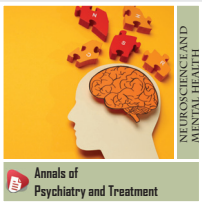
Peertechz



MEDICAL GROUP

ANNALS OF Psychiatry and Treatment OPEN ACCESS JOURNAL

ISSN: 2640-8031 DOI: https://dx.doi.org/10.17352/apt

Research Article

Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey

Abdulrazaq Yusuf Ahmed[1]* and Abdirahman Yusuf Ahmed[2]

[1]RUGSAN Consultancies & Frontier for Health Systems Development, Federal Ministry of Health & Human Services, Benadir University, Mogadishu, Somalia

[2]RUGSAN Consultancies & Frontier for Health Systems Development, DarulHikma University, Mogadishu, Somalia

Received: 06 November, 2025
Accepted: 11 November, 2025
Published: 12 November, 2025

***Corresponding author:** Dr. Abdulrazaq Yusuf Ahmed, MBChB, MD, MPH, MSc(HM), PhD, FRSPH, FRSTMH, FeSMA, RUGSAN Consultancies & Frontier for Health Systems Development, Federal Ministry of Health & Human Services, Benadir University, Mogadishu, Somalia, E-mail: drjalaal@hotmail.com; drjalaal@rugsan.org

Keywords: Mental health services; Health insurance; Insurance literacy; Stigma; Andersen model; Somalia; Mogadishu

Copyright License: © 2025 Abdulrazaq YA, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

https://www.neuroscigroup.us

Check for updates

Abstract

Background: The provision of health insurance within fragile, conflict-affected settings such as Somalia does not automatically guarantee improved access to essential mental healthcare services. Despite the proliferation of insurance products, especially Islamic Takaful schemes, the translation of insurance coverage into tangible service utilisation remains hindered by multifaceted barriers. This study investigates the determinants of formal mental health service use among salaried employees in Mogadishu, with a particular focus on the roles of insurance enrolment, insurance literacy, and stigma within this urban workforce.

Methods: Employing a quantitative, cross-sectional design, data were collected from 385 full-time government and private sector employees in Mogadishu.

Stratified random sampling ensured representation across employment sectors. The survey incorporated an adapted Andersen Behavioural Model of Health Services Use to assess sociodemographic characteristics, perceived stigma, insurance status, awareness of mental health benefits (as a proxy for insurance literacy), and psychological distress. Multivariate logistic regression analysis was conducted to identify independent predictors of formal mental health service utilisation.

Results: Among respondents, 35.1% reported significant psychological distress, yet only 15.1% accessed formal mental health services. High perceived stigma emerged as a substantial deterrent to service use (OR = 0.45), and mere enrolment in insurance schemes did not correlate with increased utilisation. Notably, insured individuals who were aware that their insurance covered mental health services demonstrated a markedly higher likelihood of seeking formal care (OR = 3.50). Tertiary education also positively influenced utilisation rates (OR = 2.10).

Conclusions: The findings underscore that offering insurance alone is insufficient to enhance mental health service access in Somalia; clarity and communication regarding benefits are paramount. Policy interventions should mandate transparent coverage for mental health, strengthen insurance literacy, and implement stigma reduction strategies to foster uptake of evidence-based care and improve population mental health outcomes.

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066

Abbreviations

AMR: Antimicrobial Resistance; DALY: Disability Adjusted Life Year; EPHS: Essential Package of Health Services; FCAS: Fragile and Conflict Affected Settings; HIL: Health Insurance Literacy; OR: Odds Ratio; PTSD: Post Traumatic Stress Disorder; UHC: Universal Health Coverage; YLD: Years Lived with Disability

Introduction

Somalia's healthcare system is a complex and multifaceted entity, significantly influenced by decades of ongoing fragility, frequent conflicts, and a heavy reliance on external donors. These factors have collectively contributed to substantial challenges in ensuring the equitable delivery of healthcare services, with mental health services being particularly affected. The country's health infrastructure is predominantly characterised by a large, largely unregulated private sector that operates in tandem with under-resourced public facilities. This situation is further exacerbated by inadequate regulatory oversight and limited institutional capacity, which hinder the effective management and delivery of healthcare services.

