Advanced Research in Medical and Health Sciences (ARMHS)

ISSN: 2960-0766 (Print) | **ISSN:** 2960-0774 (Online) **- Vol.** 3**, No.** 2**, 2025**

https://doi.org/10.5281/zenodo.17484428

Website: http://journals.jozacpublishers.com/armhs

Received: July 03, 2025 | **Accepted:** September 18, 2025 | **Published:** October 30, 2025

Type of the Paper: ***(Article Paper)***

Mental health stigma, health locus of control, and optimistic bias as predictors of treatment-seeking behaviour among health workers in Akwa Ibom State

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Abstract

In Nigeria, reluctance among healthcare workers to seek mental health support remains a major concern, often driven by stigma and cognitive biases. While previous studies have examined these factors separately, limited research has explored their combined predictive influence. This study investigated the extent to which mental health stigma, health locus of control, and optimistic bias predict treatment-seeking behaviour among healthcare professionals in Akwa Ibom State, Nigeria. A descriptive cross-sectional survey design was adopted with 323 participants, including doctors, nurses, community health extension workers, and social workers, selected through multistage sampling across public, missionary, and private health facilities. Standardized instruments were employed: the Stigma-9 Questionnaire (STIG-9), Health Locus of Control Scale (HLoC), Revised Life Orientation Test (LOT-R), and the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPH-SF). Data were analyzed using simple and multiple regression. Findings revealed that mental health stigma significantly predicted treatment-seeking behaviour ($\beta = .20$, $p < .001$), indicating that stigma reduces willingness to seek help. Optimistic bias also significantly predicted treatment-seeking ($\beta = .21$, $p < .001$), suggesting that moderate optimism enhances proactive help-seeking. However, health locus of control showed no significant predictive effect. Collectively, the predictors accounted for 11% of the variance in treatment-seeking behaviour ($R = .33$, $R^2 = .11$, $F(3, 319) = 12.78$, $p < .05$). The study concludes that stigma and optimistic bias are key predictors of treatment-seeking among healthcare workers, while locus of control plays a limited role. It recommends institutional strategies to reduce stigma, promote healthy optimism, and foster positive mental health attitudes to improve workers' well-being and service outcomes.

Keywords: Health locus of control, Health workers, Mental health stigma, Optimistic bias, Treatment-seeking behaviour

1. Introduction

In contemporary society, health care has become a critical component in maintaining a functional and thriving community. The state of one's health impacts nearly every facet of life, influencing not only individual well-being but also shaping broader social dynamics. Consequently, understanding the complexities of treatment-seeking behaviour has become essential not only for health professionals but also for social scientists exploring determinants of health. Treatment-seeking behaviour is defined as any action or inaction undertaken by individuals who perceive themselves as ill or having a health issue in search of a remedy (Olenja, 2004). It is often described within the broader concept of health behaviour, encompassing preventive measures, maintenance of well-being, and responses to illness (MacKian, 2003). According to Clement, Schauman, Graham, Maggioni, Green and Warnes (2015), treatment-seeking can be conceptualized as a process involving initiation and engagement with care whether medical, mental, or social. Health care professionals including doctors, nurses, pharmacists, and therapists play a crucial role in ensuring effective delivery of care. Yet, the demands of their roles often expose them to intense physical and emotional stress, including long working hours, heavy workloads, and traumatic experiences. Such pressures can severely affect their physical and psychological well-being, underlining the importance of examining how these professionals seek help when they face health challenges.

In healthcare environments, mental health is especially critical. However, stigma associated with mental illness presents significant barriers to seeking care. This stigma not only discourages individuals from pursuing treatment but also compounds the public health burden of mental illness. People with mental illness frequently experience devaluation and marginalization, which contributes to low self-esteem, increased distress, and poorer overall outcomes. Although mental health is increasingly recognized as a public health priority, substantial psychological and systemic barriers still impede access to appropriate care, particularly among health workers. These barriers include stigma, health beliefs, and cognitive biases, all of which shape treatment-seeking behaviour. Mental health stigma is a key factor influencing treatment decisions. It involves processes of labeling, stereotyping, prejudice, and discrimination against people perceived to have mental illness (Link & Phelan, 2001, as cited in Clement et al., 2015). Stigma often leads to delayed treatment-seeking, social isolation, and worsened health outcomes (Corrigan, 2004). It manifests in various forms: self-stigma (internalized negative perceptions), external stigma (negative attitudes from others), perceived stigma (anticipation of discrimination), and treatment-seeking stigma (concerns about others' reactions to treatment-seeking) (Clement et al., 2015; Shannon, MacKinnon & Muñoz, 2020; Mackenzie, Reynolds & Harkins, 2004).

In health-care settings, stigma can be broadly divided into public stigma and self-stigma. Public stigma entails society's negative perceptions of people with mental illness, often associating emotional vulnerability with incompetence (Corrigan & Watson, 2007). This is especially detrimental in healthcare professions, where emotional resilience is equated with professional capability. As such, professionals may avoid seeking help for fear of being seen as unreliable. On the other hand, self-stigma arises when individuals internalize these societal prejudices, leading to feelings of shame and inadequacy (Yen, Yang & Liu, 2005). Health workers often suppress mental health issues to maintain an image of strength, which leads to underreporting, poor self-care, and resistance to treatment (Gibson, 2013).

An important psychological construct influencing treatment-seeking is the Health Locus of Control (HLC), introduced by Rotter (1966). It refers to individuals' beliefs regarding the factors that govern their health.

Wilson, Williams, Arheart, Bryant and Alpert, (1994) further describe HLC as the extent to which people attribute health outcomes to internal or external factors, or to spiritual forces. This belief system has a profound impact on health behaviour and outcomes. While internal and external HLC have been widely studied, spiritual HLC remains underexplored in relation to treatment-seeking behaviour. Internal Locus of Control (LOC) refers to the belief that one's health is primarily influenced by one's own actions and decisions. This perspective is strongly linked to positive health behaviours and outcomes. Individuals with an internal LOC are more likely to engage in preventive health behaviours, adhere to treatment regimens, and rate their health more positively (Theofilou, 2012; Mautner, Peterson, Cunningham, Ku, Scott & LaNoue, 2015). Research also associates internal LOC with lower disease burden and reduced use of emergency services (Basinska & Andruszkiewicz, 2012; Berglund, Lytsy & Westerling, 2014). Among healthcare professionals, those with a strong internal LOC may demonstrate better resilience and proactive treatment-seeking, even under work-related stress (Wallston, Wallston & DeVellis, 2016). This mindset encourages self-care and timely intervention, ultimately supporting both their personal health and patient care quality.

Conversely, external LOC denotes the belief that health outcomes are determined by external forces such as fate, luck, or medical professionals. Individuals with external LOC often feel powerless and may neglect personal responsibility for health, resulting in increased health risks and poorer outcomes (Wallston et al., 2016). They are more likely to delay care, rely heavily on emergency services, and show reduced acceptance of illness (Champion & Skinner, 2008; Mautner et al., 2015). Among health professionals, external LOC can lead to avoidance of proactive coping strategies, depending instead on institutional structures or chance, which may worsen their mental health conditions. Spiritual beliefs also influence health behaviours through Spiritual LOC, which has received limited scholarly attention. Boyd and Wilcox (2020) found a weak, positive correlation between spiritual LOC and external LOC, particularly among non-white, female participants. This correlation suggests that a stronger belief in divine control may reduce proactive treatment-seeking. However, the distinction between active spiritual LOC (belief that God empowers the individual to achieve health) and passive spiritual LOC (belief that God alone determines health outcomes) reveals a more nuanced picture (Holt, Clark, Kreuter and Rubio, 2003). Active spiritual LOC aligns more closely with internal LOC and is associated with greater engagement in treatment-seeking, while passive spiritual LOC correlates with external LOC and greater health passivity (Lease, 2004; Roddenberry & Renk, 2010).

