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Religious Coping Among Adults Living with Chronic Health Conditions at the University of Benin Teaching Hospital, Nigeria.

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ABSTRACT

Chronic health conditions create prolonged physical, psychological, social, and functional challenges that require individuals to develop effective coping strategies. In Nigeria, where religious beliefs strongly influence personal identity and responses to illness, religious coping may serve as an important resource for adults managing chronic health conditions. This study examined positive and negative religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital (UBTH), Nigeria. A quantitative cross-sectional survey design was employed among adults receiving treatment for selected chronic conditions at UBTH. A total of 107 participants were recruited using convenience sampling from selected medical wards. Data were collected using a structured questionnaire containing socio-demographic and clinical information and the 14-item Brief Religious Coping (Brief RCOPE) scale, which measures positive and negative religious coping dimensions. Descriptive statistics summarised participant characteristics and coping scores, while the Wilcoxon signed-rank test compared positive and negative religious coping scores. The study found that participants used positive religious coping more, with a mean score of 8.73 ± 4.45, compared with negative religious coping, which had a mean score of 0.57 ± 1.30. The difference between positive and negative religious coping scores was statistically significant ($p < 0.001$), indicating that participants relied more on religious practices and beliefs for support than on expressions of religious struggle. The Brief RCOPE demonstrated good internal consistency for positive religious coping (Cronbach's $\alpha = 0.87$) and acceptable reliability for negative religious coping (Cronbach's $\alpha = 0.75$). The findings highlight the importance of recognising religious coping patterns in healthcare and rehabilitation practice, particularly occupational therapy, when supporting adults living with chronic health conditions.

KEYWORDS: *Religious coping; Chronic health conditions; Occupational therapy; Rehabilitation; Coping.*

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1. Introduction

1.1 Background of the Study

Chronic conditions are diseases that require relatively long management, progress slowly, and demand lifelong medical and self-management because they are not cured in a single episode of treatment. Chronic conditions have reached epidemic proportions; they now lead as the greatest global cause of death and disability (Daar et al., 2009). Many chronic health conditions, including non-communicable diseases- cancers, diabetes, and stroke- are the leading cause of global mortality, accounting for about 74% of all deaths worldwide. The WHO reported that NCDs cause at least 43 million deaths globally in 2021 and are responsible for the majority of premature NCD-related deaths (World Health Organisation [WHO], 2023). Chronic diseases contribute substantially to the global burden of illness by increasing disability, functional limitations, and years lived with disability (YLDs). The Global Burden of Disease study 2017 reported that

noncommunicable diseases are a major contributor to global health loss, with increasing numbers of people experiencing long-term health consequences from chronic conditions across regions worldwide (GBD 2017 Disease and Injury Incidence and Prevalence Collaborators, 2018). This is because the conditions are usually lifelong, progressive, and unpredictable. The impact and demand on patients, their relatives, and their families can affect functional capacity, reduce overall quality of life, and create long-term challenges that go far beyond acute medical treatment.

In sub-Saharan Africa, there is currently a rapid epidemiological transition driven by urbanisation and changing lifestyles, contributing to the global burden of chronic conditions, especially cardiovascular diseases (Belue et al., 2009). Unlike many high-income regions, Africa confronts the double burden of diseases characterised by chronic conditions and poverty-related diseases like malaria and respiratory infections; this overlapping disease burden contributes to mortality and disability in Africa (Boutayeb et al., 2005). The specific incidence rate of chronic diseases such as diabetes and hypertension among African adults is increasing rapidly, with reduced physical activity and dietary changes contributing to the changing patterns of disease occurrence (Tuei et al., 2010). Evidence indicates an increase in deaths related to chronic diseases, reflecting the growing contributions of NCDs to the regional health burden. (He et al., 2020). The Coexistence of communicable and non-communicable diseases increases pressure on the healthcare system, which is usually oriented toward short-term conditions rather than the long-term management of chronic conditions (Belue et al., 2009). Chronic disease treatment and management in Africa are further challenged by limited disease surveillance, limited financial resources, delayed presentation to treatment units, and difficulty following long-term care; all of these increase the personal burden of living with chronic conditions (Spencer et al., 2023).

Nigeria, which is the most populous country in Africa, has a serious burden of chronic health conditions. According to the 2020 NCD Progress Monitor, NCDs, which include certain chronic conditions, were responsible for 617,300 deaths in Nigeria, which is 29% of total deaths, with 22% happening among adults aged 30 to 70 years and considered premature (WHO, 2020). Earlier studies have shown that non-communicable diseases constitute a growing public health challenge in Nigeria, with hypertension, diabetes mellitus, and cancers contributing substantially to disease burden and premature mortality among adults (Idris et al., 2020). More recent data show that 102,000 Nigerians are newly diagnosed with cancer every year, with a population prevalence rate of 4% for diabetes and 12% for cardiovascular disease (Ahmed et al., 2023). Although chronic conditions were already responsible for a quarter of all deaths in Nigeria as at 2005, the Healthcare system, almost 20 years later, still finds it hard to cope with long-term treatment and management of people living with such conditions. (Ajisegi et al., 2022). Chronic disease management and treatment in Nigeria are constrained by poor financial resources, illiteracy, limited access to screening and management, and a weak health system, with the most disadvantaged population bearing a disproportionate share of the burden (Dalal, 2011).

