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Driving in distress: mapping psychological disorders among taxi and other commercial drivers in Africa. A scoping review

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ABSTRACT

Background: Taxi and other commercial drivers face significant job hazards that may impact their psychological health. In Africa, this occupational group experiences disproportionately higher levels of psychological distress compared to the general population. This review aims to map evidence on psychological disorders among taxi and other commercial drivers in Africa.

Subjects and methods: This scoping review was conducted using the framework developed by Levac et al. A systematic literature review was conducted of studies published between 2015 and 2025. A total of 576 records were initially identified—564 through database searches, including CINAHL ($n = 95$), Emcare ($n = 4$), Medline ($n = 220$), PsycINFO ($n = 5$), Scopus ($n = 131$), and Web of Science ($n = 109$)—and an additional 12 records obtained through manual searches. The final review comprised 12 studies (10 quantitative and two qualitative) that met the eligibility criteria and were subjected to data extraction and thematic analysis. This scoping review provided descriptive summaries, as substantial heterogeneity of study designs and assessment tools restricted comparability and prevented the synthesis of pooled prevalence estimates.

Results: Across the 12 included studies, the aggregated sample size was 6359 participants, including 3502 taxi drivers and 2857 other commercial drivers. The prevalence of psychological distress varied by study, country and measurement tools: depression (26.0–43.6%), stress (28.0–89.6%), anxiety (14.5%), insomnia (59.9–76%), PTSD (12.6%), intellectual disorders (38.4%), general psychopathology (45.6%), and somatic disorders (39.9%). These disorders correlated with traumatic events, work schedules, social support, job security, violence, and drug abuse. Substance use—alcohol, tobacco, cannabis, tramadol, kola nut, khat, caffeine, and cocaine—ranged from 0.4% to 81%.

Conclusion: Targeted mental health screening, psychoeducation, better working conditions, and stronger regulation of commercial transport could help lower drivers' psychological distress and substance use.

1. Background

Taxi and other commercial drivers represent an occupational group that faces considerable work-related hazards, and the cumulative demands of their roles significantly impact their psychological well-being (Kom, 2025; Marín-Berges et al., 2025; Putri et al., 2026; Rathi et al., 2019). Occupational mental health consequences for this population include higher rates of depression, anxiety,

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stress, insomnia, and substance abuse (Akande et al., 2023; Cong et al., 2026; Davidson et al., 2020; Hamzat & Kanmodi, 2019; Marín-Berges et al., 2025; Omotayo, 2018). Commercial drivers include taxi, bus, delivery, and truck operators (Amoadu et al., 2024; Shin & Jeong, 2021). Within this category, taxi drivers typically provide on-demand, short-distance passenger transport, often in urban and informal or semi-formal contexts (Wust et al., 2025). In African countries, taxi drivers dominate informal public transport networks, operate outside formal labor protections, and endure prolonged exposure to traffic, financial, and interpersonal stressors, resulting in high levels of psychological distress (Benaicha et al., 2017; Fobosi, 2021b; Kom, 2025).

Globally, there is substantial evidence indicating an elevated rate of psychological disorders among taxi and other commercial drivers (Amoadu et al., 2024; Marín-Berges et al., 2025). A systematic review encompassing Australia, India, Korea, Serbia, the United Kingdom, and the United States revealed that depression prevalence among taxi drivers ranges from 14.3% to 60.5%, anxiety from 24.1% to 47%, and stress-related symptoms from 19% to 55%, all consistently exceeding general population norms (Marín-Berges et al., 2025). These findings align with reports from individual country studies in high-income settings, such as Australia, where approximately one-third of urban taxi drivers reported experiencing very high psychological distress associated with traumatic occupational experiences and unmet mental health needs (Davidson et al., 2018), and Canada, where precarious work characterized by instability, low wages, and harsh conditions correlated with deteriorating mental and physical health among drivers (Marani et al., 2020). The literature shows that coping strategies such as substance use may exacerbate mood and anxiety symptoms (Akande et al., 2023; Kaul et al., 2019; Lui et al., 2023; Putri et al., 2026). Exposure to violence, discrimination, and social isolation further intensifies depressive and post-traumatic symptoms (Davidson et al., 2020; Marín-Berges et al., 2025; Mirpuri et al., 2020; Tang et al., 2024).

