testing, safety attitudes, gender, job role, redeployment and psychological state.[30]

A study was carried out in Port Harcourt Nigeria, among 320 doctors and nurses to determine the occurrence of burnout and its associated factors among doctors and nurses at the University of Port Harcourt Teaching Hospital, South-South Nigeria. The results show that significant factors associated with burnout included monthly earning ($P = 0.020$), professional grouping ($P = 0.008$) and days off work ($P = 0.037$). Specifically, doctors had higher levels of emotional exhaustion (EE) in comparison to the nurses ($P = 0.005$). Furthermore, those that were not satisfied with their jobs had high EE and high depersonalization (DP) compared to those that had job satisfaction ($P < 0.05$).[31]

2.3 CONSEQUENCE ON JOB PERFORMANCE OF BURNOUT AMONG NONCLINICAL WORKERS

A survey was carried out among 152 respondents in New Zealand aimed to examine the antecedents and outcomes of burnout in a healthcare environment where healthcare workers are engaged in the novel context of non-clinical health service encounters. The findings identified significant relationships between job demand stressors (role overload, role conflict, role ambiguity and interpersonal conflict), symptoms of burnout (emotional exhaustion and depersonalization),

affective job outcomes (job satisfaction and organizational commitment) and behavioral job outcomes (service recovery performance and turnover intentions) and extend our understanding of these phenomena in the largely unexplored yet important context of non-clinical health service delivery. The major implication for hospital managers was to ensure that non-clinical healthcare workers had adequate information pertaining to their job-related duties and responsibilities since role ambiguity was the only characteristic of the non-clinical work environment that influenced subsequent appraisal (depersonalization), emotional response (organizational commitment) and behavior (service recovery performance) in the conceptualization of appraisal → emotional response → behavior.[32]

A cross-sectional study was conducted in 2017 involving 401 non clinicians in six hospitals located within Nsukka metropolis in Enugu state, Nigeria, with the aim of investigating the moderating role of emotional intelligence in the relationship between counterproductive work behaviour and non clinicians' burnout. A convenient sampling technique was used in the selection of the sample. Three instruments were used to collect data, namely: Maslach Burnout Inventory, Counterproductive Work Behaviour Checklist (CWB), and Brief Emotional Intelligence Scale (BEIS). The results from the study showed that the three dimensions of burnout: emotional exhaustion, depersonalization, and lack of personal accomplishment, positively predicted CWB in non-clinician. Also, Emotional Intelligence (EI) notably and negatively predicted CWB. The findings also showed that EI moderated the positive relationship between emotional exhaustion and CWB and also between depersonalization and CWB. Hence, the positive relationship between these two dimensions of burnout and CWB was stronger for non-clinicians with low EI as against those with high EI.[33]

A survey was carried out among 362 front line social worker in United States of America (USA) aimed to advance understanding of the differential impact of job stressors (work–family conflict, role conflict and role ambiguity) and burnout (emotional exhaustion and depersonalisation) on employee disengagement (work withdrawal and exit seeking behaviours). The study's results yielded a good model fit (RMSEA = 0.06, CFI = 0.96, NFI = 0.94). Work– family conflict, role ambiguity and role conflict were found to impact work withdrawal and exit-seeking behaviours indirectly through burnout. The outcome variable, exit-seeking behaviours, was positively impacted by depersonalisation and work withdrawal at a statistically significant level. Overall, findings, at least in the US context, highlighted the importance of further examining the development of job burnout among social workers and social work supervisors working in child welfare settings, as well as the utility of long-term administrative strategies to mitigate risks of burnout development and support engagement.[34]

A study was carried out among 400 employees aimed to examined the effects of job burnout on job satisfaction among selected health service employees in Southwestern Nigeria. The results of the study showed that insufficient motivation, low organizational support and high job demand could lead to job burnout. The study revealed an inverse relationship between job burnout and employee satisfaction which makes them to perform below expectations.[35]

2.4 EFFECTIVENESS OF EXISTING SUPPORT SYSTEMS BY NONCLINICAL WORKERS IN UBTH IN MITIGATING BURNOUT

A study was carried out among 232 counselors aimed to investigate whether effective coping strategies play an important role to reduce burnout levels among sexual or substance abuse counselors. The results indicated that self-distraction and behavior disengagement coping strategies mediated the relationships between 3 job stress variables (workload, role conflict, and job ambiguity) and burnout. Although venting and humor coping strategies positively moderated the relationship between role ambiguity and burnout, active coping strategies negatively moderated the relationship between workload and burnout.[36]

A study was carried out among 232 counselors aimed to examine the burnout experiences of occupational therapists practicing in Ontario and to describe the practice implications and coping strategies employed. The results indicated high levels of emotional exhaustion were reported by 34.8% of participants, high levels of cynicism by 43.5%, and low professional efficacy by 24.6%. Practice issues included excessive demands on time, conflict, and lack of autonomy and respect. Coping strategies included spending time with family and maintaining professional/personal balance, control of work responsibilities, maintaining a sense of humor, and self-awareness/self-monitoring.[37]

A descriptive study was carried out in 2018 to assess stressors, effects and coping strategies among teachers in a public school in Esan Central Senatorial District, Edo State, Nigeria. A total of 308 teachers were selected for the study by random sampling technique. It was questionnaire based. It was discussed that with the lack of coping strategies for stress, the teachers can develop negative emotions which can lead to burnout. The study concluded that stress reduces the teachers' productivity especially in imparting knowledge.[38]

A study was carried out among 234 nurses aimed to investigated the sources, patterns and coping strategies for occupational stress among nurses in Nnamdi Azikiwe University Teaching Hospital

(NAUTH), Nnewi Anambra State. The results of the study showed that Majority of the nurses strongly agreed that the common occupational stress coping strategy they usually adopt include ventilation of feelings 110 (47.01), followed by effective time management 100 (42.73%) and avoidance of unnecessary stress. Others agreed that adjusting one's standard and attitude to life and work 92 (39.1%) and identification of the sources of stress 84 (35.89) as coping strategies that they can adopt in times of stress.[39]

CHAPTER THREE

METHODOLOGY

3.1 STUDY AREA

The study was carried out in the University of Benin Teaching Hospital (UBTH), Benin City, Edo state, Nigeria. Edo State is one of the 36 states in Nigeria. It is located in the South-South geopolitical zone of Nigeria. It was created on 27th August, 1991 from the Northern portion of the defunct Bendel State. It is bounded by Kogi State to the north-east, Anambra State to the east, Delta State to the south-east and Ondo State to the west and the north-west.[37] Its population estimate as at 2021 is 4,751,878 (projected). Its capital is Benin City. It is the center of Nigeria's rubber industry and also possesses palm nuts for oil in the traditional industry.[40]

University of Benin Teaching Hospital (UBTH) is a tertiary health facility, which was established on May 12th 1973 following the enactment of Edict No.12 of April, 1971 as the sixth of the 1st generation Teaching Hospitals to complement her sister institution, University of Benin and to provide secondary and tertiary care to the then Midwestern region (now Edo and Delta State) and its environs.[41]

It was taken over by the Federal government on April 1, 1975 as the fifth teaching hospital coming after University College Hospital Ibadan and Lagos University Teaching Hospital. For over forty years now, the tertiary referral hospital, widely acknowledged as a Centre for Excellence, has remarkably and effectively served as the last port of call for expert management of diverse and varied disease conditions in Edo, Delta, part of Kogi and Ondo states which largely form its catchment areas and sometimes further.[42]

In addition to the main hospital there are other facilities which include: two Comprehensive Health Centres located at Ogbona and Udo and a centre for training Community Health Officers in Ekpoma, (presently this school has moved to UBTH).

At inception the hospital's goals were encapsulated in her motto for Healing, Research and Training. Initially commissioned as a 300 bedded hospital in 1973, UBTH has expanded her facilities tremendously over the years such that she provides facilities for training of high and middle level manpower for the health industry. Through the comprehensive health centres in Ogbona and Udo and the General Practice Clinic that came on stream later, she equally provides some avenues for primary health care to the immediate communities. The hospital is located in Egor Local Government area along Benin-Ore Road. Its boundaries are the University of Benin and Federal Government Girls' College Road.

University of Benin Teaching Hospital (UBTH) is a 900-bed tertiary care hospital. It serves as a referral center to the State as well as to surrounding states in southern Nigeria. UBTH is one of the busiest hospitals in Nigeria, with monthly average outpatient attendance exceeding 25,000; admissions up to 3,000 and bed occupancy rates exceeding 90% in several of the hospital's wards. The hospital has a total of 31 wards, 71 clinical and non-clinical departments and units, which work in synergy to provide general and specialized healthcare services to clients.[39]

3.2 STUDY DESIGN

A descriptive cross-sectional study design was employed to assess the prevalence of burnout and its determinants among non-clinical workers in the University of Benin Teaching Hospital (UBTH), Benin City, Edo State.

3.4 STUDY POPULATION

The study was carried out among non-clinical workers in UBTH.

Inclusion criteria

The following persons were included in the study:

I. Nonclinical workers currently employed in UBTH.
II. Nonclinical workers who gave consent to participate in the study.

Exclusion criteria

The following persons were excluded from the study:

I. Nonclinical workers with preexisting medical conditions that can impact stress level.
II. Nonclinical workers with recent significant life events.
III. Nonclinical workers participating in other stress reducing interventions.

3.5 STUDY DURATION

The study was carried out from December 2022 to December 2023 and this is the breakdown:

- Conceptualization and initial write up: 3 months
- Data collection: 3 months
- Data entry and analysis: 3 months
- Final write-up: 3 months

3.6 SAMPLE SIZE DETERMINATION

This was calculated using the Cochran's formula in which a design effect was factored in, taking into consideration the sampling method (multi stage sampling technique) to be used in the study.[43]

$$n = \frac{Z^2 pq \times deff}{d^2}$$

Where:

n = Minimum Sample Size.

Z = Standard normal deviate set at 1.96 (at 95% confidence interval).

p = Prevalence rate of a particular characteristics of the target population from a previous study.

q = 1-p

d = degree of precision set at 0.05

df = Design effect (multi stage technique is 1.5), which is estimated to compensate for deviation from simple random sampling procedure[44].

From a study carried out on burnout among nonclinical staff of two tertiary health institution in Maiduguri, North Eastern, Nigeria. 63.6% of the respondents suffered from emotional exhaustion.

Therefore, $p = 63.6\% = \frac{63.6}{100}$

$= 0.636$

$q = 1 - 0.636$

$= 0.364$

Hence, $n = \frac{Z^2 pq \times df}{d^2}$

$n = \frac{1.96 \times 1.96 \times 0.636 \times 0.364 \times 1.5}{0.05 \times 0.05}$

$n = 533.61$

$n \approx 534$

To make room for non-response, 10% non-response rate was added to the minimum sample size, utilizing the formula for non-response rate.

$n_f = \frac{n}{1-nr}$

n = Minimum sample size= 534

nr = Non-response rate= 10% = 0.10

n_f = Final Minimum sample size

$= \frac{534}{1 - 0.10}$

$= \frac{534}{0.90}$

$= 593.33$

≈ 593

Thus, final minimum sample size for this study is 593. However, for the purpose of this study, a sample size of 600 was used.

3.7 SAMPLING TECHNIQUE

A multi staged sampling technique was used to select nonclinical workers that participated in the study:

STEP 1: Definition of Population

The sample population is non-clinical workers in University of Benin Teaching Hospital, Benin City, Edo State.

There are total number (N) of 1611 non-clinical workers in University of Benin Teaching Hospital.