Living with a chronic health condition goes beyond the biomedical treatment of the symptoms and affects every domain of life. Qualitative evidence from Nigerian patients has shown that chronic conditions affect physical functioning, mental health, self-concept, and overall quality of life and are usually compounded by societal stigma and misconceptions (Kafayat et al., 2024). Chronic conditions can disrupt daily routines and meaningful activities, with patients experiencing interference with work, difficulty performing family duties, and limited social participation. Chronic conditions often change physical functioning and require individuals to develop adaptive or compensatory behaviours. These responses may improve symptom control and functional independence, but maladaptive strategies may also reduce participation or worsen functional outcomes (Barlow et al. 2002). The unrelenting demand, joined by how unpredictable the financial strain of extended care can be, combined with the condition, can further increase the stress that affects psychological well-being, mental health, and quality of life. These conditions bring challenges that may not resolve quickly, so the patient must develop coping strategies to regulate emotions, preserve meaning, and maintain relationships while adapting to the demands of care (Bury, 1982; Lorig & Holman, 2003). A study by Fischer et al. (2021) shows that individuals' expectations of illness-related demands, in relation to their available financial resources, determine whether the experience becomes overwhelming or manageable. Coping has been central to understanding the direction of chronic conditions. According to Lazarus and Folkman's transactional model of stress and coping, stress usually arises from a transaction between the person and their environment, based on the appraisal of what the situation is and how many resources the person can muster (Laubmeier et al., 2004; Fischer et al., 2021). The model explains the stress response through two major appraisal processes: primary appraisal, in which the person checks whether the situation is threatening or harmful; and secondary appraisal, in which the person checks what coping resources and options are available. Following these appraisal processes, individuals engage in coping efforts, which may involve problem-focused or emotion-focused strategies (Lazarus and Folkman, 1984). Reappraisal occurs when individuals reassess the stressful situation after applying coping strategies; this may change their view of the stressor and influence subsequent coping responses (Lazarus and Folkman, 1984). Coping can be defined as the ongoing cognitive and behavioural effort to manage specific external and internal demands appraised as taxing or exceeding a person's resources (Stanisławski, 2019; Algorani & Gupta, 2023).

Lazarus and Folkman distinguish two classes of coping strategies: problem-focused coping, which aims to change or manage the source of stress, and emotion-focused coping, which aims to regulate the emotional distress associated with the stressor (Lazarus & Folkman, 1984). Both types of coping are important to chronic illness because patients can go through treatment and symptom management while simultaneously trying to regulate their fear and possible loss using an emotion-focused strategy. These coping choices are strongly shaped by how people interpret and experience their conditions, and the strategy adopted affects immediate stress, mental health, psychological well-being, and the ability to participate socially (Fischer et al., 2021). The transactional model suggests that individuals draw on different coping resources, including personal, social, cultural, and religious ones, and that stress may be managed very differently depending on the resources available to the patient (Folkman & Moskowitz, 2004). Because chronic conditions

are constantly being appraised as uncontrollable and enduring, emotional focus resources, which include religious ones, are particularly crucial for a lot of patients, making religion a significant coping resource to study.

Religious coping refers to ways individuals use their religious beliefs, practices, and relationships with the sacred to understand and manage stressful life events (Pargament et al., 2011). According to Pargament (1998), religious coping involves using religion as a resource to interpret stressful experiences, regulate emotions, and find pathways for adaptation. Religious coping is considered multidimensional because it includes prayer, scripture reading, participation in religious rituals, seeking support from faith communities, trust and surrender to God, and efforts to find religious meaning in suffering and pain (Narayanasamy, 2002). Research has consistently revealed that when people become ill, they rely heavily on religious belief practices and communities to help them cope with their stress, gain a sense of control, keep constant hope, and have meaning and purpose through the rest of their lives (Koenig et al. 2001). Religion functions as a meaning-making framework that helps people integrate threatening experiences into a coherent worldview (Park, 2005), and religious needs are important for people living with chronic conditions. Religion can be especially important when a condition is prolonged, the outcome is uncertain, and its progression is difficult to control, which are the features that characterise most chronic conditions (Hargreaves et al., 2008). Religion offers interpretive frameworks for pain and suffering, communal support, and a sense of transcendent partnership that can sustain hope over time (Xu, 2015). Religious involvement can help enable the sick, especially those living with chronic conditions, to cope better and experience psychological growth rather than having a defeated mindset due to their circumstances (Koenig et al 2001). The most influential conceptualisation is Pargament's, which defines religion as a search for significance and describes religious coping as how this search unfolds under stress (Xu 2015). Based on this theory, Pargament and his colleagues conceptualise the RCOPE. This multidimensional instrument identifies religious coping methods, including seeking spiritual support, benevolence, religious attributes, religious forgiveness, punishing God, and spiritual discontentment (Pargament 2000). Because of the original RCOPE's length, Pargament, Smith, Koenig, and Perez developed the Brief RCOPE as a shorter measure of religious coping that assesses two broad dimensions: positive and negative religious coping. (Pargament et al., 2011). Religious coping can then be either a conservative function which preserves meaning, mastery, and spiritual connection during crisis, or a transformational one in which the stressor can lead to new meaning, new purpose, and new drive (Xu, 2015)