The interaction of spiritual beliefs and health behaviours is especially important in culturally and religiously diverse populations, such as healthcare workers in Nigeria or other faith-driven environments. When spiritual beliefs reinforce internal control, they can motivate timely treatment-seeking. Conversely, if beliefs emphasize passive dependence on divine intervention, they may discourage engagement with professional care. As such, spiritual LOC presents both challenges and opportunities in addressing mental health issues, depending on whether beliefs promote empowerment or resignation. Given the high rates of burnout, anxiety, and depression among health professionals, understanding their treatment-seeking behaviour is essential for both individual and systemic well-being. Mental health stigma both self-imposed and socially reinforced remains a central barrier. At the same time, health locus of control, whether internal, external, or spiritual, significantly shapes how healthcare workers perceive their health and the extent to which they take proactive steps to manage it.

Furthermore, optimistic errors have been identified to be a central part of human nature, and have been observed across gender, race, nationality, age, education and occupation (Sharot, 2011). Although moderate unrealistic optimism can indeed be adaptive, excessive optimism has, on the other hand, been shown to be maladaptive. In high-stress professions like healthcare, optimistic bias can have particularly detrimental effects. Health workers who exhibit optimistic bias may downplay their own vulnerability to health issues, resulting in delayed recognition and treatment of their problems. Schwarzer, Knoll and Rieckmann (2007) explain that

optimistic bias can lead individuals to believe that negative outcomes are less likely to affect them personally, even when there is clear evidence to the contrary. This belief can reduce the likelihood of seeking timely treatment for health issues. For health workers, this bias can contribute to a dangerous underestimation of personal risk, potentially exacerbating health problems and negatively impacting professional performance. Thus, addressing optimistic bias through accurate risk communication and awareness campaigns can be crucial in encouraging health workers to seek help when needed.

Despite increased awareness, a gap still exists between recognizing the need for mental health care and actively seeking it. Exploring the factors that influence this behaviour particularly among those responsible for delivering care is vital. Identifying how mental health stigma, locus of control and optimistic bias influence treatment-seeking can inform the development of tailored interventions to support healthcare workers, ultimately enhancing both their well-being and the effectiveness of healthcare systems. The study hypothesized the following:

i. Mental health stigma will predict the treatment-seeking behaviour of health workers in Akwa Ibom state.
ii. Health locus of control will predict the treatment-seeking behaviour of health workers in Akwa Ibom state.
iii. Optimistic bias will predict the treatment-seeking behaviour of health workers in Akwa Ibom state.

2. Literature review

2.1. Mental Health Stigma

Mental health stigma refers to the negative attitudes, beliefs, and behaviors directed toward individuals experiencing mental illness. This stigma often results in discrimination, social exclusion, and reluctance to seek professional help (Corrigan & Watson, 2002). Health workers, despite being professionals, are not immune to internalizing societal stigma, which can negatively impact their willingness to seek mental health services for themselves (Thornicroft, 2016). Stigma manifests in two forms: public stigma, which refers to negative societal attitudes, and self-stigma, the internalization of these attitudes by individuals (Corrigan & Watson, 2007). Both forms have been found to significantly hinder treatment-seeking behavior.

2.2. Health Locus of Control (HLOC)

Health Locus of Control describes the extent to which individuals believe their health outcomes are influenced by internal or external factors (Wallston, Wallston & DeVellis, 1978). An internal HLOC suggests that individuals believe they have control over their health through their own actions, while an external HLOC attributes health outcomes to fate, luck, or powerful others, including medical professionals (Wallston, 2005). Among health workers, those with high internal HLOC may be more proactive in seeking treatment, believing in their personal responsibility for health maintenance.

2.3. Optimistic bias

Optimistic bias is a cognitive phenomenon where individuals believe they are less likely than others to experience negative events, including mental health issues (Weinstein, 1980). In healthcare settings, this bias can lead professionals to underestimate their vulnerability to mental illness, thus reducing their likelihood to seek treatment (Weinstein, 2017). Optimistic bias may foster denial and neglect of personal mental health needs, especially in high-stress occupations such as healthcare.

2.4. Treatment-seeking behaviour

Treatment-seeking behavior refers to the process by which individuals recognize a health problem and take action to seek professional help. In the context of mental health, this includes acknowledging symptoms,

overcoming stigma, and accessing psychological or psychiatric care. Health workers may experience additional barriers such as fear of professional repercussions or perceived weakness (Gulliver, Griffiths & Christensen, 2010). Understanding the psychological predictors of this behavior such as stigma, locus of control, and bias is crucial for promoting mental well-being in healthcare environments.

3. Research method

3.1. Study design

This study utilized a cross-sectional survey design, which allowed data collection at a single point in time. This design was selected because it enables the exploration of relationships between the independent variables (mental health stigma, health locus of control, and optimistic bias) and the dependent variable (treatment-seeking behaviour) among health workers.

3.2. Research area

This study was conducted in Akwa Ibom State, located in the South-South geopolitical zone of Nigeria. The state comprises 31 Local Government Areas (LGAs), 119 clans, and 2,664 villages, with Uyo serving as the state capital. Covering a land area of approximately 7,249 square kilometers, Akwa Ibom ranks as the tenth largest state in Nigeria by landmass. This figure does not account for any disputed territories (Directorate of Statistics, Ministry of Economic Development, 2013). Geographically, the state is bordered by Rivers State to the east, Cross River State to the west, Abia State to the north, and the Gulf of Guinea to the south. According to data from the National Bureau of Statistics (2012), as cited in the Directorate of Statistics, Ministry of Economic Development (2013), the state had an estimated population of five million people, with an annual growth rate of 3.4%. Although this estimate is based on 2012 data, it remains one of the most recent officially published figures for Akwa Ibom's population. For the purpose of this study, six Local Government Areas were randomly selected through balloting to ensure a representative geographic spread across the state's three senatorial districts. In the Northwest senatorial district, Ikot Ekpene and Abak were selected. From the Northeast, the study included Uyo and Itu. In the South senatorial district, Eket and Oron were chosen. This approach was adopted to ensure broad inclusion and balanced representation of health workers across the diverse regions of the state.

3.3. Population of study

The target population for this study comprised health workers with professional clinical experience, particularly those engaged in direct patient care and clinical responsibilities. These individuals were drawn from government-owned hospitals, missionary health institutions, and registered private hospitals and clinics across Akwa Ibom State. According to data from the Akwa Ibom State Ministry of Health (2012, as cited in Government of Akwa Ibom State, 2014), there are 659 registered health establishments in the state, employing approximately 3,280 health workers in the public sector alone. However, the number of clinical personnel working in missionary and private facilities is not officially documented. For the purpose of this study, it was assumed that the distribution of health workers across public, missionary, and private establishments reflects the general distribution of health facilities in the state.