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STEP 2: Separation of study population into departments

The departments surveyed were chosen by simple random sampling which include Engineering, Ward Orderly, Information Communication Technology (ICT), Administration, Environmental Waste Management, Caterers, Laundry, Oxygen plant, Security, Records, and Social workers.

STEP 3: Determination of sample size for each department

The sample frame of each department was obtained from the administrative offices of the various non-clinical workers. The sample size of each department was determined.

The sampling fraction was calculated as follows;

Sampling fraction was calculated as follows:

Sampling fraction (SF)= n/N

Where:

n = Sample size

N = Population size

n = 600

N = 735

SF = 600/735

SF = 0.8163

The sampling fraction was dependent on the total number of nonclinical workers in the selected departments as at the time of the survey and was used as sampling frame to calculate sample fraction.

STEP 4: Random sampling of participants from each department

A simple random sampling technique was used in selecting participants from each department

STEP 5: Combination of department samples into one representative sample

All stratum samples were combined into one representative sample. A total population analysis was carried out thereafter.

3.8 DATA MANAGEMENT

Data was collected using a semi structured questionnaire adapted from the Maslach Burnout Inventory. [45]

3.8.1 DATA COLLECTION TOOL

A semi structured questionnaire was used for this study. The questionnaire was interviewer administered containing questions and respondents were required to answer.

The questionnaire was structured to contain both open ended and closed ended questions. The questionnaire used was adopted from the Maslachs Burnout Inventory. The questionnaire covered the set objectives for the study which are broadly divided into sections.

SECTION A: Socio-demographic data of non-clinical staff

This section was to seek answers concerning respondents' age, sex, marital status, ethnic group, religion, occupation, level of education.

SECTION B: To identify the prevalence and severity of burnout among non-clinical workers in UBTH.

SECTION C: To identify factors that contribute to burnout among non-clinical workers UBTH

SECTION D: To investigate the coping mechanisms utilized by non-clinical workers to manage burnout and explore their effectiveness in reducing burnout symptoms.

SECTION E: To analyze the effects of burnout among non-clinical workers on hospital operations, team dynamics, and patient care quality.

3.8.2 METHOD OF DATA COLLECTION

A quantitative method of data collection with the use of an interviewer-administered questionnaires was used for this study.

3.8.3 PRE-TESTING

Pre-testing will be carried out among non-clinical staff of Central Hospital, Benin City.

Ten percent of the sample size (60 questionnaires) in the proportion will be used for pretesting. The aim was to identify errors, effect corrections and ensure validity and reliability of the questionnaire to aid appropriate collection of data. Appropriate corrections were made where applicable to the questionnaire before commencement of this survey.

3.8.4 DATA ANALYSIS

The filled questionnaires from the University of Benin Teaching Hospital, Benin City, Edo State was reviewed to see if data were entered properly; and checked for any inconsistencies. Data coding and cleaning was carried out. Quantitative data will be entered and analyzed with IBM SPSS (Statistical Package for Scientific Solutions) version 26.0 software.

3.8.4.1 SCORING SYSTEM

The abbreviated Maslach Burnout Inventory (MBI) and modified Brief-COPE tool were used to self-assess the non-clinical workers be at risk of burnout. It contains questions each with a score of 0 to 6. To determine the risk of burnout, the MBI explores three components: **EXHAUSTION, DEPERSONALIZATION AND PERSONAL ACHIEVEMENT**. The objective is simply to make you aware that anyone may be at risk of burnout.[45,46]

For each question, a score that corresponds to your response is given. At the end of each section the scores for each section is added and compared with the ideal range of values for burnout. A high score in the first two sections and a low score in the last section may indicate burnout.

Emotional exhaustion was assessed using 3 questions (7, 8, & 9). A minimum score of 0 and a maximum score of 6 was given for every response. A total score of 18 was gotten. Individuals with total scores ≤6 was classified as low burnout, 7-10 as moderate burnout and ≥11 as high burnout.

Depersonalization was assessed using 3 questions (4, 5 & 6). A minimum score of 0 and a maximum score of 6 was given for every response. A total score of 18 was gotten. Individuals with total scores ≤3 was classified as low burnout, 4-6 as moderate burnout and ≥7 as high burnout.

Personal accomplishment was assessed using a total of 3 questions (1, 2, & 3). A minimum score of 0 and a maximum score of 6 was given for every response. A total score of 18 was gotten. Individuals with total scores ≥15 was classified as low burnout, 13-14 as moderate burnout and ≤12 as high burnout.

Respondents who have high burnout scores in any domain was considered burnout while those without any high burnout score were considered as absent of burnout.

The modified Brief COPE was used to measure strategies used for coping with stress. The questionnaire was made up of 14 items grouped into 14 subscales measuring three coping strategies: avoidant (denial, substance use, behavioural disengagement, and self-distraction), problem-focused (Use of informational support, active coping, Positive reframing and planning) and emotion-focused (use of emotional support, venting, acceptance, humour, religion and Self-blame). The three coping strategies are outlined below; Problem-focused coping (Items – 2, 8, 9 and 11), Emotion-focused coping (Items – 5, 7, 10, 12, 13 and 14) and Avoidant Coping (Items – 1, 3, 4 and 6). [46]

Scores were presented for the three coping strategies as average scores (sum of item scores divided by number of items), indicating the degree to which the respondent has been engaging in that coping style using a four-point Likert scale as follows; 1 = I haven't been doing this at all, 2 = A little bit, 3 = A medium amount and 4 = I've been doing this a lot. Each coping strategy had a highest average score of 4 and a lowest average score of 1. Scores > 3 was classified as high use of coping strategies, scores of 2 − 3 was classified as medium use of coping strategies while scores of <2 was classified as low use of coping strategies. [47]

Subsequently, the coping strategies were categorized into positive and negative coping mechanisms, with their respective mean scores and standard deviations provided. [48].

Univariate analysis was done on categorical data such as sex, religion and marital status and presented as frequencies and percentages in order to assess the distribution of the variables. Bivariate analysis was done to determine the association between socio-demographic characteristics and the level of burnout. Data was analyzed using Chi-square test and Fisher's exact test (based on >20% of the expected values having a score <5) and presented in prose and frequency tables. Multivariate analysis using binary logistic regression was carried out to further determine significant predictors of outcome variables. Level of significance was set at $p \leq 0.05$ which was considered statistically significant.

3.8.4.2 DATA PRESENTATION

The data for the study was collected and entered into IBM Statistical Package for Social Sciences (IBM – SPSS) Statistics software version 21. Prose, tables and charts were used in the presentation of data. Data entered into the software was crossed-checked for errors and corrected. Data was categorized and analyzed using descriptive statistics., frequencies and percentage based on the total number of respondents. Chi square test was used to analyze the data. Test of significance using appropriate test of association was adopted and used at 95% confidence level and P-value <0.05 was accepted as being statistically significant.

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3.9 ETHICAL CONSIDERATION

The study was carried out under the supervision of two Consultants from the Department of Community Health, University of Benin Teaching Hospital.

A cover letter was obtained from the Department of Community Health, University of Benin. Ethical approval of protocol number: ADM/E 22/A/VOL. VII/148301196 was obtained from the Ethics and Research Committee of the University of Benin Teaching Hospital. Participation in the study was voluntary; informed consent was obtained from the respondents before administering questionnaires. Names and addresses were omitted to ensure confidentiality. Respondents were informed that they had a right to withdraw from the interview at any time and that withdrawal posed no harm or change in the services they receive in the hospital.

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3. 10 LIMITATIONS TO THE STUDY

Participants may provide responses that they believe are socially acceptable or expected rather than their true feelings. This can lead to an underestimation or masking of actual burnout levels.

This was overcome by assuring the participants that their responseswould remain anonymous and confidential.

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Question	Never	Few times a year	Once a month	Few times a month	Once a week	Few times a week	Every day
SECTION A	**0**	**1**	**2**	**3**	**4**	**5**	**6**

I feel emotionally drained by my work.							
Working with people all day long requires a great deal of effort.							
I feel like my work is breaking me down.							
I feel frustrated by my work.							
I feel I work too hard at my job.							

It stresses me too much to work in direct contact with people.							
I feel like I'm at the end of my rope.							
Total SECTION A							

Questions	Never	A few times year	Once a month	A few times per month	Once a week	A few per week	Every day
SECTION B	**0**	**1**	**2**	**3**	**4**	**5**	**6**
I feel I look after certain patients/clients impersonal , as if they are objects.							
I feel tired when I get up in the morning and have to face another day at work.							
I have the impression that my patients/clients make							

~~I am at the end of my patience at the end of my work day.~~							
~~I really don't care about what happens to some of my patients/clients.~~							
~~I have become more insensitive to people since I've been working.~~							
~~I'm afraid that this job is making me uncaring.~~							
~~Total score - SECTION B~~							

~~Questions~~	~~Never~~	~~A few times per year~~	~~Once a month~~	~~A few times per month~~	~~Once a week~~	~~A few times per week~~	~~Every day~~
~~**SECTION C**~~	~~**0**~~	~~**1**~~	~~**2**~~	~~**3**~~	~~**4**~~	~~**5**~~	~~**6**~~
~~I accomplish many worthwhile things in this Job.~~							
~~I feel full of energy.~~							

I am easily able to understand what m patients/clients feel.							
I look after my patients'/clients' problems very effectively.							
In my work, I handle emotional problems I have calmly.							
Through my work, I feel that I have a positive influence on people.							
I am easily able to create a relaxed atmosphere with my patients/clients.							
I feel refreshed when I have been close to my patients/clients at work.							
Total score - SECTION C							

SECTION C: To identify the key contributing factors to burnout among non clinical workers in UBTH.

Question	rarely	Sometimes	Undecided	Often	Very often
Seeking support from colleagues					
Seeking support from supervisors					
use substances					
Engaging in physical exercise					
Practicing relaxation techniques (e.g., meditation, deep breathing)					
Taking regular breaks during work hours					
Utilizing employee assistance programs (EAPs)					
Adjusting my work schedule					
Engaging in hobbies or leisure activities outside of work					

SECTION E: To analyze the potential impact of burnout among non-clinical workers on hospital operations, team dynamics, and patient care quality.

CHAPTER 4

RESULTS

A total of 600 respondents participated in this study with a response rate of 100%. The results are presented as follows:

Section A: Socio-demographic characteristics of respondents

Section B: Prevalence of Burnout among respondents

Section C: Factors associated with burnout among respondents

Section D: Coping strategies for burnout among respondents

Section E: Consequences of burnout among respondents

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

TABLE 1a: Socio-demographic Characteristics of Respondents

Variable	Frequency (n=600)	Percent
Age group (years)		
<20	3	0.5
20 – 29	24	4.0
30 – 39	187	31.2
40 – 49	272	45.3
50 – 59	114	19.0
Mean (SD) Age = ~~42.3+7.84~~	42.3+7.84 years	
Sex		
Male	353	58.8
Female	247	41.2
Ethnic group		
Benin	197	32.8
Esan	191	31.8
Yoruba	100	16.7
Igbo	61	10.2
Urhobo	42	7.0
Others*	9	1.5
Religion		
Christianity	554	92.3
Islam	9	1.5
ATR	37	6.2

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Marital Status		
Single	68	11.3
Married	459	76.5
Divorced	20	3.3
Widowed	24	4.0
Cohabiting	29	4.8
Level of Education		
Primary	39	6.5
Secondary	186	31.0
Tertiary	375	62.5
Income		
<30,000	36	6.0
30,000 - 50,000	17	2.8
50,000 - 100,000	139	23.2
>100,000	408	68.0

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Age group 40 - 49 constituted the predominant age category 272 (45.3%). The mean age of the respondents was 42.3+7.84. Male respondents accounted for 353 (58.8%) of the respondents. The predominant ethnic group of the respondents was Benin 197 (32.8%). Almost all the respondents 554 (92.3%) practised Christianity. Majority of the repondents 459 (76.5%) are married and most 375 (62.5%) have tertiary level of education. Most of the respondents 408 (68.0%) have income >₦100,000.