Pargament's work differentiates between two overarching forms of religious coping. Positive religious coping reflects a secure relationship with a transcendent force and a sense of spiritual connectedness with others and the world. In contrast, negative coping reflects spiritual tension and struggles with oneself and with the Divine (Pargament et al., 2011). Examples of positive religious coping include benevolent religious appraisal (for example, seeing illness as an opportunity for growth), seeking spiritual support and guidance, religious forgiveness and purification, and collaborative problem solving with God (Xu, 2015). On the other hand, negative religious coping shows a trend of punishing God, spiritual discontent, and questioning God's power. (Pargment et al., 2007). Qualitative evidence shows that positive religious coping can be associated with reduced anxiety and depression and improved quality of life. In contrast, negative religious coping further exacerbated psychological distress and non-adherence to treatment (Pargament et al., 2000). Positive religious coping has also been linked with sustained hope, positive adjustment of physical symptoms, and treatment adherence among patients living with cancer and type 2 diabetes (Cummings et al., 2010). Negative religious coping, however, can manifest as a spiritual struggle, which brings religious doubt and a direct sense of being punished or abandoned by God, and has been identified as a big predictor of poor health-related outcomes (Pargament et al., 2011). These two forms are usually measured with the Brief RCOPE, a 14-item scale by Pargament, commonly used to measure religious coping worldwide and demonstrating sound psychometric properties across diverse cultures and religious groups (Pargament, 1998).

Nigeria is considered a religious society where Islam and Christianity are the two dominant faiths, with recent estimates indicating that Muslims make up about 56%, and Christian about 40%, and other religions about 3% of the population (McKinnon, 2021). Religion shapes people's identity so deeply that citizens are often required to declare their religious affiliation in public documents (Ehiane & Seedat-Khan, 2024). A study by Kitause & Achunike (2013) found that 97% of Muslim respondents reported praying at the mosque five times daily, and 97% of Christians reported attending church at least weekly. In a society where there is a religious culture, it is not surprising that faith and spirituality feature prominently in how Nigerians respond to chronic illness. Qualitative studies in Nigerian hospitals show that patients rely heavily on faith; their families support personal resilience; and divine help sustains hope as they cope with chronic conditions (Afolaranmi et al (2026): Samuel et al., 2025). Comparable West African studies have shown that prayer, fasting, church attendance, and belief in God are dominant emotion-focused coping strategies among patients living with chronic non-communicable diseases (Parrinder, 2014). Most Nigerian studies have examined religion and spirituality as a general term rather than as a distinct, measurable coping construct. Few studies have used validated instruments such as the Brief RCOPE to assess positive and negative religious coping among Nigerian clinical populations, and limited evidence exists on the psychometric performance of such measures in the Nigerian setting (Agormedah et al., 2023). Without local evidence, health care professionals lack empirical grounds to recognise religious coping patterns. In occupational therapy, the spiritual dimension is regarded as an intrinsic experience, and this matters in chronic illness, as practitioners are encouraged to support it through meaningful activities and person-centred care that supports meaning and well-being (So et al., 2025), because religious coping can be present as a specific measurable expression of the spiritual dimension. It is then undetermined how positive and negative religious coping are distributed within Nigerian adults living with chronic conditions and how this can affect their psychological outcomes. At the University of Benin Teaching Hospital, this gap matters because Nigerian religious culture suggests that people living with chronic conditions will seek religious coping. University of Benin Teaching Hospital (UBTH) is a federal point of service in

southern Nigeria. UBTH provides a wide range of specialist healthcare services, including internal medicine, surgery, obstetrics and gynaecology, paediatrics, radiology, oncology, cardiology, neurology, orthopaedics, rehabilitation services, and emergency care. In chronic disease management, UBTH serves as an important centre for diagnosing, treating, and following up long-term conditions such as hypertension, diabetes mellitus, cardiovascular diseases, cancer, chronic kidney disease, and other non-communicable diseases. However, like many tertiary hospitals in Nigeria, it operates amid broader health system challenges, including high patient demand, financial barriers to care, and the need for sustained long-term management of chronic illnesses.