The study targeted clinical professionals such as doctors, nurses/midwives, Community Health Extension Workers (CHEWs), and social workers across public, private, and missionary facilities in the selected LGAs. Health workers were chosen for this study due to their direct involvement in clinical practice, making them key individuals whose treatment-seeking behaviours are vital to understanding broader healthcare dynamics. Also, by focusing on healthcare professionals, the study sought to capture a broad range of perspectives, expertise,

and experiences, ensuring a comprehensive view of how clinical backgrounds may influence decisions regarding personal healthcare. These factors likely influence their perceptions and behaviours regarding their own treatment-seeking behaviours, particularly in relation to mental health stigma, health locus of control, and optimistic bias.

3.4. Sample and Sampling Techniques

The sampling method used for this study was multistage sampling, consisting of two key stages:

i. **Stage 1**: Balloting was employed to select six LGAs from the three senatorial districts (Northwest, Northeast, and South) of Akwa Ibom State. This approach was chosen because the population was naturally divided into clusters (LGAs) based on the senatorial districts, allowing for a more efficient sampling process. This ensured that all areas of the state were adequately represented.

ii. **Stage 2**: After the LGAs were selected, a stratified random sampling technique was applied to select health workers. The population of health workers was stratified based on their professional roles (for example, medical doctors, nurses, CHEWs) within each of the selected LGAs. Health workers were then randomly selected from each stratum to ensure that all professional categories were proportionately represented in the sample.

After stratifying the population by professional role and LGA, Cochran's (1977) formula for infinite or unknown populations was employed due to the absence of a definitive population figure for health workers in Akwa Ibom State. This approach is widely adopted in health-related social science research when the total population is presumed large or indeterminate. Using a 95% confidence level and a 5% margin of error, the calculated sample size was 384, based on the assumption of maximum population variability ($p = 0.5$), which provides the most conservative and statistically reliable estimate. To account for potential non-responses, 400 questionnaires were distributed and 350 were retrieved. However, challenges such as incomplete response, participant unavailability, time constraints, and limited access to some health facilities posed limitations to data collection. Despite these limitations, valid responses were obtained from 323 health workers across a range of public and private healthcare settings, including missionary hospitals and health centers. Although the final sample size was slightly below the projected 384, the sample used remains statistically sound. A recalculation based on the achieved sample size indicated a modest increase in the margin of error from 5% to approximately 5.4%, which is still within the acceptable threshold for empirical health research (Kadam & Bhaleraom, 2010; Mukti, 2025). Moreover, the sample was adequately distributed across key demographics and professional categories, thereby preserving the representativeness and validity of the findings. Thus, the sample size of 323 is justified as it maintains high statistical power and ensures that the study outcomes are generalizable to the broader population of health workers in the state. The methodological rigor applied in participant selection and the adoption of Cochran's framework further affirm the reliability of the sampling strategy.

3.5. Procedure

The researcher initiated the study by obtaining an introductory letter from the Department of Psychology, University of Uyo. This letter served as proof of studentship and was used to apply for ethical approval, which was granted by the University of Uyo Teaching Hospital. These documents provided the necessary permissions to conduct the study in both private and government-owned hospitals, missionary health institutions, and health centers across Akwa Ibom State.

According to the calculated sample size, 400 copies of the questionnaires were printed, with additional copies prepared to account for any missing or discarded responses. The questionnaires were administered following a brief introduction, where participants were informed of the study's purpose, ethical considerations,

and the importance of their voluntary participation. Two research assistants were recruited and trained on how to distribute and administer the questionnaires. They were instructed on maintaining confidentiality, ensuring adherence to ethical standards, and assisting participants with any questions during the process. The questionnaires were then distributed to the selected participants across the six LGAs. The researchers, along with the research assistants, visited each health facility and administered the questionnaires, ensuring that health workers in the professional roles of interest had the opportunity to participate. The data collection process lasted for four weeks. Among the 400 copies of questionnaires, 150 copies were distributed in Uyo LGA. Specifically, 60 copies were distributed in University of Uyo Teaching Hospital, 50 copies were administered in Premiere Hospital and 40 copies were administered in Namitrend Healthcare Medical & Diagnostic. Of the 150 copies of the questionnaire administered, a total of 131 copies were filled and returned. In Itu, 50 copies of questionnaires were distributed. Specifically, 10 copies were distributed in Primary Health Center Idoro, 20 were administered in Primary Health Center Itam, 8 were administered in Hand Maid Hospital Ibiono Ikot Ambang and 12 were administered in Primary Health Centre Ekritam. Out of these 50 copies of questionnaires, a total of 34 copies were filled in and returned.

In Ikot Ekpene LGA, 50 copies of the questionnaire were distributed. Specifically, 25 copies were administered in General Hospital, 13 in Abasi-nyin Ekeme Clinic located at Sani Ogun, and 12 in Primary Health Centre, Ikot Ekpene. Of the 50 copies distributed, a total of 35 were filled and returned. For Abak LGA, 60 copies of the questionnaire were distributed. Of these, 35 were administered in the Primary Health Centre and 25 in Uduak-Abasi Hospital located in Abak town. Out of the 60 questionnaires distributed, 53 were filled out and returned. In Eket LGA, 50 copies of the questionnaire were distributed, with 25 administered in the Primary Health Centre in Eket town and 25 in Enwongo-Abasi Medical Centre located at 40A Robert Street, Off Oron Road, Etoi. Of these, 35 were filled and returned. For Oron LGA, a total of 40 copies of the questionnaire were distributed. Specifically, 27 were administered in Oron Primary Health Centre and 13 in Esin Ufot Health Centre, also located in Oron. Out of the 40 questionnaires distributed, 35 were filled out and returned. After compilation, a total of 323 copies of questionnaire were used for data analysis on the Statistical Package for the Social Sciences (SPSS) model 25 software.

3.6. Instrumentation

A structured questionnaire was used to collect relevant data for this study. The questionnaire consisted of sections outlined below.

Section A: Socio-demographic variables including age, gender, marital status, religion, number of years of practice, educational qualification, sector (government owned hospital, missionary and registered private hospital/clinic), average monthly income and clinical profession.

Section B Mental Health Stigma: The Stigma-9 Questionnaire (STIG-9), developed by Gierka, Löwe, Murray and Kohlmann, (2018), was used to assess mental health-related stigma. This instrument consists of 9 items designed to measure perceptions and attitudes toward individuals who have received treatment for mental illness. Participants responded using a 4-point Likert scale with the following options: “Disagree” (scored as 0), “Somewhat disagree” (scored as 1), “Somewhat agree” (scored as 2), and “Agree” (scored as 3). Some sample items from the STIG-9 include: Item 2: “I think most people consider someone who has been treated for a mental illness to be dangerous”; Item 3: “I think most people hesitate to do business with someone who has been treated for a mental illness”; and Item 6: “I think most people hesitate to entrust their child with someone who has been treated for a mental illness”.

According to the developers, the STIG-9 has demonstrated good psychometric properties, including a high internal consistency with a Cronbach's alpha of .88, a norm of 12.15, and a standard deviation of 5.57. To ensure

its validity and reliability within the current study's context, a pilot study was conducted to revalidate the instrument for use among healthcare professionals in Akwa Ibom State. The results indicated strong psychometric qualities, with a Cronbach's alpha of .79, reflecting good internal consistency. Furthermore, item-total correlation coefficients ranged between 0.34 and 0.68, indicating an acceptable level of validity of the instrument for the study population.