TABLE 1b: Socio-demographic characteristics of respondents

Variable	Frequency(n=600)	Percent
Length of Employment		
1 – 3	22	3.7
3 – 5	90	15.0
> 5	486	81.0
Others	2	0.3
Department		
Administration~~or~~	98	16.3
Engineering	82	13.7
Cleaning	60	10.0
Catering	52	8.7
ICT	50	8.3
Records	48	8.0
Orderly	26	4.3
Secretary	25	4.2
Laundry	19	3.2
Oxygen	11	1.8
Security	10	1.7
Environmental Waste Mgt	9	1.5
Reception	3	0.5
Health assistant	1	0.2

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Commented [nm20]: Health assistant is not a non-clinical worker

Porter	1	0.2
Work hour per day		
5 – 8	560	93.3
9 – 12	40	6.7
Times work per week		
4	17	2.8
5	565	94.2
6	15	2.5
7	3	0.5
Work Shifts		
Yes	424	70.7
No	176	29.3

Commented [nm21]: Number of days worked per week

Majority of the respondents 486 (81.0%) have worked for over 5 years. Predominant proportion of the respondents 98 (16.3%) are members of the Administration department. Almost all the respondents 560 (93.3%) work for at least 5 - 8 hours daily and 565 (94.2%) work 5 times a week. Majority of the respondents 424 (70.7%) run shift duties.

SECTION B: PREVALENCE OF BURNOUT AMONG RESPONDENTSTABLE 2:

Prevalence of Burnout among respondents

VARIABLE	**Never**	**A few times per year**	**Once a month**	**A few times per**	**Once a week**	**A few times per**	**Every day**
	Freq						
I deal very effectively with the problems of my workplace	112 (18.7)	230 (38.3)	98 (16.3)	30 (5.0)	21 (3.5)	21 (3.5)	88 (14.7)
I feel I'm positively influencing other people's lives through my work	63 (10.5)	176 (29.3)	162 (27.0)	57 (9.5)	21 (3.5)	28(4.7)	93 (15.5)
I feel happy after working closely with my clients	40 (6.7)	83 (13.8)	134 (22.3)	142 (23.7)	63 (10.5)	51 (8.5)	87 (14.5)
I feel I treat some clients as if they were impersonal objects	89 (14.8)	53 (8.8)	141 (23.5)	171 (28.5)	79 (13.2)	43 (7.2)	24 (4.0)
I've become more callous towards people since I took this job	99 (16.5)	60 (10.0)	93 (15.5)	143 (23.8)	157 (26.2)	35 (5.8)	13 (2.2)
I don't really care what happens to some clients	122 (20.3)	28 (4.7)	74 (12.3)	134 (22.3)	142 (23.7)	82 (13.7)	18 (3.0)

I feel emotionally drained from my work	37 (6.2)	61 (10.2)	75 (12.5)	119 (19.8)	140 (23.3)	127 (21.2)	41 (6.8)
I feel fatigued when I get up in the morning and have to face another day on the job	22 (3.7)	47 (7.8)	37 (6.2)	158 (26.3)	131 (21.8)	133 (22.2)	72 (12.0)
Working with people all day is really a strain for me	59 (9.8)	41 (6.8)	42 (7.0)	78 (13.0)	113 (18.8)	198 (33.0)	69 (11.5)

Two hundred and thirty (38.8%) of respondents reported that they deal very effectively with patient's problems a few times per year, 176 (29.3%) respondents reported that they positively influence other people a few times per year, 142 (23.7%) respondents reported that they were happy after working with clients a few times per month, 171 (28.5%) of them reported that they treat clients as impersonal objects a few times per month, 157 (26.2%) and 142 (23.7%) of respondents reported that they have become more callous towards people and don't care what happens to some clients once a week respectively. One hundred and forty (23.3%) respondents reported that once a week they were emotionally drained from work and 158 (26.3%) respondents reported that a few times a month they felt fatigued in the morning before going to work while 198 (33.0%) of respondents felt like working with people all day strained them a few times per week.

TABLE 3**:** Summary of the prevalence of burnout among respondents

Burnout dimensions	**Frequency (n = 600)**	**Percentage (%)**
Personal accomplishment		
Low-level burnout	101	16.8
Moderate burnout	23	3.8
High-level burnout	476	79.3
Depersonalization		
Low-level burnout	100	16.7
Moderate burnout	77	12.8
High-level burnout	423	70.5
Emotional exhaustion		
Low-level burnout	109	18.2
Moderate burnout	129	21.5
High-level burnout	362	60.3

On personal achievement, 476 (79.3%) of respondents experienced high-level burnout, on depersonalization, 423 (70.5%) of respondents experienced high-level burnout and on emotional exhaustion, 362 (60.3%) of respondents experienced high-level burnout.

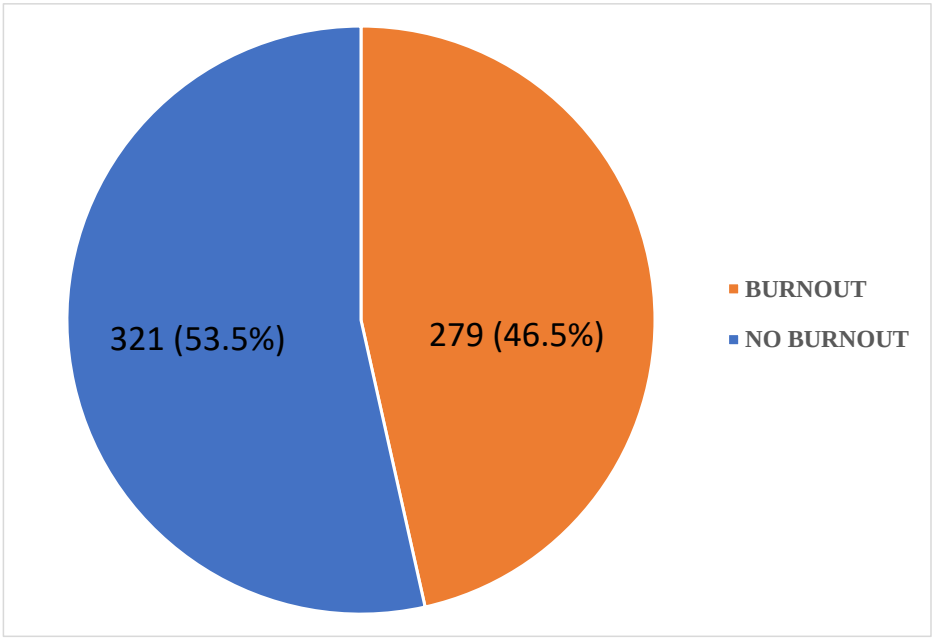

Figure 1: Overall prevalence of burnout

This figure shows that 279 (46.5%) of respondents experienced burnout in the 3 dimensions of burnout.

TABLE 4: Socio-demographic characteristics and prevalence of burnout

Variable	Burnout (n = 600) Frequency (%)		Chi-square	p-value
	Present	Absent		
Age				
<20	0 (0.0)	3 (100.0)	19.399*	0.001
20 - 29	2 (8.3)	22 (91.7)		
30 - 39	95 (50.8)	92 (49.2)		
40 - 49	128 (47.1)	144 (52.9)		
50 - 59	54 (47.4)	60 (52.6)		
Sex				
Male	155 (43.9)	198 (56.1)	2.313	0.128
Female	124 (50.2)	123 (49.8)		
Marital Status				
Single	17 (25.0)	51 (75.0)	16.657	0.002
Married	220 (47.9)	239 (52.1)		
Divorced	11 (55.0)	9 (45.0)		
Widowed	14 (58.3)	10 (41.7)		
Cohabiting	17 (58.6)	12 (41.4)		
Level of Education				
Primary	19 (48.7)	20 (51.3)	8.571	0.014
Secondary	70 (37.6)	116 (62.4)		
Tertiary	190 (50.7)	185 (49.3)		

Income				
<30,000	3 (8.3)	33 (91.7)	32.176	<0.001
30,000 - 50,000	2 (11.8)	15 (88.2)		
50,000 - 100,000	69 (49.6)	70 (50.4)		
>100,000	205 (50.2)	203 (49.8)		

* - Fisher's Exact

3 (100.0%) of the respondents with age <20 years were not burnt out. This association was statistically significant (p = 0.001). 198 (56.1%) of the respondents who were not burnt out were males. This association was not statistically significant. 37 (60.7%) of the respondents who were not burnt out were Igbos. This association was statistically significant (p=0.031). 5 (55.6%) of the respondents who were not burnt out practiced Islam religion. 51 (75.0%) respondents who were not burnt out were singles. This association was statistically significant (p=0.002). 116 (62.4%) respondents who were not burnt out had secondary level of education. This association was statistically significant (p=0.014). 33 (91.7%) respondents who were not burnt out earned <₦30,000 monthly. This association was found to be statistically significant (p <0.001)

TABLE 5: Work Characteristics and Prevalence of Burnout

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Variable	Burnout (n = 600) Frequency (%)		Chi-square	p-value
	Present	Absent		
Length of Employment				
1 - 3	1 (4.5)	21 (95.5)	17.637	<0.001
3 - 5	38 (42.2)	52 (57.8)		
> 5	240 (49.2)	248 (50.8)		
Work hour per day				
5 - 8	277 (49.5)	283 (50.5)	29.670	<0.001
9 - 12	2 (5.0)	38 (95.0)		
Times work per week				
4	3 (17.6)	14 (82.4)	15.762*	<0.001
5	274 (48.5)	291 (51.5)		
6	2 (13.3)	13 (86.7)		
7	0 (0.0)	3 (100.0)		
Work Shifts				
Yes	194 (45.8)	230 (54.2)	0.323	0.570
No	85 (48.3)	91 (51.7)		

* - Fisher's Exact

21 (95.5%) respondents who were not burnt out had worked about 1-3 years. This association was found to be statistically significant ($p < 0.001$). 38 (95.0%) respondents who were not burnout out worked about 9-12 hours per day. This association was found to be statistically significant ($p < 0.001$). 13 (86.7%) of respondents who were not burnt out worked 6 times per week. This association was found to be statistically significant ($p < 0.001$). 230 (54.2%) respondents who were not burnt out had shift duties. This association was not statistically significant.