1.2 Statement of the Problem

Chronic health conditions increase global morbidity, mortality, and disability; they prolong physical, psychological, and functional challenges (Hacker et al. 2024). Effective management and patient outcomes rely on patients' ability to cope, including religious coping, which can be positive or negative. In Nigeria, religious beliefs and practices influence how many individuals understand illness, seek healthcare, and respond to health challenges (Afolaranmi, 2026). However, rehabilitation professionals and occupational therapists in Nigeria may lack empirical evidence to distinguish adaptive from maladaptive religious coping in local practice. (Eleyinde et al., 2018).

Despite the importance of spiritual belief in managing illness, direct empirical evidence that systematically quantifies positive and negative religious coping among Nigerian adults with chronic conditions remains scarce. Simply knowing a patient is religious is insufficient, as clinical care requires understanding of how religion is actively used in the illness experience.

To address this gap, this study examines positive and negative religious coping among adults with chronic health conditions at the University of Benin Teaching Hospital, Nigeria. UBTH is a federal point-of-service hospital where patients are treated in acute and chronic settings.

1.3 General Objective

This study aims to examine the use of positive and negative religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital, Nigeria.

1.3.1 Specific Objectives

1. To determine the extent of positive religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital.
2. To determine the extent of negative religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital.
3. To compare positive and negative religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital

1.4 Corresponding Research Questions

1. What is the level of positive religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital?
2. What is the level of negative religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital?
3. Is there a difference between the extent of positive and negative religious coping among adults living with chronic health conditions?

2. Methodology

2.1 Research Design

A quantitative, cross-sectional survey design was employed. The study was conducted over 11 months, from October 2023 to August 2024, during which eligible participants were recruited and data was collected at the study site.

2.2 Study Site

The study was conducted at the University of Benin Teaching Hospital (UBTH), Benin City, Edo State, Nigeria. UBTH is a tertiary healthcare institution located in the South-South geopolitical zone of Nigeria. It provides specialized and multidisciplinary healthcare services to patients from Edo State and surrounding areas. Participants were recruited from the hospital's medical wards, including Wards A1, A2, A3, A4, and the Neurology Ward.

2.3 Study Population

The study population comprised adults living with selected chronic health conditions who were receiving treatment at the University of Benin Teaching Hospital during the study period. The chronic health conditions considered in the study were cancer, Human Immunodeficiency Virus, Traumatic Brain Injury, Spinal Cord Injury, stroke, and diabetes mellitus.

2.4 Selection Criteria.

2.4.1 Inclusion Criteria

Adults aged 18 years and above.

1. Individuals diagnosed with one of the selected chronic health conditions (cancer, HIV, TBI, SCI, stroke, or diabetes mellitus).

2. Individuals living with the condition for at least three months.
3. Patients receiving treatment at UBTH during the study period and were willing to participate in the study.
4. Participants who provide informed consent.

2.4.2 Exclusion Criteria

1. Individuals with acute illness unrelated to chronic disease management.
2. Patients living with comorbidity (more than one chronic illness at the time of the study): participants with multiple diagnosed chronic health conditions were excluded because the presence of multiple chronic conditions may introduce additional psychological, functional, and health-related challenges that could influence religious coping patterns independently of the primary chronic condition under investigation.
3. Patients who did not identify as religious. Participants who did not identify as religious were excluded because the study specifically examined religious coping, which requires participants to identify religion as a meaningful framework for responding to illness.
4. Individuals unable to complete the questionnaire due to communication or cognitive difficulties.

2.5 Sample Size.

The sample size was determined using an a priori statistical power approach with G*Power software version 3.1. Because the study compared two related measurements from the same participants (positive and negative religious coping scores), the calculation used a paired-comparison design. Assuming a significance level of 0.05, 80% power, and a medium effect size (Cohen's d = 0.50), we estimated the minimum required sample size. A total of 124 questionnaires were administered to account for incomplete responses and ineligible participants. Following data cleaning, 17 questionnaires were excluded: 7 due to incomplete questionnaires, 5 because the duration of illness was below the required three months, and 5 because participants had comorbidities, yielding a final analyzed sample of 107 participants, which satisfies and exceeds the minimum a priori power requirement. The paired comparison approach was selected because positive and negative religious coping scores were obtained from the same participants, and the Wilcoxon signed-rank test was used for analysing related non-normally distributed observations

2.6 Sampling Technique

Convenience sampling was employed. Eligible adults who were available in the selected medical wards during the study period were approached by the researchers and informed about the purpose and procedure of the study. Individuals who agreed to participate were recruited.

Where participants required assistance with completing the questionnaire, their caregiver assisted with recording the participant's responses while the participant provided the information verbally. The responses therefore represented the participants' own views and experiences rather than those of their caregivers. Caregivers were instructed only to record participants' responses and were not allowed to influence answers or interpret questionnaire items.