Epidemiological studies consistently reveal a substantial burden of mental and substance use disorders within the Somali population. These studies highlight high prevalence rates of trauma-related conditions, depression, and anxiety, underscoring the urgent need for comprehensive mental health services. Despite this clear and pressing need, the formal utilisation of mental health services remains notably low. Many individuals opt to seek support from traditional or spiritual healers, a practice deeply rooted in socio-cultural norms, stigma, and a pervasive mistrust of formal healthcare systems.

In recent years, the introduction of private Takaful (Islamic insurance) products has sparked optimism regarding the potential to mitigate catastrophic out-of-pocket healthcare expenditures. These insurance mechanisms are seen as a means to facilitate more equitable access to health services, including those related to mental health. However, the expected benefits of expanding insurance coverage are often undermined by persistent non-financial barriers. These barriers include stigma, low institutional trust, and limited insurance literacy, collectively contributing to what is termed the "insurance paradox." This paradox highlights that merely possessing insurance does not necessarily lead to increased service utilisation, particularly for stigmatised conditions such as mental illnesss.

This study was conducted to investigate the factors influencing the formal utilisation of mental health services among salaried employees in Mogadishu, a key demographic for the growth of the insurance market. Utilising the Andersen Behavioural Model of Health Services Use as a framework, the research aimed to elucidate the complex interplay between predisposing, enabling, and need factors. Special emphasis was placed on the roles of stigma, insurance enrolment, and awareness of mental health benefits, which serve as proxies for insurance literacy and transparency. The study posited three central hypotheses: (1) high perceived stigma would independently suppress the utilisation of formal mental health services; (2) insurance enrolment alone would be insufficient to significantly increase utilisation rates; and (3) awareness of mental health coverage would emerge as a strong, positive predictor of formal help-seeking behaviour.

Somalia's healthcare system presents a highly intricate and layered landscape, shaped by its protracted history of instability, recurrent conflicts, and profound dependence on international aid. Over the past several decades, these enduring challenges have collectively undermined efforts to establish a robust and equitable healthcare framework, with mental health services suffering disproportionately as a result. The system is notably fragmented, comprising a dominant, largely unregulated private sector that coexists with underfunded and overstretched public health facilities. This fragmentation is further compounded by insufficient regulatory mechanisms and constrained institutional capacity, impeding the effective governance, coordination, and delivery of healthcare services across the country.

The epidemiological profile of Somalia is marked by a pronounced burden of mental and substance use disorders. Research consistently points to elevated prevalence rates of trauma-related conditions, depression, anxiety, and other psychiatric conditions morbidities, reflecting both the legacy of conflict and ongoing societal stressors.

Despite the magnitude of these public health challenges, the formal utilisation of mental health services remains alarmingly low. A significant proportion of individuals experiencing psychological distress, continue to seek assistance from traditional or spiritual healers rather than qualified health professionals. This tendency is deeply embedded in socio-cultural traditions, entrenched stigma surrounding mental illness, and widespread scepticism regarding the efficacy and trustworthiness of formal healthcare institutions.

In response to these challenges, the recent emergence and proliferation of private Takaful (Islamic insurance) products have generated cautious optimism among policymakers and stakeholders. These insurance schemes are designed to alleviate the financial burden associated with healthcare, particularly by reducing catastrophic out-of-pocket expenditures. Theoretically, such mechanisms could pave the way for more equitable access to a broad spectrum of health services, including those related to mental health, which have historically been neglected. However, the anticipated improvements in service utilisation have not materialised as expected. The persistence of non-financial barriers—such as pervasive stigma, limited trust in institutional actors, and inadequate insurance literacy—has given rise to the so-called "insurance paradox." This phenomenon highlights a critical disconnect: the mere possession of health insurance does not automatically translate into increased utilisation of services, especially for conditions that remain highly stigmatised, such as mental illness.

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066

Against this backdrop, the present study seeks to provide a nuanced understanding of the determinants influencing the formal utilisation of mental health services among salaried employees in Mogadishu, a demographic group considered pivotal to the development and expansion of the insurance market in Somalia. Grounded in the Andersen Behavioural Model of Health Services Use, the research systematically examines the interplay between predisposing factors (e.g., sociodemographics and stigma), enabling factors (e.g., income, insurance enrolment, and insurance literacy), and need factors (e.g., psychological distress). Particular attention is devoted to the roles of perceived stigma, the mere enrolment in insurance schemes, and the degree of awareness regarding mental health coverage—each serving as critical proxies for insurance literacy and transparency within the system.