The African context differs markedly from that of high-income countries, as commercial transport, particularly the taxi industry, operates within highly informal labor markets, characterized by weak regulation, fragmented employer responsibility, and limited social protection (Fobosi, 2021a; Kom, 2025; Ramukumba & Mathikhi, 2016; Wust et al., 2025). African epidemiological studies suggest that this combination of informality and occupational strain results in considerable mental health burdens: among taxi drivers in Lagos, nearly 60% reported insomnia, 44% exhibited depressive mood disorders, and 46% experienced general psychological distress (Uzonwanne, 2015), while additional African studies report elevated levels of anxiety, stress, and related symptoms consistent with the upper ranges observed globally (Kasemy et al., 2019; Mchunu et al., 2020). In South Africa, Kom (2025) illustrates how drivers experience “stress” stemming from abusive passengers, conflicts with colleagues and vehicle owners, pressure to meet daily financial targets, and economic downturns that reduce passenger volumes, all exacerbated by experiences of extortion and harassment from enforcement officials. The informal transport work, intersecting occupational and socioeconomic stressors, elevates drivers' risk for psychological disorders. Prolonged, irregular hours, night shifts, and hazardous congestion lead to sleep deprivation, fatigue, and anxiety (Amoadu et al., 2024; Marín-Berges et al., 2025; Omotayo, 2018). Low, unstable income, weak job security, and daily repayment pressures perpetuate financial strain and distress (Amoadu et al., 2024; Kom, 2025).

Psychological disorders have direct implications for road safety and public health (Chiu et al., 2019; Miyata et al., 2018; Okada et al., 2025). These disorders can impair concentration, judgment, and reaction time, increasing the likelihood of road traffic accidents, particularly during acute exacerbations or following changes in psychotropic medication (Chiu et al., 2019; Miyata et al., 2018). A systematic review by Unsworth et al. (2017) found that people with psychotic, personality, or psychoneurotic disorders have higher rates of reckless driving, more frequent and severe crashes, and increased risk-taking behaviors—such as driving under the influence, without a license, or without seat belts—that are particularly relevant for commercial drivers. Nevertheless, help-seeking remains low: only a minority of affected drivers access formal mental health care, and gendered norms within this predominantly male workforce further suppress care-seeking (Davidson et al., 2020; Lui et al., 2023). While experts advocate for occupational health programs, routine mental health screenings, improved working conditions, and mobile health interventions, most evaluated initiatives—such as Australian mHealth pilots, “Drive Safe” programs, and “fit-to-drive” checklists—have been developed in high-income, formalized contexts and have not been adapted to Africa's informal transport systems (Davidson et al., 2020; Rasheed, 2023; Valencia-Contrera et al., 2022; Wishart & Weaver, 2023). In South Africa, the Occupational Therapy Association (OTASA) has emphasized both the importance of assessing driver fitness and the absence of national legislation, training, and context-appropriate assessment tools, which further hampers implementation in resource-constrained settings (OTASA, 2018).

Although international studies estimate the prevalence and risks of psychological disorders among drivers (Marín-Berges et al., 2025; Ramukumba & Mathikhi, 2016; Tang et al., 2024; Unsworth et al., 2017), there is limited data on taxi drivers and other commercial drivers in Africa. Thus, this review aims to map evidence on psychological disorders among taxi and other commercial drivers in Africa.

2. Methods

This scoping review followed the framework for conducting scoping reviews developed by Levac et al. (2010). The framework consists of the following stages: identifying the research questions, identifying relevant studies, selecting relevant studies, charting the data, collating, summarizing, and reporting the results (Levac et al., 2010). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guided the methodology (Tricco et al., 2018).