TABLE 6: Predictors of burnout among respondents

Variable	B (regression co-efficient)	Odds ratio	95% C.I. for O.R.		p-value
			Lower	Upper	
Age (in years)	0.002	1.002	0.976	1.028	0.889
Sex					
Male	-0.405	0.667	0.451	0.985	0.042
Female*		1			
Marital status					
Ever married	0.086	1.089	0.628	1.888	0.760
Never married*		1			
Level of Education					
Primary	-0.364	0.695	0.287	1.682	0.420
Secondary	-0.732	0.481	0.292	0.792	0.004
Tertiary*			1		
Income					
<30,000	-1.949	0.142	0.036	0.557	0.005
30,000 - 50,000	-2.084	0.124	0.023	0.671	0.015
50,000 - 100,000	0.285	1.329	0.798	2.213	0.274
>100,000*			1		

Length of Employment					
1 - 3	-2.221	0.108	0.013	0.939	0.044
3 - 5	-0.121	0.886	0.506	1.549	0.670
> 5		1			
Work hour per day	-0.007	0.993	0.798	1.236	0.949
Times work per week	0.747	2.112	0.903	4.937	0.085

*** - Reference category, R^2 = 9.3% – 12.5%, C.I. = Confidence Interval, O.R. = Odds Ratio**

With increasing age, respondents were likely to have burnout in at least one dimension. However, this association was not statistically significant (p = 0.889, OR = 1.002). Males were 0.405 times less likely to become burnt out when compared to their female counterparts. This association was statistically significant (p = 0.042, OR = 0.667). Individuals who have ever been in a marital relationship were noticed to be 0.086 times more likely to be burnt out when compared to the unmarried category. This association was not statistically significant (p = 0.760, OR = 1.089). Individuals with primary level and secondary level of education were found to be 0.364 and 0.732 times less likely to be burnt out when compared to those with tertiary level of education. While this association was not significant for individuals with primary level of education, it was significant for individuals with tertiary level of education (p = 0.004, OR = 0.481). Individuals who earn income <N30,000 and those who earn between N30,000 and 50,000 were less likely to be burnt out when compared to individuals who earn over N100,000. This association was found to be statistically significant (p = 0.005, OR = 0.142) and (p = 0.015, OR = 0.124) respectively.

Individuals who have worked for a period of 1 - 3 years and those who have worked for a period of 3 -5 years were found to be -2.221 and -0.121 times less likely to be burntout when compared to individuals who have worked for over 5 years. While this association was signifcant for those who have worked for 1 - 3 years (p = 0.044, OR = 0.108), it was not significant for those who have worked for 3 - 5 years. With increasing number of hours worked per day, individuals were 0.007 times less likely to be burnt out. This association was not statistically significant. Also, for every increase in the number of times worked per week, individuals were 0.747 times more likely to be burnt out. This association was however not statistically significant.

TABLE 7a: Socio-demographic characteristics and prevalence of burnout dimensions

Variable	**Personal accomplishment (n = 600)**			**Chi-square**	**p-value**
	Frequency (%)				
	Low	**Moderate**	**High**		
Age					
<20	2 (66.7)	0 (0.0)	1 (33.3)	65.307*	<0.001
20 - 29	14 (58.3)	5 (20.8)	5 (20.8)		
30 - 39	29 (15.5)	4 (2.1)	154 (82.4)		
40 - 49	37 (13.6)	7 (2.6)	228 (83.8)		
50 - 59	19 (16.7)	7 (6.1)	88 (77.2)		
Sex					
Male	83 (23.5)	10 (2.8)	260 (73.7)	28.452	<0.001
Female	18 (7.3)	13 (5.3)	216 (87.4)		

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Marital Status					
Single	29 (42.6)	5 (7.4)	34 (50.0)	59.136*	<0.001
Married	71 (15.5)	15 (3.3)	373 (81.3)		
Divorced	0 (0.0)	3 (15.0)	17 (85.0)		
Widowed	1 (4.2)	0 (0.0)	23 (95.8)		
Cohabiting	0 (0.0)	0 (0.0)	29 (100.0)		
Level of					
Education					
Primary	1 (2.6)	1 (2.6)	37 (94.9)	11.348	0.023
Secondary	33 (17.7)	12 (6.5)	141 (75.8)		
Tertiary	67 (17.9)	10 (2.7)	298 (79.5)		
Income					
<30,000	23 (63.9)	3 (8.3)	10 (27.8)	61.596*	<0.001
30,000 - 50,000	7 (41.2)	2 (11.8)	8 (47.1)		
50,000 - 100,000	21 (15.1)	3 (2.2)	115 (82.7)		
>100,000	50 (12.3)	15 (3.7)	343 (84.1)		

*** - Fisher's Exact**

228 (83.8%) of the respondents with age 40 - 49 years had high burnout. This association was statistically significant ($p < 0.001$). 216 (87.4%) of the respondents who had high burn out were males. This association was statistically significant ($p < 0.001$). 36 (85.7%) of the respondents who had high burnout were Urhobos. This association was statistically significant ($p < 0.001$). 30 (81.1%) of the respondents who had high burnout practiced ATR. 29 (100.0%) respondents who

had high burnt out were cohabiting. This association was statistically significant ($p<0.001$). 37 (94.9%) respondents who had high burnout had primary level of education. This association was statistically significant ($p=0.023$). 343 (84.1%) respondents who had high burnout earned over N100,000 monthly. This association was found to be statistically significant ($p <0.001$)

TABLE 7b: Socio-demographic characteristics and prevalence of burnout dimensions

Variable	Personal accomplishment (n = 600)			Chi-square	p-value
	Frequency (%)				
	Low	Moderate	High		
Length of Employment					
1 - 3	15 (68.2)	3 (13.6)	4 (18.2)	51.980*	<0.001
3 - 5	22 (24.4)	1 (1.1)	67 (74.4)		
> 5	63 (13.0)	19 (3.9)	404 (83.1)		
Others	1 (50.0)	0 (0.0)	1 (50.0)		
Work hour per day					
5 - 8	72 (12.9)	19 (3.4)	469 (83.8)	103.800	<0.001
9 - 12	29 (72.5)	4 (10.0)	7 (17.5)		
Times work per week					
4	0 (0.0)	1 (5.9)	16 (94.1)	36.339*	<0.001
5	90 (15.9)	19 (3.4)	456 (80.7)		
6	8 (53.3)	3 (20.0)	4 (26.7)		
7	3 (100.0)	0 (0.0)	0 (0.0)		
Work Shifts					
Yes	69 (16.3)	20 (4.7)	335 (79.0)	3.232	0.199
No	32 (18.2)	3 (1.7)	141 (80.1)		

*** - Fisher's Exact**

404 (83.1%) respondents who had high burn out has for over 5 years. This association was found to be statistically significant (p <0.001). 469 (83.8%) respondents with high burnout worked about 5-8 hours per day. This association was found to be statistically significant (p <0.001). 3 (100.0%) of respondents who had low burn out worked 7 times per week. This association was found to be statistically significant (p <0.001). 141 (80.1%) respondents who had high burn out did not have shift duties. This association was not statistically significant.

TABLE 7c: Socio-demographic characteristics and prevalence of burnout dimensions

Variable	**Depersonalization (n = 600)**			**Chi-square**	**p-value**
	Frequency (%)				
	Low	**Moderate**	**High**		
Age					
<20	0 (0.0)	1 (33.3)	2 (66.7)	32.508*	<0.001
20 - 29	12 (50.0)	6 (25.0)	6 (25.0)		
30 - 39	28 (15.0)	19 (10.2)	140 (74.9)		
40 - 49	38 (14.0)	40 (14.7)	194 (71.3)		
50 - 59	22 (19.3)	11 (9.6)	81 (71.1)		
Sex					
Male	73 (20.7)	50 (14.2)	230 (65.2)	12.944	0.002
Female	27 (10.9)	27 (10.9)	193 (78.1))		

Marital Status					
Single	23 (33.8)	15 (22.1)	30 (44.1)	37.253*	<0.001
Married	76 (16.6)	53 (11.5)	330 (71.9)		
Divorced	0 (0.0)	3 (15.0)	17 (85.0)		
Widowed	1 (4.2)	3 (12.5)	20 (83.3)		
Cohabiting	0 (0.0)	3 (10.3)	26 (89.7)		
Level of					
Education					
Primary	4 (10.3)	6 (15.4)	29 (74.4)	1.709	0.789
Secondary	34 (18.3)	22 (11.8)	130 (69.9)		
Tertiary	62 (16.5)	49 (13.1)	264 (70.4)		
Income					
<30,000	13 (36.1)	11 (30.6)	12 (33.3)	29.630	<0.001
30,000 - 50,000	5 (29.4)	4 (23.5)	8 (47.1)		
50,000 - 100,000	21 (15.1)	17 (12.2)	101 (72.7)		
>100,000	61 (15.0)	45 (11.0)	302 (74.0)		

*** - Fisher's Exact**

140 (74.9%) of the respondents with age 30 - 39 years had high burnout. This association was statistically significant ($p < 0.001$). 230 (65.2%) of the respondents who had high burn out were males. This association was statistically significant ($p = 0.002$). 35 (83.3%) of the respondents who had high burnout were Urhobos. This association was statistically significant ($p < 0.001$). 396 (71.5%) of the respondents who had high burnout practiced Christianity. This association was not

statistically significant. 26 (89.7%) respondents who had high burnt out were cohabiting. This association was statistically significant (p<0.001). 29(74.4%) respondents who had high burnout had primary level of education. This association was not statistically significant. 302 (74.0%) respondents who had high burnout earned over N100,000 monthly. This association was found to be statistically significant (p <0.001)

TABLE 7d: Socio-demographic characteristics and prevalence of burnout dimensions

Variable	**Depersonalization (n = 600)**			**Chi-square**	**p-value**
	Frequency (%)				
	Low	**Moderate**	**High**		
Length of Employment					
1 - 3	7 (31.8)	8 (36.4)	7 (31.8)	23.171*	0.001
3 - 5	18 (20.0)	11 (12.2)	61 (67.8)		
> 5	74 (15.2)	57 (11.7)	355 (73.0)		
Others	1 (50.0)	1 (50.0)	0 (0.0)		
Work hour per day					
5 - 8	76 (13.6)	68 (12.1)	416 (74.3)	68.482	<0.001
9 - 12	24 (60.0)	9 (22.5)	7 (17.5)		

Times work per week					
4	1 (5.9)	3 (17.6)	13 (76.5)	10.245*	<0.124
5	94 (16.6)	69 (12.2)	402 (71.2)		
6	5 (33.3)	4 (26.7)	6 (40.0)		
7	0 (0.0)	1 (33.3)	2 (66.7)		
Work Shifts					
Yes	66 (15.6)	56 (13.2)	302 (71.2)	1.317	0.518
No	34 (19.3)	21 (11.9)	121 (68.8)		

*** - Fisher's Exact**

355 (73.0%) respondents who had high burn out has been employed for over 5 years. This association was found to be statistically significant (p = 0.001). 416 (74.3%) respondents with high burnout worked about 5-8 hours per day. This association was found to be statistically significant (p <0.001). 13 (76.5%) of respondents who had high burn out worked 4 times per week. This association is not statistically significant. 302 (71.2%) respondents who had high burn out ran shift duties. This association was not statistically significant.