Section C Health Locus of Control: The Health Locus of Control Scale (HLoC), developed by Wallston, Wallston, Kaplan and Maides, (1976), was used to measure individuals' beliefs about control over their health outcomes, distinguishing between internal and external locus of control. The scale consists of 11 items and employs a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Responses to items 1, 2, 8, 10, and 11 are reverse scored, while items 3, 4, 5, 6, 7, and 9 are scored directly. According to the original developers, the HLoC has demonstrated acceptable psychometric properties, including a reliability coefficient of .72, a norm score of 34.00, and a standard deviation of 6.00.

To confirm its suitability for the present study, a pilot study was conducted among healthcare professionals in Akwa Ibom State. The results indicated strong reliability, with Cronbach's alpha of .82. Additionally, item-total correlation coefficients ranged between 0.36 and 0.76, indicating an acceptable level of validity of the instrument for the study population.

Section D Optimistic Bias: The Revised Life Orientation Test (LOT-R), developed by Scheier, Carver and Bridges, (1994), was used to assess optimistic bias. The LOT-R comprises 10 items, including both Optimism and Pessimism subscales. Specifically, three items measure optimism (Items 1, 4, and 10) and are directly scored, while three items assess pessimism (Items 3, 7, and 9) and are reverse scored; the remaining four items (Items 2, 5, 6, and 8) serve as fillers. Respondents rated their agreement with each item on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." The authors reported an internal consistency (Cronbach's alpha) of .76, a norm score of 14.23, and a standard deviation of 4.0.

To verify its reliability and appropriateness within the context of the present study, a pilot test was conducted among healthcare professionals in Akwa Ibom State. The result indicated a satisfactory internal consistency with a Cronbach's alpha of .71. Furthermore, item-total correlation coefficients ranged between 0.32 and 0.66, indicating an acceptable level of validity of the instrument for the study population.

Section E Treatment Seeking Behaviour: Attitudes Toward Seeking Professional Psychological Help Scale - Short Form (ATSPPH-SF), developed by Rayan, Baker and Fawaz, (2020) was used to measure treatment-seeking behaviour of study participants. The ATSPPH-SF items are rated on a 4-point Likert-type scale (3 = Agree, 0 = Disagree), where items 2, 4, 8, 9, and 10 are reverse scored and others directly scored. The ATSPPH-SF was reported by the developers to have unidimensional structure with Cronbach's alpha values of 0.84, norm of 15.7, and standard deviation of 4.0.

To establish the instrument's applicability and dependability for this study, a pilot study was conducted to revalidate its use with healthcare workers in Akwa Ibom State. The results showed a Cronbach Alpha of .89 indicating reliability of the scale. Additionally, item-total correlation coefficients ranged between 0.34 and 0.86, indicating an acceptable level of validity of the instrument for the study population.

3.7. Method of data analysis

The data collected from health workers in Akwa Ibom State were analyzed using appropriate statistical methods to examine the relationships between mental health stigma, health locus of control, optimistic bias, and treatment-seeking behaviour. The data analysis was conducted in several stages.

Descriptive statistics were first used to summarize the characteristics of the sample. Frequencies and percentages were calculated for categorical variables such as professional roles (for example, physicians,

nurses, pharmacists), while means and standard deviations were computed for continuous variables, including scores for mental health stigma, health locus of control, optimistic bias, and treatment-seeking behaviour. These descriptive statistics provided a clear understanding of the distribution and central tendencies of the variables, offering a foundational overview before conducting further analyses.

Correlation matrix was calculated to illustrate the inter-relationships among the socio-demographic and psychological variables assessed in the study. Simple linear regression was used to test the first three hypotheses. The results from the regression analysis indicated the strength and direction of these relationships, providing insights into how each factor influenced health workers' likelihood of seeking treatment.

Finally, multiple regression analysis was used to test the joint relationships between the predictors - mental health stigma, health locus of control, and optimistic bias - and the dependent variable, treatment-seeking behaviour. This analysis was conducted to examine the extent to which these independent variables could predict treatment-seeking behaviour among health workers in Akwa Ibom State. Through these analyses, the study examined both the individual and combined predictive power of mental health stigma, health locus of control, and optimistic bias on treatment-seeking behaviour, while also assessing how treatment-seeking behaviour varied across different health professions.

3.8. Ethical considerations

Informed consent was obtained from all participants prior to the administration of the questionnaire, ensuring that they fully understand the purpose and procedures of the study. Participants were given the opportunity to ask questions and clarify any concerns they may have. Those who choose not to participate were allowed to withdraw immediately, with no negative consequences, leaving only individuals who are willing to provide genuine and voluntary responses. Moreover, participants were assured that their privacy and confidentiality will be strictly upheld throughout the research process. It was made clear that their responses were not intended for any form of victimization or personal judgment but was utilized solely for academic research purposes. Participants who wished to remain anonymous were not required to disclose identifying information.

In addition, the study employed various measures to foster an atmosphere of openness and trust, such as clearly explaining the goals and scope of the research and ensuring transparency in data handling. Every effort was made to create a relaxed environment, encouraging participants to feel comfortable and cooperative during the process. The information gathered from participants were carefully handled, stored securely, and used exclusively for the purpose of this study. Under no circumstances was any data shared with unauthorized people, and participants' contributions remained confidential, adhering strictly to ethical research standards.

4. Result

Table 1: Summary of Socio-Demographic Characteristics of Participants (n = 323)

Variables	Category	N	(%)	Cumulative (%)	
Gender	**Male**		97	30.00	30.1
Male	Female		225	69.70	**100.00**
	Missing		**1**	**0.30**	
Marital Status	Married		205	63.50	64.10
	Divorced	18	5.60	69.70	
	Single		83	25.70	95.60
	Cohabitation		14	4.30	**100.00**

		Missing		**3**		**0.90**	
Religion	Christianity		312	67.8		97.50	
		Islamic		1		24.3	97.80
		Traditionalist		7		7.9	**100.00**
		Missing		**3**		**0.90**	
Edu. Qualification	Health Tech.		18		5.60		10.10
		HND/BSc.	136		19.90		86.50
		MSc		17		25.70	96.10
		PhD		7		2.60	**100.0**
		Missing		**145**		**44.90**	
Sector	Government-owned		210		65.00		69.10
		Missionary		3		0.90	70.10
		Private		91		28.20	**100.00**
		Missing		**19**		**5.9**	
Monthly Income		70,000 - 99,900		109		33.70	35.60
		100,000 - 199,900	105		32.50		69.90
		200,000 - 299,900	58		18.00		88.90
		300,000 - 399,900	24		7.40		97.70
		400,000 and Above	10		3.10		**100.0**
		Missing		**17**		**5.30**	
LGA		Uyo		131		40.60	42.80
		Itu		17		5.30	48.40
		Ikot Ekpene		35		10.80	59.80
		Abak		53		16.10	77.80
		Eket		35		10.80	88.60
		Oron		35		10.80	**100.00**
		Missing		**17**		**5.30**	
Clinical Profession	Nurse		177		54.80		60.20
		CHEW		70		21.70	84.00
		Social Worker		33		10.20	95.20
		Doctor		14		4.30	100.00
		Total		**294**		**91.00**	
		Missing		**29**		**9.00**	

Note: CHEW = Community Health Extension Workers

The demographic characteristics of the participants, as presented in Table 1, offer a detailed snapshot of their background across several key variables. The study comprised 323 participants, with some variables having slightly missing values. In terms of gender distribution, the majority of the respondents were female,

representing 69.7% of the sample, while males accounted for 30.0%. This indicates a notable gender disparity, with females comprising more than twice the proportion of males.