2.1. Identifying the research questions

The research questions were developed using an iterative process to ensure alignment with the scoping review methodology. The review aimed to map the existing literature on the psychological disorders among taxi and other commercial drivers in Africa. Specifically, the following research questions guided the review:

1. What are the types of psychological disorders and their prevalence among taxi and other commercial drivers in Africa?
2. What factors contribute to the psychological disorders that taxi and other commercial drivers face in Africa?
3. What strategies address psychological disorders among taxi and other commercial drivers in Africa?

2.2. Identifying relevant studies

A comprehensive literature search was conducted in CINAHL, Emcare, Medline, PsychInfo, Scopus, and Web of Science to identify

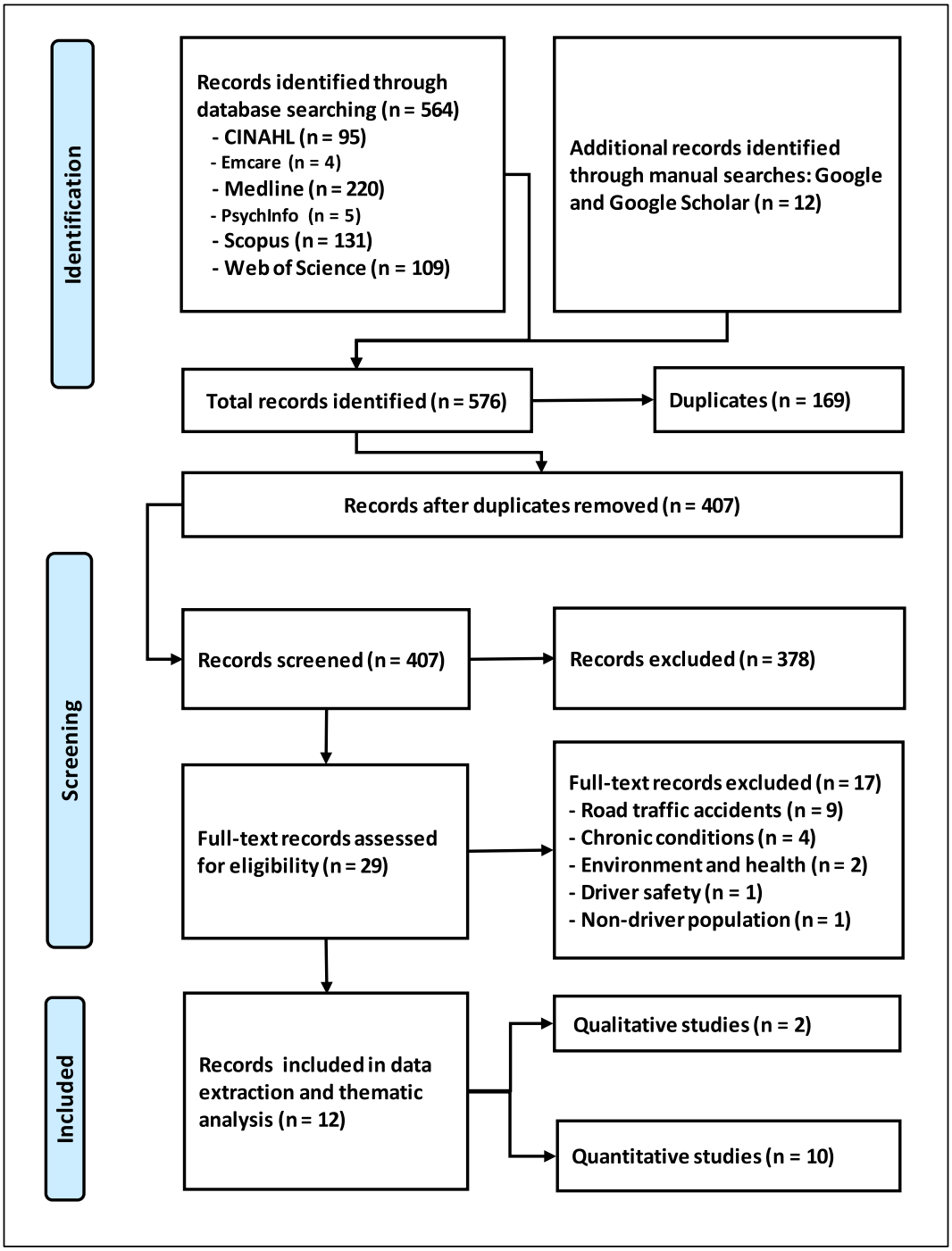

Fig. 1. PRISMA flow diagram.