TABLE 7e: Socio-demographic characteristics and prevalence of burnout dimensions

Variable	**Emotional Exhaustion (n = 600)**			**Chi-square**	**p-value**
	Frequency (%)				
	Low	**Moderate**	**High**		
Age					

<20	1 (33.3)	2 (66.7)	0 (0.0)	13.065*	0.086
20 - 29	9 (37.5)	3 (12.5)	12 (50.0)		
30 - 39	32 (17.1)	44 (23.5)	111 (59..4)		
40 - 49	47 (17.3)	61 (22.4)	164 (60.3)		
50 - 59	20 (17.5)	19 (16.7)	75 (65.8)		
Sex					
Male	74 (21.0)	68 (19.3)	211 (59.8)	5.731	0.057
Female	35 (14.2)	61 (24.7)	151 (61.1)		
Marital Status					
Single	19 (27.9)	16 (23.5)	33 (48.5)	25.472*	0.001
Married	72 (15.7)	104 (22.7)	283 (61.7)		
Divorced	9 (45.0)	0 (0.0)	11 (55.0)		
Widowed	6 (25.0)	1 (4.2)	17 (70.8)		
Cohabiting	3 (10.3)	8 (27.6)	18 (62.1)		
Level of					
Education					
Primary	13 (33.3)	7 (17.9)	19 (48.7)	14.032	0.007
Secondary	30 (16.1)	53 (28.5)	103 (55.4)		
Tertiary	66 (17.6)	69 (18.4)	240 (64.0)		
Income					
<30,000	9 (25.0)	12 (33.3)	15 (41.7)	16.298	0.012
30,000 - 50,000	8 (47.1)	3 (17.6)	6 (35.3)		
50,000 - 100,000	22 (15.8)	28 (20.1)	89 (64.0)		

>100,000	70 (17.2)	86 (21.1)	252 (61.8)

*** - Fisher's Exact**

75 (65.8%) of the respondents with age 50 - 59 years had high burnout. This association was not statistically significant. 151 (61.1%) of the respondents who had high burn out were males. This association was not statistically significant. 28 (66.7%) of the respondents who had high burnout were Urhobos. This association was not statistically significant. 25 (67.6%) of the respondents who had high burnout practiced Islam religion. This association was not statistically significant. 17 (70.8%) respondents who had high burnt out were Widows. This association was statistically significant ($p<0.001$). 240 (64.0%) respondents who had high burnout had tertiary level of education. This association was statistically significant ($p = 0.007$). 252 (61.8%) respondents who had high burnout earned over N100,000 monthly. This association was found to be statistically significant ($p =0.012$)

TABLE 7f: Socio-demographic characteristics and prevalence of burnout dimensions

Variable	**Emotional Exhaustion (n = 600)**			**Chi-square**	**p-value**
	Frequency (%)				
	Low	**Moderate**	**High**		
Length of Employment					
1 - 3	5 (22.7)	8 (36.4)	9 (40.9)	5.664*	0.394
3 - 5	19 (21.1)	19 (21.1)	52 (57.8)		
> 5	85 (17.5)	102 (21.0)	299 (61.5)		

Others	0 (0.0)	0 (0.0)	2 (100.0)		
Work hour per day					
5 - 8	93 (16.6)	120 (21.4)	347 (62.0)	14.969	0.001
9 - 12	16 (40.0)	9 (22.5)	15 (37.5)		
Times work per week					
4	4 (23.5)	9 (52.9)	4 (3.5)	17.225*	0.010
5	101 (17.9)	113 (20.0)	351 (62.1)		
6	3 (20.0)	6 (40.0)	6 (40.0)		
7	1 (33.3)	1 (33.3)	1 (33.3)		
Work Shifts					
Yes	85 (20.0)	95 (22.4)	244 (57.5)	5.225	0.073
No	24 (13.6)	34 (19.3)	118 (67.0)		

*** - Fisher's Exact**

299 (61.5%) respondents who had high burn out has been employed for about 3-5 years. This association was not statistically significant. 347 (62.0%) respondents with high burnout worked about 5-8 hours per day. This association was found to be statistically significant ($p = 0.001$). 351 (62.1%) of respondents who had high burn out worked 5 times per week. This association was statistically significant ($p = 0.010$). 118 (67.0%) respondents who had high burn out worked during the day alone. This association was not statistically significant.

SECTION C: FACTORS ASSOCIATED WITH BURNOUT

TABLE 8: Factors associated with burnout

Variable	Frequency(n=600)	Percent
Hours worked per day		
< 8	130	21.7
8 – 12	389	64.8
> 12	81	13.5
Days worked per week		
< 3	5	0.8
3 – 5	447	74.5
> 5	148	24.7
Clients cared for per day		
< 10	52	8.7
10 – 20	424	70.7
> 20	124	20.7
Severity of clients' problem		
Not severe	72	12.0
Severe	445	74.2
Very severe	83	13.8

Commented [nm24]: You have stated this previously

Work to be done during working hours		
Little work	51	8.5
Enough work	485	80.8
Too much work	64	10.7
Demand at work conflicting		
Yes	475	79.2
No	125	20.8
Social support at work from peers to superiors		
Yes	324	54.0
No	276	46.0
Lack of emotional support at home		
Yes	229	38.2
No	371	61.8

A higher number of respondents reported that working 8 – 12 hours a day 389 (64.8%), 447 (74.5%) worked 3-5 days a week, 424 (70.7%) cared for 10 – 20 clients per day, 445 (74.2%) of respondents reported clients to have severe problems, 485 (80.8%) respondents reported enough work done during working hours, 475 (79.2%) respondents reported conflicting demands at work,

324 (54.0%) respondents reported lack of social support at work from peers or superiors, 229 (38.2%) of respondents reported lack of emotional support at home.

TABLE 9: Factors and prevalence of burnout

Variable	**Burnout (n = 600) Frequency (%)**		**Chi-square**	**p-value**
	Present	**Absent**		
Hours worked per day				
< 8	45 (34.6)	85 (65.4)	17.116	<0.001
8 - 12	205 (52.7)	184 (47.3)		
> 12	29 (35.8)	52 (64.2)		
Days worked per week				
< 3	3 (60.0)	2 (40.0)	60.553*	<0.001
3 - 5	247 (55.3)	200 (44.7)		
> 5	29 (19.6)	119 (80.4)		
Clients cared for per day				
< 10	16 (30.8)	36 (69.2)	28.823	<0.001
10 - 20	227 (53.5)	197 (46.5)		
> 20	36 (29.0)	88 (71.0)		

Severity of clients' problem				
Not severe	13 (18.1)	59 (81.9)	49.170	<0.001
Severe	244 (54.8)	201 (45.2)		
Very severe	22 (26.5)	61 (73.5)		
Work to be done during working hours				
Little work	20 (39.2)	31 (60.8)	19.831	<0.001
Enough work	245 (50.5)	240 (49.5)		
Too much work	14 (21.9)	50 (78.1)		
Demand at work conflicting				
Yes	241 (50.7)	234 (49.3)	16.452	<0.001
No	38 (30.4)	87 (69.6)		
Social support at work from peers to superiors				
Yes	148 (45.7)	176 (54.3)	0.191	0.662
No	131 (47.5)	145 (52.5)		
Lack of emotional support at home				
Yes	109 (47.6)	120 (52.4)	0.180	0.672

Commented [nm25]: Why bold?

No	170 (45.8)	201 (54.2)

*** - Fisher's Exact**

205 (52.7%) of respondents who had burnout worked 8-12 hours. This association was statistically significant (p <0.001). 119 (80.4%) respondents without burnout worked over 5 days per week. This association was statistically significant (p <0.001). 88 (71.0%) of respondents without burnout cared for over 20 clients per day. This association is statistically significant (p <0.001). 31 (60.8%) of respondents without burnout does little work during working hour. This association was statistically significant (p <0.001). 176 (54.3%) respondents without burnout have social supports. This association was not statistically significant. 201 (54.2%) respondents without burnout lacked emotional support at home.

TABLE 10: Predictors of factors associated with burnout

Variable	**B (regression co-efficient)**	**Odds ratio**	**95% C.I. for O.R.**		**p-value**
			Lower	**Upper**	
Hours worked per day					
< 8	-1.633	0.195	0.088	0.433	<0.001
8 - 12	-0.926	0.396	0.198	0.793	0.009
> 12		1			

Days worked per week					
< 3	1.737	5.682	0.697	46.327	0.105
3 - 5	1.606	4.984	2.716	9.143	<0.001
> 5		1			
Clients cared for per day					
< 10	0.028	1.028	0.424	2.494	0.951
10 - 20	0.759	2.137	1.276	3.579	0.004
> 20		1			
Severity of clients' problem					
Not severe	-1.294	0.274	0.103	0.734	0.010
Severe	0.331	1.392	0.725	2.674	0.320
Very severe		1			
Work to be done during working hours					
Little work	1.098	2.999	1.024	8.780	0.045
Enough work	0.482	1..619	0.770	3.407	0.204
Too much work		1			
Demand at work conflicting	0.806	0.447	0.273	0.731	0.001

Social support at work from peers to superiors	-0.023	0.978	0.673	1.420	0.905
Lack of emotional support at home	-0.220	0.803	0.541	1.192	0.276

*** - Reference category, R^2 = 19.2% – 25.7%, C.I. = Confidence Interval, O.R. = Odds Ratio**

Individuals who worked <8 hours and between 8 - 12 hours were 1.633 and 0.926 times less likely to be burnt out when compared to those who worked for over 12 hours. This association was statistically significant ($p < 0.001$, OR = 0.195) and ($p = 0.009$, OR = 0.396). Individuals who worked <3 days per week and those who worked between 3 - 5 days were 1.737 and 1.606 times more likely to be burnt out when compared to those who worked over 5 days. While this association was not significant for individuals who worked <3 days per week, it was significant for those who worked between 3 - 5 days per week ($p < 0.001$, OR = 4.984). Individuals who cared for < 10 and between 10 - 20 clients per day were 0.028 and 0.759 times more likely to be burnt out when compared to individuals who cared for > 20 clients per day. While this association was not statistically significant for individuals who cared for <10 clients per day, it was significant for individuals who cared for 10 - 20 client per day ($p = 0.004$, OR = 2.137). Individuals who saw clients with problems that was not severe were 1.294 times less likely to be burnt out when compared to individuals who saw clients with very severe problems. This association was statistically significant ($p = 0.010$, OR = 0.274). While individuals who saw clients with severe problems were found to be 0.331 times more likely to be burnt out than those with very severe

problems. This association was not statistically significant. Individuals who had little work and enough work to be done were 1.098 and 0.482 times more likely to be burnt out than those who had too much work respectively. This association was not statistically significant. With increasing demand at work individuals were noticed to be 0.806 times more likely to be burnt out. This association was statistically significant (p = 0.001, OR = 0.447). With Increasing social support at work from peers to superiors individuals were noted to be 0.023 times less likely to be burnt out. This assoiciation was however not statistically significant. Also, with increasing absence of emotional support, individuals were 0.220 times less likely to be burnt out. However, this association was not statistcally significant.