2.7 Data Collection Instrument

Data were collected using a structured questionnaire consisting of two sections. Section A collected participants' socio-demographic and clinical characteristics; it included age, sex, religion, type of chronic health condition, and duration of illness. Section B consisted of the 14-item Brief Religious Coping (Brief RCOPE) developed by Pargament, Smith, Koenig, and Perez. The original RCOPE was developed from Pargament's theory of religious coping to assess the different ways individuals use religion when responding to stressful life events (Pargament et al., 1998, 2000). The Brief RCOPE was later developed as a shorter 14-item measure that captures two broad dimensions of religious coping.

The Brief RCOPE measures two dimensions of religious coping: positive religious coping and negative religious coping. The positive religious coping subscale consists of seven items (Items 1–7), which assess adaptive religious responses such as seeking a stronger connection with God, seeking God's love and care, seeking help from God, and attempting to understand how God may be involved in the individual's situation. The negative religious coping subscale also consists of seven items (Items 8–14). It assesses religious struggle and negative religious interpretations, such as feeling punished or abandoned by God, questioning God's love or power, and attributing an event to the devil.

The original Brief RCOPE items were used without modification. Each item was rated on a four-point response scale: 0 = Not at all, 1 = Somewhat, 2 = Quite a bit, and 3 = A great deal.

The Brief RCOPE has demonstrated acceptable psychometric properties across different populations. Previous studies have reported evidence of internal consistency, construct validity, and predictive validity for both positive and negative religious coping in diverse populations (Agormedah et al., 2023). The Brief RCOPE was administered in English because the participants were recruited from a tertiary hospital environment where English is the official language of healthcare communication. Researcher assistance was provided where clarification was required without altering questionnaire meaning.

2.8 Scoring and Interpretation

The seven positive religious coping items were summed to obtain a positive religious coping score. The seven negative religious coping items were summed to obtain a negative religious coping score. Each subscale therefore had a possible score range of 0–21, with higher scores indicating greater use of the respective religious coping dimension.

For the present study, positive and negative religious coping scores were treated as separate continuous measures.

The two dimensions were compared statistically using descriptive statistics. No arbitrary low, moderate, or high categories were assigned unless supported by an established scoring interpretation for the Brief RCOPE.

2.9 Validity and Reliability of the Instrument

The Brief RCOPE is an established instrument developed to assess positive and negative religious coping. It has been used in research involving individuals experiencing stressful life circumstances and health-related challenges. The original instrument was adopted for the present study without modification.

No separate pilot testing or expert validation was conducted before data collection because an established instrument was used. However, the internal consistency of the positive and negative religious coping subscales was assessed using Cronbach's alpha based on the data obtained from the present sample. Cronbach's alpha based on responses from the 107 participants was included in the final analysis.

The reliability analysis was performed using Statistical Package for the Social Sciences (SPSS) version 29. Cronbach's alpha values of ≥ 0.70 were considered acceptable indicators of internal consistency, while values above 0.80 indicated good reliability and values above 0.90 indicated excellent reliability (Tavakol & Dennick, 2011).

2.10 Data Collection Procedure

Data collection was carried out between October 2023 and August 2024 in the selected medical wards of the University of Benin Teaching Hospital. The researcher and research collaborators approached potentially eligible participants, explained the study's purpose and procedures, and obtained consent before administering the questionnaire.

Questionnaires were primarily administered in the wards. Participants who could complete the questionnaire independently did so, while participants who required assistance were supported by the researcher, research collaborators, or caregivers. When a caregiver assisted with completion, the participant responded verbally, and the caregiver recorded them as directed by the participant. The questionnaire required approximately 15 minutes to complete.

Participation was voluntary, and participants were informed that they could decline participation or withdraw from the study without any consequences to their healthcare. Completed questionnaires were collected and reviewed for completeness before inclusion in the final dataset.

2.11 Data Analysis

Data obtained from the study were coded and analyzed using the Statistical Package for the Social Sciences (SPSS). The 14 items of the Brief Religious Coping (Brief RCOPE) questionnaire were scored from 0 to 3 in accordance with the scoring procedure for the instrument. The seven items assessing positive religious coping (Items 1–7) were summed to obtain the positive religious coping score, while Items 8–14 were summed to obtain the negative religious coping score. Each subscale therefore had a possible score range of 0–21.

Descriptive statistics, including frequencies, percentages, means, standard deviations, medians, and ranges, were used to summarise the participants' socio-demographic and clinical characteristics, as well as their religious coping scores.

For the first objective, we described participants' overall religious coping using appropriate summary statistics based on scores from the Brief RCOPE. We assessed the second objective by calculating the mean and standard deviation of negative religious coping scores, and we assessed the third objective by comparing positive and negative religious coping scores using the Wilcoxon signed-rank test.

Before comparing the positive and negative religious coping scores, the distribution of the scores was assessed for normality. Since the assumption of normality was not met, the Wilcoxon signed-rank test was used to determine whether there was a statistically significant difference between positive and negative religious coping scores among the participants.

The internal consistency of the Brief RCOPE was also assessed using Cronbach's alpha, with reliability calculated separately for the positive religious coping subscale and the negative religious coping subscale. Statistical significance for the inferential analysis was set at $p < 0.05$.