The study is guided by three principal hypotheses. First, it posits that high levels of perceived stigma will independently act as a significant deterrent to the utilisation of formal mental health services, irrespective of other enabling factors. Second, it hypothesises that simply enrolling in an insurance scheme will not suffice to substantially increase service utilisation rates, highlighting the limitations of coverage in the absence of effective communication and understanding of benefits. Third, it suggests that awareness of mental health coverage will be a robust, positive predictor of formal help-seeking behaviour, underscoring the importance of insurance literacy and transparent benefit structures in overcoming barriers to care. By systematically investigating these dimensions, the study aims to generate actionable insights that can inform policy interventions, promote equitable access to mental health services, and ultimately contribute to improved health outcomes for the Somali population.

Table 1: **Socio-demographic characteristics (*N* = 385).**

Characteristic	Category	n	%
Employment sector	Government	212	55.1
Employment sector	Private	173	44.9
Gender	Male	231	60.0
Gender	Female	154	40.0
Age group (years)	18 29	110	28.6
Age group (years)	30 39	155	40.2
Age group (years)	≥40	120	31.2
Highest education	Primary/Secondary	120	31.2
Highest education	Technical/Diploma	91	23.6
Highest education	Tertiary (University)	174	45.2
Income bracket	Low	77	20.0
Income bracket	Middle	231	60.0
Income bracket	High	77	20.0

Table 2: Logistic regression: determinants of formal mental health service utilisation (*N* = 385).

Predictor (reference)	B	SE	Wald	df	*p* value	OR	95% CI (Lower Upper)
Education (tertiary *vs.* lower)	0.74	0.25	8.76	1	.003	2.10	1.50 2.90
Income (high *vs.* low/mid)	0.41	0.29	2.01	1	.156	1.51	0.85 2.68
Perceived stigma (high *vs.* low)	−0.80	0.28	8.16	1	.004	0.45	0.25 0.75
Insurance enrolment (yes *vs.* no)	0.35	0.24	2.13	1	.145	1.42	0.89 2.27
Awareness of mental health coverage (aware *vs.* unaware)	1.25	0.35	12.74	1	<.001	3.50	1.80 6.80

Methods

Study design, population, and sampling

This research was conducted as a quantitative, cross-sectional survey targeting full-time employees employed within government ministries and private organisations located in Mogadishu, the capital and primary urban centre of Somalia. To achieve a representative sample across various employment sectors, a stratified random sampling methodology was implemented. The strata were defined based on the employees' affiliation with either the public or private sector. The sample size was calculated using Cochran's formula, which is specifically designed for cross-sectional studies. The parameters used in this calculation included a 95% confidence level, a margin of error of 5%, and a proportion estimate (p) of 0.5. These parameters collectively determined a target sample size of 385 participants (Tables 1,2).

Instrument development and variables

Data collection was facilitated through the use of a structured questionnaire. This instrument was meticulously translated from English to Somali to ensure linguistic accessibility and cultural adaptation. Before its final deployment, the questionnaire underwent rigorous pilot testing to ascertain its contextual relevance and comprehensibility among the target population. The questionnaire was conceptually grounded in the Andersen Behavioural Model and encompassed a comprehensive array of variables:

Predisposing factors: These included sociodemographic data such as age, gender, and education level. Additionally, a multi-item perceived stigma index, specifically adapted for the Somali context, was employed. This index utilised a five-point agreement scale, with responses summed to generate a total score. Higher scores were indicative of greater perceived stigma. For analytical purposes, these scores were dichotomised at the sample median into categories of high versus low stigma. A detailed summary of the item wording and coding is available in Supplementary Table S1.

Enabling factors: This category included household income brackets and insurance enrolment status, which was recorded as either yes or no. For respondents who were insured, further inquiry was made regarding their awareness of whether their insurance plan included mental health coverage. This awareness was classified as either aware, unaware, or unsure.

Need Factors: Self-reported experiences of moderate to severe anxiety and/or depression within the preceding 12 months were operationalised as indicators of psychological distress.

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066

Outcome: The primary outcome measure was the utilisation of formal mental health services. This was defined as having consulted a qualified clinician at a health facility for mental health concerns, as opposed to not having utilised such services.