relevant studies. Additionally, a manual search was conducted using Google and Google Scholar. To enhance the comprehensiveness of the review, grey literature, including theses, government reports, and non-peer-reviewed sources, was also taken into consideration. The search strategy combined controlled vocabulary and keywords and was customized for each database. Furthermore, to improve search result accuracy, advanced strategies were implemented. Boolean operators (AND, OR, NOT) were used to combine or exclude keywords, while parentheses structured the search logic. Quotation marks ("") were employed to retrieve exact phrases, and truncation or wildcard symbols, such as the asterisk (*) and question mark (?), captured variations in word endings and alternative spellings. Examples of the keyword combinations used are provided below:

- **Search 1**: ("Taxi driver*" OR "cab driver*" OR "commercial driver*" OR "minibus taxi driver*" OR "bus driver*")
- **Search 2**: ("Mental health" OR "mental health illness" OR "Psychological disorders" OR "depression" OR "anxiety" OR "stress*" OR "work-related stress" OR "mental disorders" OR "psychological distress")
- **Search 3**: Africa
- **Search 4**: Search 1 AND Search 2 AND Search 3

2.3. Selecting relevant studies

The study selection process consisted of two stages: a title and abstract screening followed by a full-text review. Inclusion criteria comprised empirical studies—quantitative, qualitative, or mixed-methods—and grey literature reports presenting original data. Eligible studies were published in English. A 10-year publication limit (2015–2025) was applied to ensure the inclusion of the most recent evidence regarding psychological disorders among taxi and other commercial drivers in Africa. This approach ensures that the included studies reflect contemporary transportation systems, working conditions, and current mental health screening and assessment tools, thereby enhancing the relevance and applicability of the findings. Exclusion criteria included studies published in languages other than English, studies that did not present empirical data (such as literature reviews, commentaries, or editorials), and studies focusing on taxi or other commercial drivers outside of Africa. Additionally, research that addressed general occupational health without a specific emphasis on mental health outcomes was also excluded. To enhance methodological rigor and mitigate selection bias, two independent reviewers systematically screened all retrieved records for relevance using predefined eligibility criteria. Each reviewer conducted an independent assessment of titles, abstracts, and full texts to ensure objectivity. Discrepancies regarding study inclusion were resolved through structured discussions, resulting in consensus and consistent application of inclusion and exclusion criteria across all stages of the screening process.

The selection of relevant studies was guided by the research question and evaluated using the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018). The Mixed Methods Appraisal Tool (MMAT; version 2018) was employed to assess the methodological quality of the included studies, as it is suitable for appraising various research designs, including qualitative studies, randomized controlled trials, quantitative non-randomized studies, quantitative descriptive studies, and mixed-methods research (Hong et al., 2018). Each study was first classified into one of the five MMAT design categories and subsequently evaluated against the corresponding methodological criteria. For each criterion, responses were recorded as "Yes," "No," or "Can't tell." Although the MMAT was applied to describe methodological strengths and limitations across the included studies and to inform interpretation, no study was excluded based on MMAT ratings, and no risk-of-bias assessment was used to produce weighted conclusions. As a scoping review, this study aimed to map the breadth, nature, and characteristics of evidence on psychological disorders among taxi and other commercial drivers in Africa. The findings should therefore be interpreted as a descriptive overview of the literature rather than definitive evidence of causality or precise prevalence estimates, given substantial variation in study design, rigor, and measurement approaches.