2.12 Ethical Considerations

Ethical approval was sought and obtained from the University of Benin Teaching Hospital Ethics Committee before data collection began. A formal letter concerning the study was submitted to the Ethics Committee, fees were paid and permission was granted. Participants were informed about the purpose and procedures of the study before participation. Participation was voluntary, and informed consent was obtained from participants. Written consent was obtained from participants who could sign, while verbal consent was obtained from those unable to provide a written signature. Participants were informed of their right to decline participation or withdraw from the study at any time without affecting the care they received.

Confidentiality and privacy were maintained throughout the study. The research dataset did not include personally identifying information, and information obtained from participants was used solely for the study. Completed questionnaires and study data were handled securely and were accessible only for research purposes.

3. Results

3.1 Socio-demographic and Clinical Characteristics of Participants

A total of 107 participants who met the eligibility criteria were included in the final analysis. Participants had a mean age of 53.00 ± 19.78 years, ranging from 19 to 83 years. With respect to gender, 73(68.22%) were female and 34(31.78%) were male.

Regarding religious affiliation, 89 (83.2%) participants were Christians, 15 (14.0%) were Muslims, and 3 (2.8%) reported belonging to a traditional African religion.
Regarding chronic health conditions, stroke was the most common condition, accounting for 39 (36.45%) participants; traumatic brain injury was reported by 19 (17.76%) participants; spinal cord injury (SCI) by 17 (15.89%), cancer by 16 (14.95%), diabetes mellitus by 15 (14.02%); and HIV by one (0.93%) participant. The mean duration of the chronic health condition was 7.73 ± 6.99 months, with a range of three to 40 months.

Variable	Frequency(n)	Percentage(%)
Gender		
Female	73	68.22%
Male	34	31.78%
Religion		
Christianity	89	83.18%
Islam	15	14.02%
Traditional African Religion	3	2.80%
Chronic condition		
Stroke	39	36.45%
Traumatic Brain Injury	19	17.76%
Spinal Cord Injury	17	15.89%
Cancer	16	14.95%
Diabetes mellitus	15	14.02%
Human Immunodeficiency Virus	1	0.93%

Table 3.1 Socio-demographic and clinical characteristics of participants

3.2 Positive religious coping among adults living with chronic health conditions
The extent of positive religious coping was assessed using the seven positive coping items of the Brief Religious Coping (Brief RCOPE) questionnaire. Responses to P1-P7 were recorded and summed to obtain a total positive religious coping score, with a possible range of 0-21. Higher scores indicate a greater use of positive coping strategies.
Among the 107 participants, the mean positive religious coping score was 8.73 ±4.45, with scores ranging from 0-21. The median score was 8.00.
The findings indicate that participants demonstrated various degrees of positive religious coping.

Variable	Mean ± SD	Median	IQR	Minimum	Maximum
Positive Religious Coping	8.73 ± 4.45	8.00	4.50	0	21

Table 3.4 Positive religious coping scores.
Participants demonstrated varying levels of positive religious coping, with the average score indicating that adults living with chronic health conditions used positive religious coping strategies.

3.3 Negative religious coping among adults living with chronic health conditions
The extent of negative religious coping was assessed using the seven negative coping items of the Brief RCOPE responses to P8-P14 were recorded and summed to obtain a total negative religious coping score, with a possible range of 0-21.

Variable	Mean ± SD	Median	IQR	Minimum	Maximum
Negative Religious Coping	0.57 ± 1.30	0.00	1.00	0	6

Table 3.5 Negative religious coping scores
Participants reported substantially lower levels of negative religious coping compared with positive religious coping, indicating that religious beliefs were more commonly used as a source of support rather than religious struggle.

3.4 Comparison of positive and negative religious coping
Positive and negative religious coping scores were obtained from the same participants and were treated as paired observations. The normality of the difference between positive and negative religious coping was assessed using the Shapiro-Wilk test.
The Shapiro-Wilk test indicated that the difference scores were not normally distributed.
W=0.958, p=0.001.
Therefore, the Wilcoxon signed-rank test was used to compare positive and negative religious coping scores.

Coping dimension	Median	Wilcoxon Statistic	p-value
Positive Religious Coping	8.00	105.50	<0.001
Negative Religious Coping	0.00		

Table 3.6 Comparison of positive and negative religious coping
Participants showed a statistically significant difference between positive and negative religious coping scores. Positive religious coping scores were significantly higher than negative religious coping scores. This indicates that adults living

with chronic health conditions at UBTH relied more on positive religious coping strategies compared with negative religious coping responses.

3.5 Reliability of the Brief RCOPE

Internal consistency was assessed using Cronbach's alpha.

Subscale	Number of Items	Cronbach's Alpha	Interpretation
Positive religious coping	7	0.87	Good reliability
Negative religious coping	7	0.75	Acceptable reliability

Table 3.7 Reliability of Brief RCOPE

The Brief RCOPE demonstrated acceptable internal consistency among participants in this study.