TABLE 11a: Factors and prevalence of burnout dimensions

Variable	**Personal accomplishment (n = 600)**			**Chi-square**	**p-value**
	Frequency (%)				
	Low	**Moderate**	**High**		
Hours worked per day					
< 8	25 (19.2)	5 (3.8)	100 (76.9)	10.486*	0.018
8 - 12	60 (15.4)	10 (2.6)	319 (82.0)		
> 12	16 (19.8)	8 (9.9)	57 (70.4)		
Days worked per week					
< 3	1 (20.0)	0 (0.0)	4 (80.0)	118.231*	<0.001

3 - 5	32 (7.2)	12 (2.7)	403 (90.2)		
> 5	68 (45.9)	11 (7.4)	69 (46.6)		
Clients cared for per day					
< 10	16 (30.8)	2 (3.8)	34 (65.4)	42.173*	<0.001
10 - 20	46 (10.8)	12 (2.8)	366 (86.3)		
> 20	39 (31.5)	9 (7.3)	76 (61.3)		
Severity of clients' problem					
Not severe	26 (36.1)	7 (9.7)	39 (54.2)	64.024*	<0.001
Severe	46 (10.3)	10 (2.2)	389 (87.4)		
Very severe	29 (34.9)	6 (7.2)	48 (57.8)		
Work to be done during working hours					
Little work	13 (25.5)	5 (9.8)	33 (64.7)	78.940*	<0.001
Enough work	57 (11.8)	9 (1.9)	419 (86.4)		
Too much work	31 (48.4)	9 (14.1)	24 (37.5)		
Demand at work conflicting					
Yes	66 (13.9)	20 (4.2)	389 (81.9)	14.428	0.001
No	35 (28.0)	3 (2.4)	87 (69.6)		

Social support at work from peers to superiors					
Yes	52 (16.0)	11 (3.4)	261 (80.6)	0.743	0.690
No	49 (17.8)	12 (4.3)	215 (77.9)		
Lack of emotional support at home					
Yes	34 (14.8)	9 (3.9)	186 (81.2)	1.044	0.593
No	67 (18.1)	14 (3.8)	290 (78.2)		

*** - Fisher's Exact**

319 (82.0) respondents who had high burnout worked 8-12 hours. This association was statistically significant (p = 0.018). 403 (90.2%) respondents with high burnout worked 3-5 days per week. This association was statistically significant (p <0.001). 366 (86.3%) respondents with high burnout cared for 10-20 clients per day. This association is statistically significant (p <0.001). 389 (87.4%) respondents with high burnout does enough work during working hour. This association was statistically significant (p <0.001). 261 (80.6%) respondents with high burnout have social supports. This association was not statistically significant (p = 0.690). 186 (81.2%) respondents with high burnout lacked emotional support at home.

TABLE 11b: Factors and prevalence of burnout dimensions

Variable	**Depersonalization (n = 600)**		**Chi-square**	**p-value**
	Frequency (%)			

	Low	Moderate	High		
Hours worked per day					
< 8	24 (18.5)	21 (16.2)	85 (65.4)	55.785	<0.001
8 - 12	41 (10.5)	46 (11.8)	302 (77.6)		
> 12	35 (43.2)	10 (12.3)	36 (44.4)		
Days worked per week					
< 3	0 (0.0)	1 (20.0)	4 (80.0)	158.489*	<0.001
3 - 5	25 (5.6)	52 (11.6)	370 (82.8)		
> 5	75 (50.7)	24 (16.2)	49 (33.1)		
Clients cared for per day					
< 10	17 (32.7)	12 (23.1)	3 (44.2)	102.929	<0.001
10 - 20	31 (7.3)	52 (12.3)	341 (80.4)		
> 20	52 (41.9)	13 (10.5)	59 (47.6)		
Severity of clients' problem					
Not severe	25 (34.7)	22 (30.6)	25 (34.7)	102.071	<0.001
Severe	41 (9.2)	48 (10.8)	356 (80.0)		
Very severe	34 (41.0)	7 (8.4)	42 (50.6)		

Work to be done during working hours					
Little work	12 (23.5)	7 (13.7)	32 (62.7)	73.904	<0.001
Enough work	54 (11.1)	65 (13.4)	366 (75.5)		
Too much work	34 (53.1)	5 (7.8)	25 (39.1)		
Demand at work conflicting					
Yes	72 (15.2)	49 (10.3)	354 (74.5)	19.617	<0.001
No	28 (22.4)	28 (22.4)	69 (55.2)		
Social support at work from peers to superiors					
Yes	48 (14.8)	43 (13.3)	233 (71.9)	1.754	0.416
No	52 (18.8)	34 (12.3)	190 (68.8)		
Lack of emotional support at home					
Yes	40 (17.5)	36 (15.7)	153 (66.8)	3.262	0.196
No	60 (16.2)	41 (11.1)	270 (72.8)		

*** - Fisher's Exact**

302 (77.6%) respondents who had high burnout worked 8-12 hours. This association was statistically significant ($p < 0.001$). 370 (82.8%) respondents with high burnout worked 3-5 days per week. This association was statistically significant ($p < 0.001$). 341 (80.4%) respondents with

high burnout cared for 10-20 clients per day. This association is statistically significant (p <0.001). 356 (80.0%) respondents with high burnout described client's problem as severe. This association was statistically significant (p = 0.001). 366 (75.5%) respondents with high burnout does enough work during working hour. This association was statistically significant (p <0.001). 354 (74.5%) respondents with high burnout have social supports. This association was statistically significant (p <0.001). 270 (72.8%) respondents with high burnout lacked emotional support at home. This association was not statistically significant.

TABLE 11c: Factors and prevalence of burnout dimensions

Variable	**Emotional Exhaustion (n = 600)**			**Chi-square**	**p-value**
	Frequency (%)				
	Low	**Moderate**	**High**		
Hours worked per day					
< 8	19 (14.6)	43 (33.1)	68 (52.3)	14.835	0.005
8 - 12	72 (18.5)	75 (19.3)	242 (62.2)		
> 12	18 (22.2)	11 (13.6)	52 (64.2)		
Days worked per week					
< 3	1 (20.0)	1 (20.0)	3 (60.0)	19.275*	0.001
3 - 5	63 (14.1)	104 (23.3)	280 (62.6)		
> 5	45 (30.4)	24 (16.2)	79 (53.4)		

Clients cared for per day					
< 10	4 (7.7)	11 (21.2)	37 (71.2)	25.607	<0.001
10 - 20	64 (15.1)	94 (22.2)	266 (62.7)		
> 20	41 (33.1)	24 (19.4)	59 (47.6)		
Severity of clients' problem					
Not severe	12 (16.7)	18 (25.0)	42 (58.3)	24.204	<0.001
Severe	67 (15.1)	92 (20.7)	286 (64.3)		
Very severe	30 (36.1)	19 (22.9)	34 (41.0)		
Work to be done during working hours					
Little work	9 (17.6)	8 (15.7)	34 (66.7)	25.928	<0.001
Enough work	74 (15.3)	112 (23.1)	299 (61.6)		
Too much work	26 (40.6)	9 (14.1)	29 (45.3)		
Demand at work conflicting					
Yes	83 (17.5)	94 (19.8)	298 (62.7)	5.889	0.053
No	26 (20.8)	35 (28.0)	64 (51.2)		
Social support at work from peers to superiors					

Yes	51 (15.7)	72 (22.2)	201 (62.0)	2.791	0.248
No	58 (21.0)	57 (20.7)	161 (58.3)		
Lack of emotional support at home					
Yes	43 (18.8)	39 (17.0)	147 (64.2)	4.431	0.109
No	66 (17.8)	90 (24.3)	215 (58.0)		

*** - Fisher's Exact**

52 (64.2%) respondents who had high burnout worked over 12 hours. This association was not statistically significant. 280 (62.6%) respondents with high burnout worked 3-5 days per week. This association was statistically significant ($p = 0.001$). 266 (62.7%) respondents with high burnout cared for 10-20 clients per day. This association is statistically significant ($p < 0.001$). 286 (64.3%) respondents with high burnout described client's problem as severe. This association was statistically significant ($p < 0.001$). 299 (61.6%) respondents with high burnout does enough work during working hour. This association was statistically significant ($p < 0.001$). 201 (62.0%) respondents with high burnout have social supports. This association not was statistically significant. 147 (64.2%) respondents with high burnout had emotional support at home. This association was not statistically significant.

SECTION D: COPING STRATEGIES FOR BURNOUT AMONG NON CLINICAL STAFF

TABLE 12: Coping strategies for burnout

Variable	I haven't been doing this at all Freq (%)	A little bit Freq (%)	A medium amount Freq (%)	I have been doing this a lot Freq (%)
Taking actions to try to make it better	276 (46.0)	150 (25.0)	54 (9.0)	120 (20.0)
Getting help and advice from other people	101 (16.8)	289 (48.2)	115 (19.2)	95 (15.8)
Looking for something good in what is happening	106 (17.7)	150 (25.0)	223 (37.2)	121 (20.2)
Trying to come up with a strategy about what to do	96 (16.0)	205 (34.2)	159 (26.5)	140 (23.3)
Getting emotional support from others	87 (14.5)	236 (39.3)	153 (25.5)	124 (20.7)
Expressing my negative feelings	159 (26.5)	222 (37.0)	144 (24.0)	75 (12.5)
Making fun of the situation	175 (29.2)	173 (28.8)	143 (23.8)	109 (18.2)
Learning to live with it	85 (14.2)	206 (34.3)	224 (37.3)	85 (14.2)
Praying or meditating	107 (17.8)	201 (33.5)	147 (24.5)	145 (34.2)

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Blaming myself for things that have been happening	141 (23.5)	192 (32.0)	166 (27.7)	101 (16.8)
Turning to work or other activities to take my mind off things	136 (22.7)	231 (38.5)	155 (25.8)	78 (13.0)
Refusing to believe that it has happened	171 (28.5)	195 (32.5)	173 (28.8)	61 (10.2)
Using alcohol or drugs to help me get through it	162 (27.0)	215 (35.8)	158 (26.3)	65 (10.8)
Giving up trying to deal with it	144 (24.0)	172 (28.7)	166 (27.7)	118 (19.7)

On coping strategies for burnout, 276 (46.0%) respondents stated that they haven't been taking actions to try to make it better a lot, 289 (48.2%) stated that they had been getting a little bit of help and advice from other people, 150 (25.0%) stated that they had been looking for something good in what is happening a little bit and 205 (34.2%) stated that they had been trying to come up with a strategy about what to do a little bit.

236 (39.3%) respondents stated that they had been getting a little bit of emotional support from others, 222 (37.0%) stated that they had been expressing their negative feelings a little bit, 175 (29.2%) stated that they had not been making fun of the situation at all, 224 (37.3%) stated that they had been learning to live with it in medium amount, 201 (33.5%) stated that they had been praying or meditating a little bit and 192 (32.0%) stated that they have been blaming themselves for things that have been happening a little bit.

In addition, 231 (38.5%) stated that they had been turning to other activities to take their mind off things a little bit, 195 (32.5%) stated that they have been refusing to believe that it has happened a little bit, 215 (35.8%) stated that they have been using a little bit of alcohol or drugs to help them get through it and 172 (28.7%) stated that they have giving up a little bit trying to deal with it.

TABLE 13: Coping Strategies employed by respondents

Coping strategies	Mean (SD)
Positive coping strategy	
Taking actions to try to make it better	2.03 (1.16)
Getting help and advice from other people	2.34 (0.938)
Looking for something good in what is happening	2.60 (0.99)
Trying to come up with a strategy about what to do	2.57 (1.02)
Getting emotional support from others	2.52 (0.98)
Making fun of the situation	2.31 (1.08)
Learning to live with it	2.52 (0.90)
Praying or meditating	2.55 (1.04)
Negative coping strategy	
Blaming myself for things that have been happening	2.38 (1.02)
Turning to work or other activities to take my mind off things	2.29 (0.96)
Expressing my negative feelings	2.23 (0.98)
Refusing to believe that it has happened	2.21 (0.97)
Using alcohol or drugs to help me get through it	2.21 (0.96)
Giving up trying to deal with it	2.43 (1.06)

The most frequently used positive coping strategy was looking for something good in what was happening (Mean 2.60, SD = 0.99) while taking actions to try to make the situation better was the least positive coping strategy employed (Mean = 2.03, SD = 1.16).

The most frequently employed negative coping strategy was giving up trying to deal with the situation (Mean = 2.43, SD = 1.06) while the least employed negative coping strategy was using alcohol or drugs to help get through the situation.