Marital status data showed that most participants were married (63.5%), followed by singles who constituted 25.7% of the total. A smaller fraction of respondents was divorced (5.6%) or in cohabiting relationships (4.3%), reflecting a sample largely composed of individuals in formal marital unions. On religious affiliation, Christianity was the overwhelmingly dominant religion among respondents, with 97.5% identifying as Christians. Only a few participants indicated other affiliations, including traditional worship (2.2%) and Islam (0.3%). This pattern highlights the strong Christian presence in the area under study.

The educational background of respondents was diverse. A total of 178 respondents (55.1%) provided valid responses on their educational qualification, with the largest proportion (19.9%) holding HND or BSc degrees. This was followed by 25.7% who reported having MSc degrees, while 5.6% possessed qualifications from health technology institutions, and 2.6% had attained a PhD. However, a substantial portion of the data (44.9%) was missing for this variable, limiting a fuller understanding of the entire sample's educational profile.

Employment sector data revealed that a large majority of respondents (65.0%) worked in government-owned facilities. A smaller proportion were employed in the private sector (28.2%), while only 0.9% worked in missionary institutions. This suggests that public health institutions play a central role in healthcare employment within the study area. Regarding monthly income, most respondents earned between ₦70,000 and ₦99,900 (33.7%) or between ₦100,000 and ₦199,900 (32.5%). Others earned ₦200,000 to ₦299,900 (18.0%), ₦300,000 to ₦399,900 (7.4%), or ₦400,000 and above (3.1%), indicating that the majority fell within the lower to middle-income brackets.

Participants were drawn from several local government areas in Akwa Ibom State, with the largest share of Uyo (40.6%). Other areas represented included Abak (16.1%), Ikot Ekpene (10.8%), Eket (10.8%), Oron (10.8%), and Itu (5.3%). This distribution indicates broad coverage across the state, though with a concentration in the state capital, Uyo. In terms of clinical profession, nurses formed the largest professional group among the respondents, comprising 54.8% of the sample. This was followed by CHEWs (21.7%), social workers (10.2%), and doctors (4.3%). This suggests that the majority of the respondents were frontline health workers directly involved in community and hospital-based care. Overall, the sample presents a varied and rich representation of healthcare professionals across different demographics and occupational categories

Table 2 Inter-correlations among the study variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Age	1													
Gender	.09	1												
MS	-.45**	-.09	1											
Religion	.39**	.08	.03	1										
NOYP	.77**	.09	-.48**	.30**	1									
HEQ	.51**	.18	.06	.67**	.37**	1								
Sector	-.29**	.12*	.26**	-.11	-.34**	.03	1							
MI	.58**	-.01	-.47**	-.01	.50**	.14	-.27**	1						
LGA	-.11	.01	.04	.11	-.16**	-.01	.03	-.12**	1					
CP	-.01	-.01	.13*	.26**	-.02	.22**	.01	-.10	.00	1				
MH	-.36**	-.24**	.09	.22**	-.21**	.38**	-.18**	-.19**	.08	-.11	1			
HL	-.01	-.01	-.02	-.06	.01	.16*	-.10	-.10	.17**	.10	.00	1		
OB	-.07	.03	-.02	.01	-.05	.09	.04	-.12*	.20**	-.14**	.10	.10	1	
TB	-.11*	-.05	-.06	-.09	-.10	-.13	-.07	-.08	.11	-.09	.24**	-.07	.22**	1

**. Correlation is significant at the 0.01 level (2 tailed), *Correlation is significant at the 0.05 level (2 tailed), MS = Marital Status, NYOP = Number of Years in Practice, HEQ = Highest Educational Qualification, MI = Monthly Income, LGA = Local Government Area, CP = Clinical Profession, MH = Mental Health Stigma, HL = Health Locus of Control, OB = Optimistic Bias, TB = Treatment-seeking Behaviour

The correlation matrix presented in Table 2 highlights the relationships among socio-demographic and psychological variables among health workers. Age was found to have strong and statistically significant positive correlations with number of years in practice ($r = .77$, $p < .01$), highest educational qualification ($r = .51$, $p < .01$), monthly income ($r = .58$, $p < .01$), and religion ($r = .39$, $p < .01$). This indicates that older health workers tend to have more professional experience, higher educational levels, greater income, and higher levels of religiosity. However, age negatively correlated with marital status ($r = –.45$, $p < .01$), suggesting that younger workers are more likely to be married, which may reflect cultural norms surrounding early marriage.

Gender showed weak but significant correlations. It was positively correlated with the highest educational qualification ($r = .18$, $p < .01$) and sector ($r = .12$, $p < .05$), indicating gender differences in educational attainment and the sectors where individuals work. A negative correlation was observed between gender and mental health stigma ($r = –.24$, $p < .01$), suggesting that females may perceive less stigma related to mental health treatment.

Marital status was significantly and negatively correlated with age ($r = –.45$, $p < .01$), number of years in practice ($r = –.48$, $p < .01$), and monthly income ($r = –.47$, $p < .01$), implying that married individuals are generally younger, less experienced, and earn lower incomes. On the other hand, it was positively correlated with sector ($r = .26$, $p < .01$) and clinical profession ($r = .13$, $p < .05$), indicating that marital status is linked to specific sectors and professions.

Religion demonstrated a strong positive correlation with the highest educational qualification ($r = .67$, $p < .01$), showing that more religious individuals tend to have higher levels of education. It also correlated positively with age ($r = .39$, $p < .01$) and clinical profession ($r = .26$, $p < .01$), suggesting that older and clinical staff are more religious.

The number of years in practice was positively associated with monthly income ($r = .50$, $p < .01$), age ($r = .77$, $p < .01$), and educational qualification ($r = .37$, $p < .01$), consistent with the expectation that experience is linked to both higher income and education. It had negative correlations with marital status ($r = –.48$, $p < .01$) and sector ($r = –.34$, $p < .01$), indicating that fewer years in practice were found among married workers and certain sectors.

Monthly income had strong positive correlations with age, experience, and educational attainment, but negatively correlated with sector ($r = –.27$, $p < .01$), pointing to income disparities between public and private sector workers.

Mental health stigma had significant negative associations with age ($r = –.36$, $p < .01$), gender ($r = –.24$, $p < .01$), and income ($r = –.19$, $p < .01$), indicating that older, female, and higher-earning health workers perceive less stigma. However, stigma was positively associated with religion ($r = .22$, $p < .01$), highest education ($r = .38$, $p < .01$), and clinical profession ($r = .22$, $p < .01$), which could be influenced by cultural or traditional beliefs.

Health locus of control was significantly associated with local government area ($r = .17$, $p < .01$), highest education ($r = .16$, $p < .05$), and income ($r = .10$), suggesting that individuals with higher education and those from certain areas feel more in control of their health outcomes.

Optimistic bias had weak but significant positive correlations with health locus of control ($r = .10$, $p < .01$), local government area ($r = .20$, $p < .01$), and treatment-seeking behaviour ($r = .22$, $p < .01$). It was negatively correlated with monthly income ($r = –.12$, $p < .05$) and clinical profession ($r = –.14$, $p < .01$), indicating that lower earners and non-clinical workers exhibit higher levels of optimistic bias.

Finally, treatment-seeking behaviour showed significant positive correlations with mental health stigma ($r = .24$, $p < .01$), health locus of control ($r = .22$, $p < .01$), and optimistic bias ($r = .22$, $p < .01$), suggesting that individuals with stronger personal control beliefs and optimistic views are more inclined to seek treatment. A

weak negative correlation with age ($r = –.11$, $p < .05$) indicates that older health workers may be slightly less likely to seek treatment.