The retrieved records were systematically organized and managed using EndNote (version 20). The PRISMA flow diagram was used to display the study selection process and the final count of included studies (Fig. 1). A total of 576 records were initially identified—564 through database searches, including CINAHL ($n = 95$), Emcare ($n = 4$), Medline ($n = 220$), PsycINFO ($n = 5$), Scopus ($n = 131$), and Web of Science ($n = 109$). Furthermore, 12 studies were identified through manual searches using Google and Google Scholar. After removing 169 duplicate records, 407 unique records remained for screening. During the title and abstract screening stage, 378 records were excluded for not meeting the eligibility criteria, and the remaining 29 full-text articles were assessed for eligibility. Following full-text review, 17 articles were excluded for focusing on road traffic accidents (n = 9), chronic conditions (n = 4), environment and health (n = 2), driver safety (n = 1), or non-driver populations (n = 1). Ultimately, 12 studies met the inclusion criteria and were incorporated into data extraction and thematic analysis. Among these, two were qualitative, and 10 were quantitative studies.

2.4. Charting the data

A standardized data extraction form was developed and pilot-tested across several studies to ensure consistency, accuracy, and comprehensiveness. Key information was systematically extracted from each included study. One reviewer conducted the data extraction, which a second reviewer independently verified to ensure accuracy and reliability. The extracted variables included the author(s) and year of publication, the country of study, the study title, the research design, the sample size, participant demographics (Table 1), and the main findings (Tables 2 and 3). Table 2 summarizes the psychological disorders identified among taxi and other commercial drivers, including prevalence ranges, countries, measurement tools, and corresponding authors. In contrast, Table 3 outlines the substance-specific prevalence reported among taxi and other commercial drivers across studies, providing a comparative overview of substance use patterns within this population. The missing or unclear reporting within the primary studies was

documented during data charting as not reported (NR) or not specified (NS) and was acknowledged as a limitation that may affect the interpretation and comparability of the findings.

2.5. Collating, summarizing, and reporting the results

The results were summarized using both descriptive and thematic synthesis approaches. The significant variability in study designs and assessment tools prevented meta-analysis and stability analysis. Data were analyzed using Braun and Clarke's six-phase thematic analysis framework (Braun & Clarke, 2006). The process included data familiarization, initial coding, theme identification and refinement, and precise theme definition and naming. The final phase synthesized findings into a coherent narrative aligned with research questions. Summary tables presented key study characteristics and findings, with a numerical summary capturing the prevalence of psychological disorders and substance abuse. Thematic analysis categorized the extracted data into three overarching themes: (1) psychological disorders and substance use, (2) contributing factors, and (3) strategies for addressing mental health issues. The PRISMA-ScR checklist was utilized to ensure thorough and transparent reporting throughout the review (Tricco et al., 2018). This checklist helped clearly present the rationale, objectives, eligibility criteria, search strategy, study selection, data charting, and synthesis processes (Tricco et al., 2018). Additionally, the checklist guided the structured organization of the results and discussion sections, ensuring that key findings, implications, gaps, and future research directions were presented logically. Furthermore, the funding section adhered to PRISMA-ScR requirements, clearly indicating the presence of financial support (Tricco et al., 2018).

3. Findings

3.1. Studies characteristics

The total sample size across the twelve studies was 6359 participants, including 3502 taxi drivers and 2857 other commercial drivers. Sample sizes varied significantly from 69 to 2927 participants per study (Table 1). The studies were conducted in six African countries: Nigeria ($n = 5$), Ethiopia ($n = 1$), Uganda (n = 1), Morocco ($n = 2$), Egypt (n = 2), and South Africa (n = 1). Ten studies employed a cross-sectional survey design, while two utilized qualitative methodologies. Regarding gender distribution, the majority of studies ($n = 6$) involved exclusively male participants (Alenko et al., 2019; Hamzat & Kanmodi, 2019; Laraqui et al., 2018; Mohsen & Hakim, 2019; Tawfik et al., 2025). Studies reporting predominantly male samples with small proportions including females (n = 2) (Akande et al., 2023; Kitara & Karlsson, 2020). Three studies did not explicitly report gender distribution (Awoleye et al., 2017; Obadeji et al., 2021; Uzonwanne, 2015).