TABLE 14: Summary of coping strategies for burnout

Coping strategies		**n = 600**		
	Mean (S.D)	**Low use Freq (%)**	**Moderate use Freq (%)**	**High use Freq (%)**
Problem-focused coping	2.39±0.74	137 (22.8)	324 (54.0)	139 (23.2)
Emotion-focused coping	2.42±0.41	50 (8.3)	498 (83.0)	52 (8.7)
Avoidant Coping	2.28±0.59	110 (18.3)	381 (63.5)	109 (18.2)

About half 324 (54.0%) respondents had moderate use of problem-focused coping strategies mean ± S.D, 2.39 ± 0.74, majority 498 (83.0%) respondents had moderate use of emotion-focused coping strategies mean ± S.D, 2.42 ± 0.41 and most 381 (63.5%) respondents have moderate avoidant coping strategy, 2.28 ± 0.59.

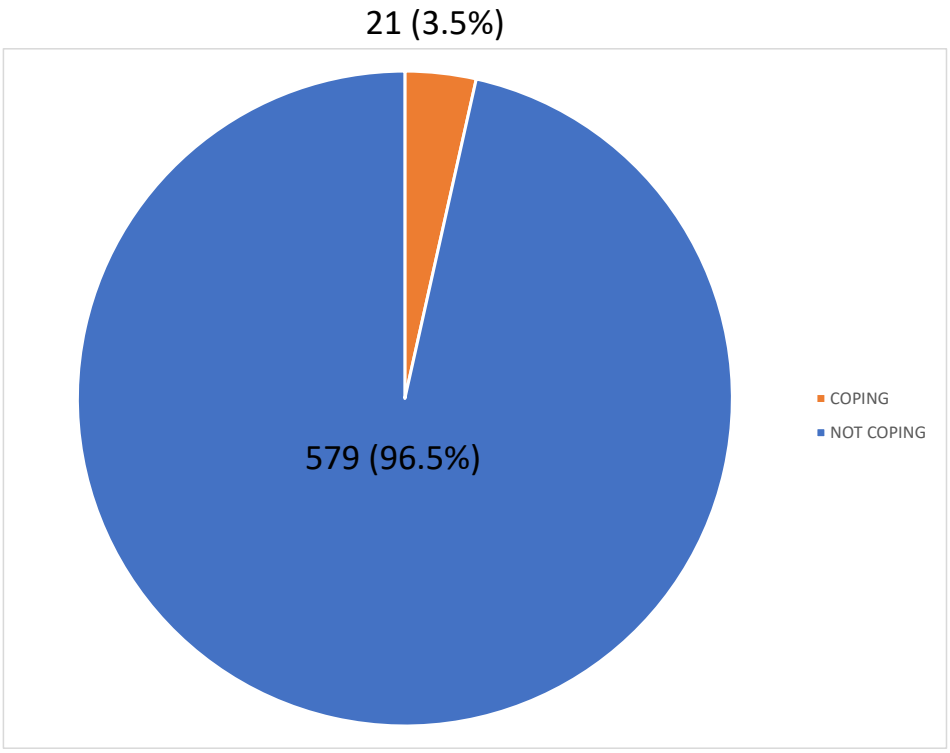

Figure 2: Overall use of coping strategies among respondents

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Overall, 21 (3.5%) of the respondents used at least one type of coping strategies to burnout.

TABLE 15: Sociodemographic characteristics and coping strategies for burnout

Variable	Coping strategies (n = 600)		Chi-square	p-value
	Frequency (%)			
	Yes	No		
Age				
<20	2 (66.7)	1 (33.3)	17.258*	<0.001
20 - 29	3 (12.5)	21 (87.5)		
30 - 39	6 (3.2)	181 (96.8)		
40 - 49	8 (2.9)	264 (97.1)		
50 - 59	2 (1.8)	112 (98.2)		
Sex				
Male	16 (4.5)	337 (95.5)	2.707	0.100
Female	5 (2.0)	242 (98.0)		
Marital Status				
Single	9 (13.2)	59 (86.8)	13.836*	0.002
Married	12 (2.6)	447 (97.4)		
Divorced	0 (0.0)	20 (100.0)		
Widowed	0 (0.0)	24 (100.0)		
Cohabiting	0 (0.0)	29 (100.0)		
Level of Education				
Primary	2 (5.1)	37 (94.9)	0.444	0.801
Secondary	7 (3.8)	179 (96.2)		
Tertiary	12 (3.2)	363 (96.8)		

*** - Fisher's Exact**

264 (97.1%) respondents who had no coping strategy belonged to age group 40 - 49 years. This association was statistically significant ($p < 0.001$). 242 (98.0%) respondents who had no coping strategy were females. This association was not statistically significant. 99 (99.0%) respondents who had no coping strategy were Yoruba. This association was not statistically significant. 37 (100.0%) respondents with no coping strategy practiced ATR. This association was not statistically significant. 29 (100.0%) respondents with no coping strategy were cohabiting. This association was statistically significant ($p = 0.002$). 363 (96.8%) respondents with no coping strategy had tertiary level of education. This association was not statistically significant.

TABLE 16: Predictors of coping strategies for burnout

Variable	B (regression co-efficient)	Odds ratio	95% C.I. for O.R. Lower	Upper	p-value
Age (in years)	-0.063	0.939	0.881	1.000	0.048
Sex					
Male	0.987	2.684	0.848	8.497	0.093
Female		1			
Marital status					
Ever married	-0.802	0.448	0.150	1.338	0.150
Never married		1			
Level of Education					
Primary	1.465	4.328	0.728	25.748	0.107
Secondary	0.465	1.591	0.584	4.332	0.363
Tertiary		1			
Times work per week	-0.646	0.905	0.239	3.424	0.883

*** - Reference category, R^2 = 2.8% – 10.8%, C.I = Confidence Interval, O.R. = Odds Ratio**

With increasing age, respondents were 0.063 times less likely to employ coping strategies. This association was statistically significant (p = 0.048, OR = 0.939). Males were 0.987 times more likely to employ coping strategies when compared to their female counterparts. This association was not statistically significant. Individuals who have ever been in a marital relationship were

noticed to be 0.802 times less likely to employ coping strategies when compared to the unmarried category. This association was not statistically significant. Individuals with primary level and secondary level of education were found to be 1.465 and 0.465 times more likely to employ coping strategies when compared to those with tertiary level of education. This association was not statistically significant. With increasing number of hours worked per day, individuals were 0.646 times less likely to employ coping strategies. This association was not statistically significant.

SECTION E: CONSEQUENCES OF BURNOUT AMONG RESPONDENTS

TABLE 17: Consequences of burnout among respondents

Variable	Frequency(n=600)	Percent
Get angry		
Yes	367	61.2
No	233	38.8
Talk about career in negative way		
Yes	240	40.0
No	360	60.0
Feel Susceptible to illness		
Yes	227	37.8

No	373	62.2
Enough Leisure time		
Yes	280	46.7
No	320	53.3
Feel need to be absent		
Yes	396	66.0
No	204	34.0
Received query from management		
Yes	101	16.8
No	499	83.2

367 (61.2%) respondents got angry easily, 360 (60.0%) respondents talked about their career in a negative way, 373 (62.2%) respondents did not feel susceptible to illness, 320 (53.3%) did not have enough leisure time, 396 (66.0%) respondents felt the need to be absent, 499 (83.2%) respondents did not receive query from management.

DISCUSSION

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Burnout among healthcare professionals, particularly non-clinical staff, remains a critical yet understudied aspect of the healthcare landscape. Despite the pivotal roles played by non-clinical staff in supporting the seamless functioning of healthcare institutions, there is a glaring paucity of research addressing burnout within this specific demographic. Recognizing the limited focus on the well-being of non-clinical staff, our study seeks to fill this crucial gap by delving into the prevalence, levels, and influencing factors of burnout among non-clinical staff at the University of Benin Teaching Hospital (UBTH). Addressing burnout among non-clinical staff is pivotal for enhancing the overall resilience of the healthcare system. Non-clinical staff play a crucial role in the seamless functioning of healthcare institutions, and their well-being directly impacts the efficiency and effectiveness of the entire system.

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A key finding from our study showed a burnout prevalence rate of 46.5%. The result seems high but is similar to the burnout prevalence rate of 45.1% from a study[46] that assessed burnout

among emergency department staff in Tygerberg Hospital, South Africa. The South African study[46] evaluated burnout prevalence among both clinical staff (doctors and nurses) and non-clinical staff. This inclusion could have played a role in the differing results. The staggering level of high burnout signifies that a good number of respondents are grappling with a multifaceted challenge, which necessitates a holistic approach in addressing burnout. Improved staff well-being can positively influence communication, teamwork, and job satisfaction, ultimately contributing to a higher standard of care provided to patients.

Regarding the levels of burnout, 476 (79.3%) of respondents experienced high-level burnout on personal achievement, on depersonalization, 423 (70.5%) of respondents experienced high-level burnout and on emotional exhaustion, 362 (60.3%) of respondents experienced high-level burnout. This differs from results from a study[47] in Maiduguri that compared burnout levels among clinical and non-clinical staff. A look at the non-clinical staff showed a 48.4% prevalence of burnout in personal achievement, 36.6% prevalence in depersonalization, and a 63.6% prevalence in emotional exhaustion[47]. The reason for the different prevalence rates could be due to the fact that the study in Maiduguri was carried out before the COVID-19 pandemic as it has shown that the COVID-19 pandemic has placed tremendous work demands on healthcare workers[48] thereby increasing burnout levels.

The results of this study also indicated that though while more males (56.1%) were not burnt out, the association between sex and burnout was not statistically significant. This implies that burnout is not markedly influenced by gender in this study, and both male and female are susceptible. This is in contrast with a 2022 study that showed that male psychiatric nurses reported a higher prevalence of burnout than did female psychiatric nurses.[48] The difference could be due to the fact

that the 2022 study focused on nurses as against nonclinical staff in our current study. This stresses the need for more studies that will explore the prevalence of burnout among nonclinical staff as regards gender differences.

From our study, hours worked per day, days worked per week, clients cared for per day, severity of clients' problem, work to be done during working hours, and demand at work conflicting are factors that influence burnout. The study showed that 13.5% participants reported working for more than 12hours per day. This is a similar finding from a study done in Tanzania which showed that 12% participants worked more than 12 hours per shift.[49] Despite the similar percentages of participants who worked for more than 12 hours, our study shows a drop in burn out proportion among those who work for 8-12 hours and those who work for more than 12 hours in contrast to the Tanzanian study. This drop could be due to the fact that the Tanzanian study was conducted among health care workers in an acute care setting.

The data from our study indicates a significant association between working hours and burnout. Respondents working 8-12 hours per day showed the highest prevalence of burnout (52.7%). This aligns with a 2021 study[50] done in China on hospital administrators that emphasized the impact of long working hours on burnout among healthcare professionals. In the study, 76.2% of hospital administrators worked for more than 8 hours per day. The 2021 study population is similar with our study as it explores a section of non-clinical staff. This is significant as working for reduced hours per day will help curb the surge of burn out among non-clinical hospital staff.

Workload factors, such as having enough work to do during work hours, conflicting demands at work, and the perception of too much work were significantly associated with burnout. Respondents with sufficient work (50.5%) reported higher burnout than those with little work (39.2%). Our study indicates a positive association between workload and burnout among

nonclinical staff, suggesting that a high workload is associated with increased exhaustion. In contrast, Portoghese et al., implies a more nuanced relationship, emphasizing that a high workload might not be a major concern if there is sufficient job control.[51] The implication of this is that with proper job control non clinical staff can adequately manage high workload thereby cope with burnout.