4. Discussion of Findings

4.1 Socio-demographic and clinical characteristics of participants

This study assessed religious coping patterns among adults living with chronic health conditions at the University of Benin Teaching Hospital. A total of 107 participants were included in the final analysis. The mean age of participants was 53.00 ± 19.78 years. The study population included young, middle-aged, and older adults. This finding is expected because chronic conditions such as stroke, cancer, diabetes mellitus, and spinal cord injuries are more frequently observed among adults as age advances due to increasing exposure to physiological changes and disease-related risk factors. The inclusion and analysis criteria restricted this study to young adults and older persons. According to the World Health Organization (2023), non-communicable diseases account for a significant proportion of morbidity among adults globally, with older populations carrying a greater burden of chronic health conditions.

Female participants represented a larger proportion of the study population than their male counterparts. The gender differences may also reveal how people respond to chronic illness, seek social support, and interact with religious resources during the period of health challenges.

Christianity was the predominant religious affiliation among the participants, followed by Islam and traditional African religions. The higher response rate for Christianity reflects the religious distribution commonly observed in Southern Nigeria Stroke was the most common condition among participants, followed by traumatic brain injury, spinal cord injury, cancer, diabetes mellitus and HIV. The high representation of neurological conditions, particularly stroke and TBI, shows the nature of the Hospital department from which the participants were recruited. These conditions often result in significant functional limitation and dependence on others.

The mean duration of illness among the participants was 7.73 ± 6.99 months. This indicates that many participants have been living with the condition for less than a year as at the time of data collection. The period following diagnosis or injury usually requires people to adapt to the various changes in their physical function, personal independence, family responsibilities, and future expectations. During this period, coping strategies including religious coping may play an important role in helping individuals manage the psychological and functional consequences associated with chronic illnesses

4.2 Positive religious coping among adults living with chronic conditions.

The study found that respondents reported using positive religious coping strategies, with a mean positive religious coping score of 8.72 ± 4.46 on a scale of 0-21. This indicates that respondents use religious approaches that provide emotional support while managing their chronic health condition.

Pargament et al. (2011) described positive religious coping as a pattern associated with spiritual support, benevolent religious appraisal, and a sense of connection with the sacred. These approaches help individuals maintain hope and develop constructive interpretations of difficult experiences. This study shows that participants' positive religious coping suggests many individuals view their religious beliefs and background as a major resource for managing the challenges associated with chronic illness.

Research among individuals with chronic diseases shows that positive religious coping is associated with greater emotional adjustment, improved psychological well-being, and better acceptance of illness-related changes; individuals who use positive religious coping frameworks gain hope, meaning, and assurance during difficult periods (Tarakeshwar et al 2006).

From an occupational therapy perspective, these findings demonstrate the importance of considering personal values and beliefs during assessment and intervention planning. Occupational therapy focuses on enabling individuals to participate in meaningful occupations despite physical, physiological, and psychological limitations; understanding the factors that motivate individuals and support adjustment may help occupational therapy develop more meaningful, person-centered interventions. Certain occupational therapy approaches support this idea, such as the MOHO and PEO models.

4.3 Negative religious coping among adults living with chronic health conditions.

Analyses of this study show that participants reported low levels of negative religious coping, with a mean score of 0.57± 1.30. This suggests that participants rarely experience religious struggle, such as feeling punished by God, questioning their divine support, or interpreting their illness as evidence of spiritual abandonment.

Negative religious coping represents religious struggles that may occur when certain people experience conflict between their health challenges and their religious beliefs. Pargament et al (2011) identify negative religious coping responses as including spiritual dissatisfaction, questioning God's power, and feeling abandoned by God. Previous studies have linked negative religious coping with poorer psychological outcomes, including increased stress and difficulties in

adjusting to stressful experiences (Salsman et al 2015).
The religious and cultural environment of the study population may also influence the low level of negative religious coping among participants. Previous research has shown that negative religious coping is associated with psychological distress and poorer adjustment among individuals experiencing health-related challenges (Salsman et al., 2015).
For occupational therapists, this finding highlights the importance of recognizing the different factors that influence adjustment to chronic illness. Although occupational therapy interventions primarily address functional abilities and participation, emotional and spiritual factors can influence a client's occupational performance. Motivation, physical limitations, and adaptation to changes that come with chronic health conditions can directly influence occupational performance.

4.4 Comparison between positive and negative religious coping among participants.
This research agrees with previous research demonstrating that positive religious coping is commonly reported among individuals experiencing illness and stressful life circumstances. Pargament et al (2011) noted that individuals frequently used religion as a source of meaning, comfort, and support during major challenges. Positive religious coping may assist individuals to maintain hope and develop constructive interpretations of their illnesses. The lower level of negative religious coping suggests that participants were less likely to view their illness as punishment or evidence of rejection by God. Similar results were found among individuals experiencing health-related stress.
For occupational therapy practice, this finding reinforces the importance of a holistic rehabilitation approach. Chronic illness affects physical functioning, emotional well-being, social participation and occupational performance. Recognizing the factors that support the adjustment can help occupational therapists develop interventions that directly address the person's functional limitations.