Statistical analysis

Descriptive statistics were employed to provide a comprehensive summary of the characteristics of the study population. Bivariate analyses, specifically chi-squared tests, were conducted to examine associations between categorical variables and the utilisation of mental health services. To ascertain independent predictors of formal mental health service use, multivariate logistic regression models were fitted. These models estimated adjusted odds ratios (ORs) along with 95% confidence intervals (CIs). Additionally, a secondary regression model was employed to restrict the analysis to insured respondents, with a focus on evaluating the impact of benefit awareness. Statistical significance was established at a p-value of less than 0.05. All statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS).

Ethical considerations

The study protocol underwent thorough review and approval by the Federal Ministry of Health, Somalia Research & Ethics Board, ensuring adherence to ethical standards. Participation in the study was entirely voluntary, with all respondents providing written informed consent. To uphold confidentiality and privacy, data were anonymised before analysis.

Results

Sample demographics

The study involved a total of 385 respondents, with a nearly equal distribution between the public and private sectors: 55.1% were employed in the public sector, while 44.9% worked in the private sector. The sample was predominantly male, comprising 60.0% of the respondents. A significant portion, 45.2%, had attained a tertiary level of education. Economically, the majority, 60.0%, identified themselves as belonging to the middle income bracket, which is indicative of the socio-economic profile of salaried urban workers in Mogadishu (refer to Table 1 for detailed demographic data).

Prevalence of psychological distress and service utilisation patterns

A notable 35.1% of the sample reported experiencing moderate to severe psychological distress within the past year. Despite this prevalence, only 15.1% of respondents sought formal mental health services to address their concerns. In contrast, 24.9% opted for assistance from traditional or spiritual providers, highlighting the enduring influence of cultural norms and the limited reach of biomedical mental health services. These findings underscore a significant treatment gap and suggest the presence of strong socio-cultural and informational barriers that hinder access to evidence-based care.

Insurance enrolment and literacy

The study population exhibited relatively high insurance coverage, with 65.2% (251 out of 385) indicating current enrolment in a health insurance scheme. However, when questioned about the specifics of their coverage, only a minority could confidently confirm whether their insurance plan included mental health benefits, with uncertainty and lack of clarity being prevalent. Importantly, statistical analyses demonstrated that awareness of mental health coverage, rather than mere insurance enrolment, was significantly associated with higher levels of formal service utilisation.

Multivariate analysis of determinants

The multivariate logistic regression models identified several key determinants of formal mental health service use. Tertiary education was linked to increased odds of accessing formal care, with an odds ratio (OR) of 2.10 (95% confidence interval: 1.50 – 2.90). High levels of perceived stigma independently and substantially reduced the likelihood of formal service utilisation, with an OR of 0.45 (95% CI: 0.25 – 0.75), even after adjusting for other factors. While insurance enrolment alone was not a statistically significant predictor, among insured respondents, awareness that their plan covered mental health tripled the odds of utilising formal services, with an OR of 3.50 (95% CI: 1.80 – 6.80). This underscores the critical role of insurance literacy (refer to Table 2 for detailed results). A visual summary of adjusted effects is provided in Supplementary Figure S1 (forest plot).

Discussion

Stigma as a persistent demand side barrier

The findings of this study reinforce the centrality of stigma as a formidable and independent barrier to the uptake of formal mental health services, even within a relatively privileged, urban, and educated workforce. Anticipated social disgrace (ceeb) and prevailing moral interpretations of mental illness continue to suppress demand for biomedical care, diverting individuals towards traditional or spiritual providers. This "demand side brake" persists despite improvements in educational attainment and insurance coverage, indicating that structural interventions alone are insufficient to overcome entrenched socio-cultural obstacles.

Gender considerations. In our adjusted analyses, gender did not emerge as an independent predictor of formal care utilisation. Nonetheless, gendered stigma and employment conditions (e.g., workplace norms, role expectations) plausibly shape help-seeking pathways in MoGadishu; future studies should incorporate gender stratified analyses to better characterise these dynamics.

The insurance paradox and the role of literacy

The results elucidate the so-called "insurance paradox": expanding health insurance coverage without ensuring clarity of benefits and robust insurance literacy does not guarantee improved access to mental healthcare. The lack of transparent,

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066

universally communicated mental health benefits within nascent Takaful schemes creates information asymmetries and perpetuates uncertainty, thereby blunting the protective function of insurance. The observed threefold increase in service utilisation among those aware of their mental health coverage starkly quantifies the "cost of confusion" and highlights the necessity of benefit transparency and consumer education.