The findings from our study shed light on the coping strategies employed by respondents facing burnout. Our analysis focused on various coping mechanisms including problem-focused, emotion-focused and avoidant strategies, aiming to provide a comprehensive understanding of how individuals navigate the challenges associated with burnout. In addition to the aforementioned strategies, Lourencao et al identified and explored other coping strategies including religious practices/ fantastical thinking and pursuit of social support.[52] This implies that there are more coping strategies that need to be explored. By prioritizing the well-being of all healthcare professionals, including those in non-clinical roles, we contribute to building a more resilient and sustainable healthcare infrastructure that can better serve the needs of the community.

Our study showed poor utilization of coping strategies as 96.5% participants were not employing a coping strategy whereas a meagre 3.5% were employing a coping strategy. This could explain the reason for the high emotional exhaustion, Liu et al. underlined that a negative coping style is associated with higher emotional exhaustion, depersonalization, and lower personal achievement among physicians and nurses.[53] The results are similar with Liu et al despite it been carried out on different study group because of the similar working environment of clinical and non-clinical staff. The lack of utilization of coping strategies could result in decreased work efficiency and increased rate of burnout.

Our findings suggest that a considerable number of respondents tend to use coping strategies moderately, with emotion-focused coping being the most commonly employed approach followed by the avoidant strategy, and lastly the problem-focused strategy. This finding is contrary to a study[54] that showed that emotion-focused coping and problem-focused coping were the more frequently utilized coping strategy utilized by resident doctors. The study focused on resident doctors as against non-clinical staff and this could have played a role in the different findings.[55] A study[55] by Shah et al which assessed the efficacy of healthcare staff support rounds highlighted the positive impacts of support groups among staff to discuss emotional aspects of work as this helps regulate emotions and help cope with burnout as each worker realizes that he is not alone in the struggle. This further stresses the importance of emotion-focused coping as a powerful coping tool for non-clinical staff. By prioritizing the well-being of all healthcare professionals, including those in non-clinical roles, we contribute to building a more resilient and sustainable healthcare infrastructure that can better serve the needs of the community.

This study reveals a concerning prevalence of burnout symptoms among the surveyed non clinical staff, shedding light on the multifaceted consequences of burnout within this cohort. Most persons experienced frequent anger, expressed negative sentiments about their career, and expressed having insufficient leisure time. A substantial majority (83.2%) did not receive queries from management despite reporting burnout symptoms. This finding divulges from the study[56] by who highlighted the role of management interventions in addressing burnout among healthcare workers. The study emphasized that in dealing with burnout among healthcare workers, supplementary action at the organization level is necessary. This suggests a potential gap in communication or awareness between healthcare professionals and management in our study.

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CONCLUSION

Our study reveals a significant burnout prevalence of 46.5% among non-clinical staff at UBTH, mirroring global trends. The multifaceted nature of burnout, including personal achievement, depersonalization, and emotional exhaustion, underscores its complexity.

While gender did not significantly influence burnout, factors like working hours and workload emerged as critical contributors. The study highlights a concerning lack of coping strategy utilization (3.5%), emphasizing the need for supportive work environments.

The implications of our findings extend beyond UBTH, emphasizing the broader significance of addressing burnout for the enhancement of healthcare systems and, ultimately, the well-being of the communities they serve. Prioritizing the well-being of healthcare professionals, particularly non-clinical staff, is essential for building a resilient healthcare infrastructure. Our findings stress the need for management interventions and organizational actions to bridge communication gaps and raise awareness, ultimately contributing to a healthier and more effective healthcare workforce.

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RECOMMENDATIONS

Government:

The government should formulate and implement policies addressing non-clinical staff well-being, including regulations on working hours and workload management.

They should allocate resources to support mental health programs for healthcare professionals, with a focus on non-clinical staff, ensuring their inclusion in comprehensive healthcare policies.

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Health Institutions:

They should establish a supportive work environment, encouraging open communication, and providing resources for coping strategies and mental health support.

Implement training programs on stress management and resilience-building for non-clinical staff, emphasizing the importance of work-life balance.

Non-Clinical Staff:

Prioritize self-care and recognize signs of burnout. Engage in available coping strategies and seek support when needed.

Advocate for reasonable working hours and workload, emphasizing the importance of maintaining a healthy work-life balance.

Non-clinical departments should take the initiative to establish peer support networks, facilitated by staff associations, to encourage open discussions and sharing of coping mechanisms, creating a sense of community.

Public:

They should raise awareness about the challenges faced by non-clinical staff and the impact of burnout on overall healthcare services.

Foster a supportive attitude toward healthcare professionals, acknowledging their contributions and the need for a balanced and healthy work environment.

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Commented [nm35]: Your questionnaire and ethical approval should be part of your appendix

APPENDIX I

QUESTIONNAIRE DESIGN

DEPARTMENT OF PUBLIC HEALTH & COMMUNITY MEDICINE, UNIVERSITY OF BENIN, BENIN CITY.

PREVALENCE AND DETERMINANTS OF BURNOUT AMONG NONCLINICAL WORKERS IN THE UNIVERSITY OF BENIN TEACHING HOSPITAL, BENIN CITY, EDO STATE

Dear Sir/Ma,

We are 600L medical students at the University of Benin, Benin City. This questionnaire assesses the prevalence and determinants of burnout among nonclinical workers at the University of Benin Teaching Hospital. All information given will be treated as confidential. Please kindly answer all questions as accurately as possible. Thank you, Sir/Ma.

SECTION A: SOCIO-DEMOGRAPHIC DATA OF NONCLINICAL WORKERS

1.Age: _____ years

2.Gender: (a)Male (b)Female(c)Other (please specify): _____

3.Tribe (a)Benin(b)Esan(c)Yoruba(d)Igbo (e)Urhobo (f)Others (please specify)_____

4.Marital Status: (a)Single (b)Married (c)Divorced (d)Widowed (e) Co-habiting (f) Others (please specify):_____

5. Level of Education: (a)primary(b)secondary(c)Tertiary (d)Others (please specify): _____

6.Income (a)30000(b)30000 - 50000(c)50000 – 100000 (d) >100000

7.Religion (a)Christian (b)Islam (c)Traditional (d)Others

8.Length of Employment at UBTH: (a)1-3 (b)3- 5 (c) > 5 (d)others_____

9.Department ----------/Position: (a)level 7(b)level 10

10.Work Hours per Week: <20hrs (b)>40hrs

11.Do you work shifts? (a)Yes (b)No

Commented [ei36]: demographics

Commented [37R36]: done

Commented [38R36]:

SECTION B: PREVALENCE OF BURNOUT
Please tick as appropriate

S/N	STATEMENT	Never	A few times per year	Once a month	A few times per month	Once a week	A few times per week	Every day
1	I deal very effectively with the problems of my workplace							
2	I feel I'm positively influencing other people's lives through my work							
3	I feel happy after working closely with my clients							
4	I feel I treat some clients as if they were impersonal objects							
5	I've become more callous towards people since I took this job							
6	I don't really care what happens to some clients							
7	I feel emotionally drained from my work							
8	I feel fatigued when I get up in the morning and have to face another day on the job							
9	Working with people all day is really a strain for me							

SECTION C: FACTORS ASSOCIATED WITH BURNOUT
Please tick which of the following you think can cause burnout
1. Hours worked in a day: <8 [ ] 8-12 [ ] >12 [ ]
2. Days worked per week: <3 [ ] 3-5 [ ] >5 [ ]
3. Clients cared for in a day: <10 [ ] 10-20 [ ] >20 [ ]
4. Severity of client's problems: Not severe [ ] Severe [ ] Very severe [ ]
5. Work to be done during working hours: Little work [ ] Enough work [ ] Too much work [ ]
6. When demands at work are conflicting: Yes [ ] No [ ]
7. Social support at work from peers or superiors: Yes [ ] No [ ]

8. Lack of emotional support at home: Yes [ ] No [ ]
9. Others (please specify): _____

SECTION D: COPING STRATEGIES FOR BURNOUT AMONG NON-CLINICAL WORKERS

Please tick the coping strategies that you have adopted towards burnout

S/N	STATEMENT	I haven't been doing this at all	A little bit	A medium amount	I have been doing this a lot
1	I've been taking action to try to make the situation better				
2	I've been getting help and advice from other people				
3	I've been looking for something good in what is happening				
4	I've been trying to come up with a strategy about what to do				
5	I've been getting emotional support from others				
6	I've been expressing my negative feelings				
7	I've been making fun of the situation				
8	I've been learning to live with it				
9	I've been praying or meditating				
10	I've been blaming myself for things that happened				
11	I've been turning to work or other activities to take my mind off things				
12	I've been refusing to believe that it has happened				
13	I've been using alcohol or other drugs to help me get through it				
14	I've been giving up trying to deal with it				

SECTION D: CONSEQUENCES OF BURNOUT AMONG NONCLINICAL WORKERS

1. Do you get angry more than usual? Yes [ ] No [ ]
2. Do you talk about your career in a negative way? Yes [ ] No [ ]
3. Do you feel you are susceptible to illness? Yes [ ] No [ ]
4. Do you have enough leisure time to attend to family and friends? Yes [ ] No [ ]
5. Do you feel the need to be absent from work? Yes [ ] No [ ]
6. Have you ever received a query from the management? Yes [ ] No [ ]
7. What other consequences of burnout have you observed?

(Please specify)_____

APPENDIX II

S/N	DEPARTMENTS	NO. OF WORKERS	NO. SELECTED
1	ENGINEERING	100	82
2	WARD ORDERLY	50	41
3	ICT	50	41
4	SECRETARY	70	57
5	ADMINISTRATIVE ASSISTANTS	120	98

6	ENVIRONMENTAL WASTE MANAGEMENT	70	57
7	CATERING	60	48
8	LAUNDRY	50	41
9	OXYGEN PLANT	35	29
10	SECURITY	80	65
11	RECORDS	50	41
		735	600

UNIVERSITY OF BENIN TEACHING HOSPITAL

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DIRECTOR OF ADMINISTRATION: JIM UWADIE, Esq

HEALTH RESEARCH ETHICS COMMITTEE APPROVAL

PROTOCOL NUMBER: ADM/E 22/A/VOL.VII/148301196

PROPOSAL TITLE: "ASSESSMENT OF BURNOUT AMONG NON-CLINICAL WORKERS IN THE UNIVERSITY OF BENIN TEACHING HOSPITAL, BENIN CITY, EDO STATE: A CROSS-SECTIONAL STUDY"

PRINCIPAL INVESTIGATOR(S): PATRICK IFUNANYA FAVOUR & SALAMI EMMANUEL DAVID

DEPARTMENT/INSTITUTION: DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE, UNIVERSITY OF BENIN, COLLEGE OF MEDICAL SCIENCES, BENIN CITY, EDO STATE, NIGERIA

DATE CONSIDERED: OCTOBER 4TH, 2023

DECISION OF THE COMMITTEE: APPROVED

THIS APPROVAL DATES 4/10/2023 TO 3/10/2024. IF THERE IS DELAY IN STARTING THE RESEARCH, PLEASE INFORM THE HREC SO THAT THE DATES OF APPROVAL CAN BE ADJUSTED ACCORDINGLY

REMARK:

CHAIRMAN: PROF. (MRS) A.N. OFILI **SIGNATURE & DATE**..... 4/10/2023

SUPERVISOR (S): PROF.(MRS.) E.C. ISAH, DR. N. MOKOGWU

DECLARATION BY INVESTIGATOR(S):
PROTOCOL NUMBER (please quote in all enquiries)
Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual re-port to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit your research site without previous notification.

Signature & Date..... 09/10/23