4.5 Reliability of the Brief RCOPE.
The brief religious coping instrument demonstrated acceptable internal consistency in this study. The positive coping subscale showed good reliability, while the negative religious coping subscale showed acceptable reliability. This finding indicates that the instrument consistently measured the religious coping dimension among adults living with chronic health conditions. The reliability findings support the use of the Brief RCOPE for assessing religious coping among adults living with chronic health challenges. The Brief RCOPE remains one of the most commonly used instruments for assessing positive and negative religious responses across different populations and cultures (Pargament et al 2011)

4.6 Implications of findings for occupational therapy practice
Findings of this study have important implications for occupational therapy practice. Chronic conditions frequently affect individuals' ability to perform daily activities and participate in meaningful occupations. Occupational therapy interventions focus on improving functional participation, coping strategies, and personal beliefs. The high level of positive religious coping observed among participants suggests that many individuals draw strength and encouragement from religious belief as they adapt to illness. Occupational therapists may consider exploring patients' available resources first during assessment. This will help better understand the specific factors that can influence individuals' motivation to participate in therapy and prescribed activities.
Furthermore, occupational therapists may explore the role of personally meaningful religious activities in rehabilitation when the client identifies them as important. Such considerations should be guided by clients' preferences, cultural sensitivity and professional boundaries. However, occupational therapy should approach religious belief with respect and recognize that individuals differ in how they use religion during healthcare challenges. Assessment of coping strategies should therefore remain centered on the individual's preferred experiences and rehabilitation goals.

4.7 Limitations of the study.
The limitations are listed below.

1. The study utilizes a cross-sectional design, meaning religious coping patterns were assessed at one point in time; therefore, participants' changes in coping strategy structure across different stages of chronic illness could not be determined.
2. The study was conducted in a single tertiary health care institution, which may limit the extent to which the findings can be generalized to other health care settings.
3. Religious coping was assessed using a self-report instrument. Participant responses may have been influenced by unwillingness to disclose their experiences
4. Convenience sampling was used, which may have introduced selection bias because participants were recruited based on availability during the study period.
5. Although excluding participants with multimorbidity may improve sample homogeneity, it may limit the generalizability of findings because multimorbidity is common among adults living with chronic conditions.
6. Excluding non-religious participants may limit generalisability to the wider population of adults living with chronic health conditions.

4.8 Recommendation

1. Occupational therapists should consider assessing coping strategies when working with adults living with chronic health conditions to understand better how individuals respond to illness-related challenges. Understanding the

factors that support adjustment can help therapists develop a more holistic and meaningful rehabilitation intervention.

2. Healthcare institutions should encourage a multidisciplinary approach that considers the physical, psychological, social, and, where appropriate, the spiritual concerns of people living with chronic illnesses. Collaboration with relevant support systems, including spiritual or religious resources requested by clients, may contribute to more person-centered care.
3. Future studies should be done considering larger samples across multiple healthcare institutions to improve understanding of religious coping patterns among adults living with chronic health conditions. This will help determine whether the findings observed in this study apply to other healthcare settings.

4.9 Declarations

Ethical Approval: Ethical approval was obtained from the Ethics and Research Committee, University of Benin Teaching Hospital on the 16th of October 2023. Participants were informed of the research topic and objectives .Verbal or written consent was obtained from participants before the questionnaires were filled. The authors declare no conflicting interest.

Conclusion

This study examined positive and negative religious coping among adults living with chronic health conditions at the University of Benin Teaching Hospital, Nigeria. The findings demonstrate that participants relied more on positive religious coping strategies than negative religious coping responses when managing the challenges associated with chronic illness. Participants reported moderate use of positive religious coping, reflecting the role of religious beliefs and practices as sources of comfort, hope, and support during periods of health-related difficulties. In contrast, negative religious coping was reported at a much lower level, suggesting that experiences such as spiritual struggle, feelings of abandonment by God, or interpreting illness as punishment were less common among the participants.

The significant difference between positive and negative religious coping scores indicates that religion appeared to function mainly as a supportive resource for adults living with chronic health conditions in this study population. The findings also demonstrate that the Brief Religious Coping (Brief RCOPE) was a reliable instrument for assessing religious coping patterns among adults receiving care at UBTH.

Understanding religious coping is important for healthcare delivery, particularly in occupational therapy and rehabilitation practice, where physical health challenges often interact with emotional, social, and personal belief systems. Healthcare professionals should recognise the role that personal beliefs may play in patients' adjustment to chronic illness while maintaining respect for individual preferences and professional boundaries. Further studies involving larger samples across multiple healthcare institutions are recommended to improve understanding of religious coping patterns among adults living with chronic health conditions in Nigeria.

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