Table 3: Simple linear regression analysis showing that mental health stigma will predict treatment-seeking behaviour among health workers

Predictors	R	R^2	df	F	β	t	p
Constant	.24	.06	1	20.37		17.79	.000
Mental Health Stigma					.20	4.51	.00

Dependent Variable: Treatment-seeking Behaviour

The result presented in Table 3 shows that mental health stigma yielded a coefficient of correlation (R) of .24 and a coefficient of determination (R^2) of .06. This means that 6% of the variance in treatment-seeking behaviour among health workers in Akwa Ibom State is accounted for by mental health stigma.

Table 3 also indicates that mental health stigma significantly predicted treatment-seeking behaviour independently ($\beta = .20$; $p < .05$). This implies that as mental health stigma increases, treatment-seeking behaviour also increases. Though this may appear counterintuitive, it may suggest that those more aware of mental health stigma are also more likely to take action regarding their mental health needs. Hence, the first hypothesis which stated that mental health stigma will predict treatment-seeking behaviour among health workers in Akwa Ibom State was confirmed. Furthermore, the results revealed that there was a significant prediction of treatment-seeking behaviour by mental health stigma ($F (1, 321) = 20.37$; $p < 0.05$), indicating that the regression model was statistically significant.

Table 4: Simple linear regression analysis showing that health locus of control will predict treatment-seeking behaviour among health workers in Akwa Ibom State

Predictors	R	R^2	df	F	β	t	p
Constant	.07	.01	1	1.67		18.67	.000
Health Locus of Control					-.04	4.29	.20

Dependent Variable: Treatment-seeking Behaviour

The result presented in Table 4.1.4 shows that health locus of control yielded a coefficient of correlation (R) of .07 and a coefficient of determination (R^2) of .01. This means that only 1% of the variance in treatment-seeking behaviour among health workers in Akwa Ibom State is explained by health locus of control.

Table 4.1.4 also indicates that health locus of control did not significantly predict treatment-seeking behaviour independently ($\beta = −.04$; $p > .05$). This implies that belief in external control over one's health does not meaningfully influence the likelihood of seeking treatment among the respondents. Hence, the hypothesis which stated that health locus of control would predict treatment-seeking behaviour among health workers was not confirmed.

Finally, Table 4 revealed that the regression model was not statistically significant ($F (1, 321) = 1.67$; $p > 0.05$), indicating that health locus of control has no significant predictive effect on treatment-seeking behaviour in the study population.

Table 5: Simple linear regression analysis showing that optimistic bias will predict treatment-seeking behaviour among health workers in Akwa Ibom State

Predictors	R	R^2	df	F	β	t	P
Constant	.22	.05	1	16.30		12.98	.00
Optimistic Bias					.21	4.04	.00

Dependent Variable: Treatment-seeking Behaviour

The result presented in Table 4.1.5 shows that optimistic bias yielded a coefficient of correlation (R) of .22 and a coefficient of determination (R^2) of .05. This means that 5% of the variance in treatment-seeking behaviour among health workers in Akwa Ibom State is accounted for by optimistic bias alone.

Result also indicates that optimistic bias significantly predicted treatment-seeking behaviour independently ($\beta = .21$; $p < .05$). This implies that as optimistic bias increases, health workers are more likely to engage in treatment-seeking behaviour. Hence, the hypothesis which stated that optimistic bias will predict treatment-seeking behaviour among health workers was confirmed. Result from the Table further revealed that there was a significant regression model for optimistic bias and treatment-seeking behaviour ($F(1, 321) = 16.30$; $p < 0.05$). This confirms that optimistic bias has a statistically significant influence on treatment-seeking behaviour among health workers in the study area.

Table 6: Multiple linear regression analysis showing mental health stigma, health locus of control and optimism bias jointly predicting treatment-seeking behaviour

Predictors	R	R^2	Df	F	β	t	P
Constant	.33	.11	3	12.78		8.19	.00
Mental Health Stigma					.18	4.23	.00
Health Locus of Control					-.05	-1.75	.08
Optimism Bias					.20	3.89	.00

Dependent Variable: Treatment-seeking Behaviour

The result presented in Table 6 above shows that mental health stigma, health locus of control, and optimism bias yielded a coefficient of multiple correlation (R) of .33 and multiple correlation square (R^2) of .11. This shows that 11% of the variance in treatment-seeking behaviour is accounted for by the combined effects of mental health stigma, health locus of control, and optimism bias.

Results also indicated that mental health stigma has a significant prediction on treatment-seeking behaviour independently ($\beta = .18$; $p < .05$). This implies that mental health stigma predicted treatment-seeking behaviour among health workers. Hence, the first hypothesis which stated that mental health stigma will significantly predict treatment-seeking behaviour among health workers was confirmed.

Results in Table 4.1.6 also revealed that optimism bias has a significant prediction on treatment-seeking behaviour independently ($\beta = .20$; $p < .05$). This implies that optimism bias predicted treatment-seeking behaviour among health workers. Hence, the second hypothesis which stated that optimism bias will significantly predict treatment-seeking behaviour was confirmed.

However, the result indicated that health locus of control did not significantly predict treatment-seeking behaviour independently ($\beta = -.05$; $p > .05$). Hence, the third hypothesis which stated that health locus of control will significantly predict treatment-seeking behaviour was not confirmed.

Finally, the results also indicated that there was a significant joint prediction of mental health stigma, health locus of control, and optimism bias on treatment-seeking behaviour among health workers ($F(3, 319) = 12.78$; $p < 0.05$). This implies that the three variables jointly predict treatment-seeking behaviour among health workers in Akwa Ibom State.

5. Findings and discussion

The main aim of this study was to examine the predictive role of mental health stigma, health locus of control and optimistic bias on treatment-seeking behaviour among health workers in Akwa Ibom State. Findings revealed that mental health stigma was a significant predictor of treatment-seeking behaviour among the respondents. Interestingly, the analysis revealed a positive relationship between stigma and treatment-seeking, which at first glance appears counterintuitive. Conventional understanding suggests that stigma typically discourages individuals from accessing health services due to fear of discrimination, shame, or judgment. However, in this context, it is possible that those health workers who are more conscious of mental health stigma are also more aware of their own mental health needs. As such, they may be more likely to seek help in spite of prevailing negative societal attitudes, possibly due to their training, awareness of professional standards, or personal resilience. This finding suggests a level of internal negotiation or cognitive dissonance, where the recognition of stigma exists alongside a commitment to personal well-being and professional responsibility. Health workers may feel compelled to maintain their mental health not only for personal reasons but also to uphold the standard of care expected in their roles. Therefore, stigma does not always operate as a deterrent; in some cases, it may coexist with a heightened drive to seek support, particularly among those who are more informed or have access to supportive professional networks. These findings support the initial hypothesis that mental health stigma significantly influences treatment-seeking behaviour. However, the direction of this relationship challenges simplistic assumptions about stigma's role and highlights the need for more nuanced understandings, especially within professional populations.