Governance and Stewardship in Fragile and Conflict-Affected Settings (FCAS)

The study's findings point to a regulatory lag in the stewardship of mental health financing and insurance markets in Somalia. While mental health has been nominally integrated into national policy frameworks, the absence of mandated, standardised mental health benefits and clear disclosure requirements in private insurance products undermines effective implementation. In fragile and conflict-affected settings, effective state stewardship is not antithetical to market development; rather, it is essential for the realisation of efficient, equitable, and sustainable health financing arrangements, particularly for conditions burdened by stigma [1-20].

Policy implications

Drawing on the empirical findings, several policy recommendations are warranted:

- **Mandate transparent mental health coverage:** Regulatory authorities should require all licensed insurers to offer a basic, clearly articulated package of mental health benefits, including explicit information on covered services, financial limits, referral pathways, and cost-sharing arrangements. These disclosures should be prominently displayed in both Somali and English, and communicated across multiple platforms.

- **Strengthen health insurance literacy:** Co-designed workplace and community-based health insurance literacy (HIL) campaigns involving insurers, employers, and the Ministry of Health are needed to educate beneficiaries about entitlements, preauthorisation procedures, and confidential pathways for seeking care.

- **Integrate financing reforms with anti-stigma programming:** Policy reforms should be complemented by sustained, culturally sensitive anti-stigma interventions, leveraging religious and civic leaders to normalise help-seeking and counteract harmful stereotypes associated with mental illness.

- **Enhance provider networks and service quality:** Contracted facilities must be supported to deliver a minimum package of evidence-based mental health services comprising assessment, counselling or psychotherapy, medication management, and referral mechanisms underpinned by robust confidentiality safeguards.

Strengths and limitations

This study's strengths include its theory-driven approach, employing the Andersen Behavioural Model to systematically examine determinants of service utilisation, and its balanced sampling across public and private employment sectors. The separation of insurance enrolment from benefit awareness provides novel insights into the mediating role of insurance literacy. Nonetheless, several limitations must be acknowledged: the cross-sectional design precludes causal inference; reliance on self-reported measures may introduce response and social desirability bias; and the focus on formal sector, urban employees limits the generalisability of findings to rural, informal, or displaced populations. Patterns of insurance literacy and stigma may differ substantially among informal sector workers, rural residents, and displaced populations, which should be examined in future studies using tailored sampling frames and context-specific measurement tools. Future research should also incorporate validated stigma measurement tools, objective verification of service use, gender disaggregated analyses (in accordance with SAGER guidelines), and longitudinal designs to assess the impact of policy reforms over time.

Stigma as a persistent demand side barrier

The present study provides robust empirical evidence that stigma remains a deeply entrenched and independent barrier to the utilisation of formal mental health services, even among a relatively privileged, urban, and educated segment of the workforce in Mogadishu. The persistence of anticipated social disgrace (ceeb) and prevailing moral or religious attributions of mental illness continues to exert a powerful suppressive effect on the demand for biomedical care. Despite notable improvements in educational attainment and the expansion of health insurance coverage, these advances have not been sufficient to overcome the cultural and social norms that favour recourse to traditional or spiritual providers over formal mental health services. This phenomenon can be characterised as a "demand side brake," wherein socio-cultural obstacles nullify the potential benefits of structural or economic interventions. The findings highlight the inadequacy of supply-side measures alone and underscore the necessity for culturally sensitive anti-stigma interventions that directly address the social meanings and misconceptions surrounding mental illness within Somali society.

Gender considerations in help-seeking behaviour

While adjusted statistical analyses within this study did not identify gender as an independent predictor of formal mental health service utilisation, it is important to consider the nuanced ways in which gendered stigma and employment contexts may influence help-seeking pathways. In Mogadishu, gendered expectations, workplace norms, and role obligations plausibly shape both the willingness and ability to seek care, potentially leading to underreporting of distress or reluctance to access formal services among certain groups. The absence of a statistically significant gender effect in this sample may reflect limitations in measurement sensitivity or the sample's

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066

specific demographic characteristics, rather than a true lack of gendered dynamics. Future research should prioritise gender stratified analyses, using validated tools and qualitative methods, to more thoroughly characterise these dynamics and inform gender responsive policy and intervention design.