To further interpret these results, psychological theories earlier reviewed such as the HBM and the TPB offer valuable frameworks. The HBM posits that individuals are more likely to take health-related action when they perceive a health issue as serious and believe that taking specific steps will reduce their risk. In this case, health workers who recognize the dangers of unaddressed psychological distress may seek help despite societal stigma, particularly if they believe that treatment will be effective and accessible. TPB, on the other hand, emphasizes that behaviour is shaped by three main factors: individual attitudes, subjective norms, and perceived behavioural control. Applied to this context, if a health worker holds a favourable attitude toward mental health services, feels supported by colleagues or family, and perceives treatment as accessible and manageable, they are more likely to seek help. Conversely, if stigma undermines these beliefs by cultivating negative attitudes, social disapproval, or perceived difficulty in accessing care it can become a powerful barrier. The study's findings may reflect the experience of health workers who, despite such barriers, are able to draw on internal motivation or institutional support to access care.

Broader literature supports the complex role that stigma plays in shaping treatment-seeking behaviour. Corrigan and Watson (2007) argue that mental health stigma significantly undermines individuals' willingness to seek care by fostering fear of labeling and discrimination. Griffiths, Christensen and Jorm (2006) found that anticipated stigma serves as a strong deterrent, often leading individuals to avoid or postpone seeking help. Thornicroft (2016) adds that stigma not only reduces willingness to seek support but also delays the process, sometimes until conditions worsen substantially. Uwakwe and Ogunwale (2019) observed that stigma remains prevalent among healthcare professionals themselves, particularly those with limited psychiatric exposure. Their study highlighted how cultural and religious beliefs contribute to negative perceptions of mental illness,

which in turn create barriers to care even for those trained to provide it. This underscores a critical insight: professional knowledge alone may not be enough to counteract deeply ingrained societal stigmas. More recent evidence by Gureje (2024) and Ede, Okeke and Ogu (2023) emphasizes the importance of environmental factors, including workplace culture and social support. When healthcare workers feel safe, supported, and assured of confidentiality, they are more likely to seek help. On the other hand, environments where mental health issues are stigmatized or trivialized can lead to internalized stigma, discouraging even those who recognize their need for support from taking action.

In conclusion, the findings of this study reaffirm that mental health stigma plays a significant, albeit complex role in influencing whether health workers pursue health treatment. The relationship is not linear or uniform; rather, it is shaped by a combination of personal awareness, professional identity, cultural context, and environmental factors. These insights carry important implications for mental health policy and practice. If stigma is not directly addressed within healthcare institutions, it may continue to hinder treatment-seeking among those entrusted with caring for others. Therefore, interventions must go beyond awareness campaigns to foster a culture in which seeking help is not only accepted but encouraged as a professional standard of self-care and resilience.

Secondly, the findings revealed that health locus of control did not significantly predict treatment-seeking behaviour among the respondents. Although there was an observed negative relationship suggesting that those with stronger external control beliefs might be slightly less likely to seek treatment, the effect was weak and not statistically significant. Consequently, the second hypothesis was not supported by the data. This implies that, in this context, health workers' beliefs about control over their health outcomes did not substantially influence their decisions to seek psychological help.

This outcome may seem surprising in light of prior studies and theoretical models that emphasize the importance of control beliefs in shaping health behaviours. However, the absence of a significant relationship in this case suggests that other factors may play a more dominant role in influencing treatment-seeking among health professionals such as workplace culture, perceived stigma, availability of services, or personal coping strategies. Theoretically, HBM suggests that individuals who believe in their personal control over health outcomes are more likely to take preventive and corrective health actions. From this perspective, health workers with an internal HLC would be expected to actively seek health care when needed. However, the current findings suggest that the mere presence of internal control beliefs may not be sufficient to influence treatment-seeking behaviour, especially if those beliefs are countered by external barriers such as stigma, fear of professional repercussions, or limited institutional support. The TPB also provides insight into these findings. One of its key components perceived behavioural control closely aligns with internal HLC. Those who believe they can influence outcomes through their actions are generally more likely to form intentions and follow through with behaviour. Yet, this study suggests that perceived control alone may not predict actual behaviour among health workers, possibly due to the presence of competing social norms, attitudes, or institutional pressures that override personal beliefs.

Nevertheless, numerous studies show the broader significance of HLC in health behaviour. For instance, Umeh and Nwankwo (2023) demonstrated that diabetic patients in Nigeria with strong internal HLC were more compliant with treatment, underscoring the role of personal agency in health management. Similarly, Wallston et al. (2016), who developed the Multidimensional Health Locus of Control (MHLC) scales, found that individuals with internal HLC were more likely to seek treatment and follow medical advice, whereas those with external beliefs such as attributing outcomes to fate or powerful others were less proactive. Eze (2024) found that internal HLC was associated with greater psychological resilience among health workers, although the relationships were sometimes indirect or affected by work stress. The study noted that professionals who

believed they had control over their health tended to engage in healthier coping strategies. However, such effects may not always translate into observable treatment-seeking behaviours, especially in environments where seeking help remains stigmatized or discouraged. The Commonsense Model of Illness Danger, explored by Leventhal, Meyer and Nerenz, (2016), supports the idea that internal beliefs about control positively influence treatment adherence. Those who believe in their ability to impact health outcomes are more likely to engage with healthcare services and follow through with medical recommendations. These individuals are motivated by the belief that their actions make a difference highlighting the need to foster such beliefs through health education and supportive environments. Further evidence from Aikpitanyi, Okonofua, Ntoimo and Tubeuf, (2022) emphasizes the role of internal control beliefs in maternal health service use among Nigerian women. Their findings align with Social Cognitive Theory, where self-efficacy and personal agency are viewed as critical to health behaviour. In line with this, Adamu (2006) found that Nigerian health workers who held external religious interpretations of health outcomes such as attributing illness to divine will were less likely to seek psychological support, pointing to the potential for cultural beliefs to influence treatment-seeking behaviours.

In conclusion, although the second hypothesis was not supported, the broader literature continues to recognize the importance of HLC in shaping health behaviour. The lack of a significant finding in this study does not negate the relevance of locus of control but rather suggests that among health workers, other contextual and environmental factors may have a stronger influence on treatment-seeking decisions. The results highlight the need for holistic interventions that address both internal beliefs and external realities such as organizational culture, access to care, and health literacy to effectively promote treatment-seeking among healthcare professionals.

In addition, findings revealed that optimistic bias was indeed a significant predictor of treatment-seeking behaviour. Interestingly, the nature of this relationship was positive, indicating that health workers who exhibited higher levels of optimistic bias were more likely to engage in treatment-seeking behaviour. This result supports the hypothesis, confirming that optimistic bias contributes meaningfully to explaining variation in treatment-seeking behaviour among the sample studied.

This finding offers an important insight into how psychological dispositions, such as optimism about personal health outcomes, may function within the professional context of healthcare workers. While optimistic bias is often associated with underestimation of personal health risks which can delay or prevent preventive health behaviour, this study presents a more nuanced view. Among health workers, optimistic bias may reflect confidence in recovery and the effectiveness of mental health interventions, rather than a denial of vulnerability. This interpretation can be contextualized within established theoretical frameworks. For instance, the HBM suggests that individuals take health-related action when they believe they are at risk and that a course of action will be effective in reducing that risk. Optimistic health workers may not necessarily deny the possibility of mental health challenges but may instead possess stronger beliefs in the benefits and success of seeking treatment, motivating their treatment-seeking actions. Similarly, the TPB posits that behaviour is influenced by attitudes, perceived social norms, and perceived behavioural control. Optimistic individuals may hold positive attitudes toward mental health services and may perceive seeking treatment as manageable or even professionally responsible. As such, their optimism does not deter them from treatment-seeking; instead, it may facilitate it by enhancing self-efficacy and reinforcing hopeful outcomes.

Although prior research has often linked optimistic bias with reduced treatment-seeking, especially in the general population, the current findings diverge. For example, Klein and Helweg-Larsen (2005) discussed how individuals with high optimistic bias may delay seeking care due to unrealistic beliefs about immunity to illness. However, in the context of this study, optimism may not be rooted in denial but in professional awareness, self-

confidence, or even internalized norms about self-care among health providers. Within the Nigerian context, while research directly examining optimistic bias among health workers is sparse, related patterns have been noted. Gureje (2024) observed that many Nigerian healthcare professionals underutilize mental health services despite high job-related stress. He attributed part of this to perceived resilience or invulnerability as possible manifestation of optimistic bias. Nonetheless, the current findings suggest that a more adaptive form of optimism may be at play that encourages treatment-promoting behaviours rather than hindering them.

Ultimately, these results challenge simplistic interpretations of optimistic bias as uniformly detrimental to treatment-seeking behaviour. They point instead to the potential for constructive optimism to play a motivating role in professional contexts, particularly when individuals believe that seeking care aligns with both personal well-being and professional responsibility. In conclusion, the third hypothesis was supported. Optimistic bias significantly predicted treatment-seeking behaviour among health workers in Akwa Ibom State. While the positive direction of the relationship was unexpected based on some prior research, it offers a valuable perspective on how psychological traits may operate differently in professional populations. These findings underscore the importance of exploring how cognitive biases manifest in healthcare workers and suggest that healthy optimism, when informed by professional knowledge and access to care, may in fact promote rather than hinder engagement with mental health services.

Lastly, the findings from the analysis further confirmed that the three variables, when considered together, significantly predicted treatment-seeking behaviour among the health workers. This suggests that mental health stigma, beliefs about health control, and cognitive biases around personal risk perception each play a role albeit to varying degrees in shaping how and whether health professionals pursue psychological care. The overall regression model was statistically significant, indicating that these variables, taken collectively, provide a meaningful explanation of differences in treatment-seeking behaviour within the sample. This reveals the need for a multi-dimensional understanding of the psychological factors that shape treatment-seeking, especially within professional populations tasked with delivering care. Importantly, it highlights that even commonly misunderstood constructs like stigma and optimism can have adaptive effects, depending on the broader social and occupational context. These findings suggest several practical implications. Interventions aimed at improving mental health service utilization among health workers should not only focus on reducing stigma but also on reframing optimism and enhancing mental health literacy. Encouraging professionals to maintain a hopeful but realistic view of mental health support, while promoting a work culture that validates vulnerability and treatment-seeking, may yield better outcomes for individuals and the healthcare system.

6. Implications of the Findings

The findings of this study have important implications for mental health interventions among healthcare professionals. The discovery that mental health stigma positively predicts treatment-seeking behaviour suggests that awareness campaigns should not only aim to reduce stigma but also harness it as a tool for fostering professional responsibility and self-awareness. Institutions can develop programs that encourage open discussions about mental health, emphasizing that seeking help is part of ethical and effective healthcare practice.

The positive role of optimistic bias implies that psychological training or wellness programs for health workers can be tailored to reinforce constructive optimism. By promoting a mindset that combines hope with proactive health behaviours, institutions may increase treatment-seeking without relying solely on fear-based messaging or risk awareness.

The non-significant impact of health locus of control suggests that internal or external beliefs about health outcomes may be less influential in structured professional environments. Therefore, organizational culture,

institutional policies, and peer norms may play a more central role in influencing health workers' behaviour. As such, workplace mental health strategies should focus on creating supportive environments rather than only targeting individual belief systems.

7. Contribution of the study

This study makes several important contributions to the understanding of treatment-seeking behaviour among health workers, particularly within the Nigerian healthcare context. First, it provides empirical insight into the complex role of mental health stigma in treatment-seeking behaviour. Contrary to prevailing assumptions in literature that stigma universally deter individuals from seeking help, the findings revealed that awareness of mental health stigma among health workers in Akwa Ibom State positively predicted treatment-seeking behaviour. This challenges traditional stigma frameworks and introduces a detailed understanding that in professional healthcare contexts, heightened stigma awareness may prompt self-reflection, professional responsibility, and proactive engagement with mental health services. This represents a context-specific shift in stigma theory, suggesting that stigma may not always function as a barrier but could sometimes motivate treatment-seeking under certain social or professional conditions.

Secondly, the study contributes to the re-evaluation of optimistic bias in relation to health behaviour. Rather than leading to complacency, optimistic bias among health workers was found to positively influence treatment-seeking. This suggests that optimistic thinking can co-exist with responsible health actions, especially when framed as proactive optimism. It adds depth to the psychological literature by demonstrating that optimistic bias, typically associated with denial and inaction, may under certain conditions encourage positive health behaviours among professionals.

Thirdly, the research explored the limited role of health locus of control (HLOC) in predicting treatment-seeking. While many psychological models position locus of control as a major determinant of health behaviours, this study found HLOC to have no significant independent predictive power in this sample. This insight underscores the need to reconsider the weight of control beliefs in structured professional environments where behaviour may be more influenced by systemic norms, ethics, or role expectations than by personal control beliefs.

8. Conclusion

This study examined how mental health stigma, health locus of control, and optimistic bias predict treatment-seeking behaviour among health workers in Akwa Ibom State, Nigeria. With rising mental health concerns in healthcare settings, understanding the psychological factors influencing treatment-seeking is crucial.

Findings showed that mental health stigma positively predicted treatment-seeking behaviour. Contrary to common assumptions, awareness of stigma may prompt self-reflection or a sense of professional duty, encouraging health workers to seek help despite potential judgment. Optimistic bias also positively predicted treatment-seeking, suggesting that belief in favorable outcomes may be linked to proactive health behaviours rather than denial of risk.

Health locus of control, however, did not significantly predict treatment-seeking when examined alone. While there was a slight negative trend for those with an external locus of control, it was not statistically meaningful—possibly due to professional expectations or systemic influences overriding personal beliefs.

Collectively, the three variables predicted treatment-seeking, with stigma and optimistic bias showing stronger effects. These results highlight the complex interplay of personal beliefs in health decisions and the need for multidimensional approaches. The study shows the importance of developing institutional policies that

promote mental health care for health workers, addressing both individual psychology and systemic support mechanisms. Based on these findings, the following are recommended.

i. First, since mental health stigma was found to positively predict treatment-seeking, awareness initiatives should not only focus on reducing stigma but also reinforce the idea that seeking mental health care is a sign of professional responsibility and self-awareness. Workshops and peer-led discussions can be organized to encourage openness and normalize treatment-seeking within the healthcare profession.

ii. Secondly, institutions should integrate positive psychological strategies into employee wellness programs, capitalizing on the observed effect of optimistic bias. Encouraging a balanced, hopeful outlook that motivates proactive health behaviours can help foster a culture where health workers feel empowered to care for their mental well-being. This can be achieved through resilience training, mental fitness programs, and positive psychology-based interventions.

iii. Additionally, since health locus of control did not significantly influence treatment-seeking behaviour independently, policy makers and health administrators should prioritize system-level interventions over individual-level belief modification. Institutional policies should make mental health services easily accessible, confidential, and stigma-free, ensuring that systemic barriers do not hinder those willing to seek help.

iv. Finally, future research should explore contextual factors that may moderate or enhance the influence of psychological predictors on treatment-seeking behaviour. These include organizational culture, workload, peer support, and confidentiality of care.

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