The insurance paradox and the role of literacy

The study's findings shed light on the so-called "insurance paradox", whereby the expansion of health insurance coverage, in the absence of transparent benefit structures and robust insurance literacy, does not automatically translate into improved access to mental health.

Services. The lack of clear, universally communicated information about mental health benefits within emerging Takaful insurance schemes has given rise to significant information asymmetries and persistent uncertainty among beneficiaries. This confusion undermines the protective intent of insurance, as many individuals remain unaware of their entitlements or the procedures for accessing mental health care. The observed threefold increase in formal service utilisation among those who were aware that their plan included mental health coverage starkly illustrates the "cost of confusion", quantifying the tangible impact of information deficits. These findings underscore the imperative for insurers and regulators to prioritise benefit transparency and invest in consumer education initiatives that demystify insurance processes and entitlements.

Governance and Stewardship in Fragile and Conflict-Affected Settings (FCAS)

The study draws attention to a critical regulatory lag in the stewardship of mental health financing and insurance markets in Somalia, a context marked by fragility and conflict. While mental health has been nominally included within national policy frameworks, the absence of mandated, standardised mental health benefit packages and clear disclosure requirements within private insurance products undermines effective implementation and access. In such settings, effective state stewardship should not be viewed as antithetical to market development; rather, it is essential for achieving efficient, equitable, and sustainable health financing arrangements, particularly for conditions burdened by stigma and marginalisation. Regulatory authorities must play a proactive role in setting minimum standards, enforcing transparency, and ensuring that both public and private sector actors are accountable for delivering comprehensive and accessible mental health coverage.

Policy implications

Drawing on the empirical findings of this study, several policy recommendations are warranted to address the identified barriers and advance mental health service utilisation:

- **Mandate transparent mental health coverage:** Regulatory authorities should require all licensed insurers to provide a basic, clearly articulated package of mental health benefits. These packages should include explicit information on covered services, financial limits, referral pathways, and cost-sharing arrangements. Such disclosures must be prominently displayed in both Somali and English and communicated through multiple channels, including digital, print, and community platforms, to ensure broad accessibility.

- **Strengthen health insurance literacy:** The design and implementation of workplace and community-based health insurance literacy (HIL) campaigns, co-developed by insurers, employers, and the Ministry of Health, are essential. These initiatives should focus on educating beneficiaries about their entitlements, preauthorisation procedures, and confidential pathways for seeking care, using culturally appropriate and accessible materials.

- **Integrate financing reforms with anti-stigma programming:** Policy reforms aimed at expanding insurance coverage and clarifying benefits should be complemented by sustained, culturally sensitive anti-stigma interventions. These interventions should leverage the influence of religious and civic leaders to normalise help-seeking behaviours and actively counteract harmful stereotypes and misconceptions associated with mental illness.

- **Enhance provider networks and service quality:** Contracted health facilities must be supported and incentivised to deliver a minimum package of evidence-based mental health services, including comprehensive assessment, counselling or psychotherapy, medication management, and referral mechanisms. These services should be underpinned by robust confidentiality safeguards to protect patient privacy and promote trust in formal care systems.

Strengths and limitations

A notable strength of this study lies in its theory-driven approach, employing the Andersen Behavioural Model to systematically examine determinants of mental health service utilisation. The sampling strategy, which achieved balanced representation across public and private employment sectors, enhances the internal validity of the findings. Furthermore, the analytical distinction between insurance enrolment and benefit awareness provides novel insights into the mediating role of insurance literacy, a factor often overlooked in previous research.

However, several limitations must be acknowledged. The cross-sectional design of the study precludes causal inference, limiting the ability to determine the directionality of observed relationships. The reliance on self-reported measures introduces the possibility of response and social desirability bias, potentially affecting the accuracy of reported service use and attitudes. Additionally, the focus on the formal sector, urban employees restricts the generalisability of findings to rural, informal, or displaced populations—groups that may experience markedly different patterns of insurance literacy, stigma, and service access.

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066

Future research should address these gaps by employing tailored sampling frames, context-specific measurement tools, and validated stigma assessment instruments. Incorporating objective verification of service utilisation, gender disaggregated analyses (in accordance with SAGER guidelines), and longitudinal study designs will be critical for evaluating the impact of policy reforms over time and ensuring that interventions are responsive to the diverse needs of the Somali population [20-30].

Conclusion

This comprehensive study elucidates that merely expanding health insurance coverage is inadequate to ensure effective access to mental health services in Mogadishu. It underscores the necessity of transparent, mandated mental health benefits and enhanced insurance literacy as crucial complements to anti-stigma interventions. The integration of these demand-side and supply-side strategies, within a robust framework of strengthened regulatory stewardship, is imperative for converting pooled financial resources into timely, dignified, and evidence-based care. Such strategic measures are pivotal in propelling Somalia towards the achievement of universal health coverage and in addressing the significant burden of mental disorders prevalent in fragile and conflict-affected environments.

Declarations

Ethics approval and consent to participate: The study received approval from the Federal Ministry of Health, Somalia Research & Ethics Board, and written informed consent was obtained from all participants.

Availability of data and materials: De-identified data and codebooks are accessible from the corresponding author upon reasonable request.

Authors' contributions: AY was responsible for conceptualisation, supervision, and policy framing; AYA contributed to instrument design, data curation, and analysis; both authors were involved in the interpretation, drafting, critical revisions, and approval of the final manuscript.

Acknowledgements

The authors express their gratitude to the participating institutions and staff who facilitated data collection, as well as to colleagues who provided valuable input on the survey instrument.

(Supplementary)

References

1. Hassan A, Oladipo O, Bah T. Prevalence of mental disorders and psychological trauma among conflict-affected population in Somalia: a cross-sectional study. BMC Psychiatry. 2023;23(1):739.

2. World Health Organization, Regional Office for the Eastern Mediterranean (WHO EMRO). Why mental health matters, especially in conflict-affected settings. 2021. Available from: https://www.emro.who.int/images/stories/somalia/documents/policy_brief_mental_health.pdf

3. El Khoury J, Sutter K, Garlant K. Mental health crisis in Somalia: a review and a way forward. Int J Soc Psychiatry. 2022;68(7):1362–1371. Available from: https://ijmhs.biomedcentral.com/articles/10.1186/s13033-022-00525-y

4. Jibril H, Oladipo O, Bah T. Mental health problems in Somalia after decades of humanitarian crises: a qualitative exploration. BMJ Ment Health. 2024;27(1):e000867. Available from: https://tropmedhealth.biomedcentral.com/articles/10.1186/s41182-024-00618-z

5. Ahmed AY, Nor FA, Mustafa Y, Amed Y, Osman MM. Universal health coverage in Somalia: charting the path to equitable healthcare financing and governance. Open Access J Sci. 2023;5(4):309–315. Available from: https://www.scirp.org/journal/paperinformation?paperid=129471

6. Amnesty International. Reduction of the Somali health budget after 2023 debt relief is a betrayal. 2024. Available from: https://www.amnesty.org/en/latest/campaigns/2024/07/reduction-of-somalia-health-budget-a-betrayal/

7. Hersi H, Ibrahim M, Musa A. Factors that lead to patient mistrust of the healthcare system in Hargeisa, Somaliland. medRxiv. 2023. Available from: https://www.medrxiv.org/content/10.1101/2023.11.23.23298819v2.full

8. Adebisi YA, Adebisi SA, Jallow M. Stigma as a barrier to mental healthcare in Nigeria. J Public Health Afr. 2023;14(S1):2576.

9. Tesfaye G, Biks GA, Anlay DZ. Internalised stigma among people with mental illness in Africa: a systematic review and meta-analysis. Int J Ment Health Syst. 2023;17(1):28.

10. Atewologun F, Adigun OA, Okesanya OJ, Hassan HK, Olabode ON, Micheal AS, et al. Discover mental health: a comprehensive review of mental health services across selected countries in sub-Saharan Africa. 2025;5:49. Available from: https://doi.org/10.1007/s44192-025-00177-7

11. World Bank. Health financing in FCV situations: five key questions. 2023. Available from: https://documents1.worldbank.org/curated/en/844951563783610138/pdf/Health-Financing-in-Fragile-Conflict-and-Violence-FCV-Situations-Five-Key-Questions-To-Be-Answered.pdf

12. World Health Organization (WHO). Health financing policy and implementation in FCAS: evidence synthesis. 2020. Available from: https://www.who.int/teams/health-financing-and-economics/health-financing/health-financing-policy

13. Ministry of Health and Human Services, Somalia. Health Sector Strategic Plan 2022–2026 (HSSP III). Available from: https://moh.gov.so/so/wp-content/uploads/2022/11/Health-Sector-Strategy-Plan-III.pdf

14. World Bank. Somalia overview. Available from: https://www.worldbank.org/en/country/somalia/overview

15. Abdi AM, Warsame DA. People's trust in the private health care system in Mogadishu. J Peacebuilding Dev. 2017;12(1):25–40.

16. Shehu FM. Relevance of Takaful for SDG 3. FUDMA J Acc Finance Res. 2025;3(3):33–40. Available from: https://doi.org/10.33003/fujafr-2025.v3i3.199.33-40

17. Jahya A, Hasyim H, Siregar S. Health Takaful literacy and perceptions of micro Takaful in Sudan. IIBF J Islamic Finance. 2023;12(2):45–58.

18. Paez K, Mallery C, Noel H. Role of insurance literacy in policy choice in the Netherlands. BMC Health Serv Res. 2023;23(1):996.

19. Cunningham CO, Naidu M, D'Souza T. Insurance literacy and access in low-income countries. Health Lit Res Pract. 2022;6(2):e61–e69.

20. Sekhri N, Savedoff W. Private health insurance in developing countries. Bull World Health Organ. 2005;83(2):127–134. Available from: https://pubmed.ncbi.nlm.nih.gov/15744405/

21. Andersen RM. Revisiting the behavioral model and access to medical care. J Health Soc Behav. 1995;36(1):1–10. Available from: https://pubmed.ncbi.nlm.nih.gov/7738325/

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066

22. Cochran WG. Sampling techniques. 3rd ed. New York: Wiley; 1977. Available from: https://www.scirp.org/reference/ReferencesPapers?ReferenceID=1390266

23. Bartlett JE, Kotrlik JW, Higgins CC. Determining an appropriate sample size. Inf Technol Learn Perform J. 2001;19(1):43–50. Available from: https://www.researchgate.net/publication/200824035_Organizational_Research_Determining_Appropriate_Sample_Size_in_Survey_Research

24. European Association of Science Editors (EASE). SAGER guidelines. Available from: https://ease.org.uk/communities/gender-policy-committee/the-sager-guidelines/

25. World Health Organization, Regional Office for the Eastern Mediterranean (WHO EMRO). Roadmap for universal health coverage (UHC) in Somalia. Available from: https://extranet.who.int/countryplanningcycles/sites/default/files/country_docs/Somalia/final_draft_somali_roadmap_towards_uhc_2019-23-2.pdf

26. Ministry of Health and Human Services, Somalia. Somali Mental Health Strategy 2019–2022. 2022. Available from: https://moh.gov.so/en/wp-content/uploads/2020/07/Somali-Mental-Health-Strategy-2019-2022.pdf

27. Amanah Insurance Somalia. Home page. Available from: https://amanahinsurance.com/so/

28. Baraka Takaful. Kaaliye Care. Available from: https://barakatakaful.com/service/kaaliye-care/

29. AXA Global Healthcare. Global health insurance. Available from: https://customer.axaglobalhealthcare.com/

30. DT Global. Somalia: private sector healthcare financing. Available from: https://dt-global.com/projects/psph/

Discover a bigger Impact and Visibility of your article publication with Peertechz Publications

Highlights

- Signatory publisher of ORCID
- Signatory Publisher of DORA (San Francisco Declaration on Research Assessment)
- Articles archived in worlds' renowned service providers such as Portico, CNKI, AGRIS, TDNet, Base (Bielefeld University Library), CrossRef, Scilit, J-Gate etc.
- Journals indexed in ICMJE, SHERPA/ROMEO, Google Scholar etc.
- OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting)
- Dedicated Editorial Board for every journal
- Accurate and rapid peer-review process
- Increased citations of published articles through promotions
- Reduced timeline for article publication

Submit your articles and experience a new surge in publication services
https://www.peertechzpublications.org/submission

Peertechz journals wishes everlasting success in your every endeavours.

Citation: Abdulrazaq YA, Abdirahman YA. Determinants of Mental Health Service Utilisation and the Role of Health Insurance among Government and Private Sector Employees in Mogadishu, Somalia: A Cross-Sectional Survey. Ann Psychiatry Treatm. 2025;9(1):011-018. Available from: https://dx.doi.org/10.17352/apt.000066