The mean age across studies commonly ranged from the early 30s to the early 40s. For example, Akande et al. (2023) and Hamzat and Kanmodi (2019) reported a mean age of around 40 years, while Obadeji et al. (2021) observed a slightly younger mean age of 31.9 years. Years of driving experience were reported in five studies (Alenko et al., 2019; Benaicha et al., 2017; Laraqui et al., 2018; Mohsen & Hakim, 2019; Uzonwanne, 2015). Reported experience ranged from an average of 11.9 years in Laraqui et al. (2018) to 8.3 ± 3.5 years in Benaicha et al. (2017). Regarding distribution, Uzonwanne (2015) reported that 60% of drivers had 1–10 years of experience, whereas Mohsen and Hakim (2019) found that 64.1% had more than 10 years of driving experience.

Four studies reported on employment status (Akande et al., 2023; Benaicha et al., 2017; Obadeji et al., 2021; Tawfik et al., 2025). A study by Akande et al. (2023) found that 69% of participants were full-time drivers, while Obadeji et al. (2021) indicated that 60.3% were employed full-time. Tawfik et al. (2025) focused exclusively on full-time professional drivers. In the study by Benaicha et al. (2017), among 300 participants, 57.1% worked day shifts, 2.3% night shifts, and 40.5% worked both day and night shifts.

This review employed a scoping methodology, presenting findings as a descriptive summary that emphasizes raw data from individual studies rather than synthesized estimates. The interpretation and comparison of prevalence rates for psychological disorders among taxi and other commercial drivers in Africa are limited by substantial methodological inconsistencies across studies. Variations in study design, sampling methods, and screening and assessment tools hinder both comparability and the synthesis of pooled prevalence estimates.

3.2. Psychological disorders, substance use, and their prevalence

3.2.1. Measurement tools

Psychological distress among taxi and other commercial drivers was assessed using standardized and self-report instruments, including the Patient Health Questionnaire-9 (PHQ-9), Perceived Stress Scale-10 (PSS-10), Awaritefe Psychological Index (API), Insomnia Severity Index (ISI), and the Trauma Screening Questionnaire (TSQ). Depression was assessed using the PHQ-9 in Nigeria (Obadeji et al., 2021), while the API was utilized in Nigeria (Uzonwanne, 2015), and the TSQ was used in Ethiopia (Alenko et al., 2019). Anxiety, general psychopathology, and somatic disorders were predominantly measured using the API, mainly in Nigeria (Uzonwanne, 2015). Insomnia was also assessed in Egypt using ISI (Tawfik et al., 2025) and a structured instrument in Morocco (Benaicha et al., 2017). Stress was evaluated using the PSS-10 in Egypt (Tawfik et al., 2025) and structured questionnaires in Egypt and Nigeria (Awoleye et al., 2017; Mohsen & Hakim, 2019). In Morocco, fatigue among taxi drivers was assessed using the Pichot questionnaire (Benaicha et al., 2017). Post-traumatic stress disorder (PTSD) screening in Ethiopia relied on the TSQ and the WHO Self-Reporting Questionnaire (SRQ-20) (Alenko et al., 2019).

Substance-use measurement showed greater methodological diversity: studies in Nigeria used tools such as the World Health Organization (WHO) Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) (Obadeji et al., 2021), the Fagerström Test

Table 1
Studies' characteristics.

Authors and year	Country	Study title	Study Design	Population and sample	Participant Demographics
Akande et al. (2023)	Nigeria	"Psychoactive substance abuse among commercial bus drivers in Umuahia, Abia State, South-Eastern Nigeria: an uncontrolled 'epidemic' with attendant road traffic crashes."	Cross-sectional survey	Commercial bus drivers ($n = 400$)	– Age range or mean age: Mean age 40.03 ± 10.50 years – Gender distribution: 97.25% of males and 2.75% of females – Driving experience: NR (Not Reported) – Employment status: Full-time: 69%, Part-time: 31%
Alenko et al. (2019)	Ethiopia	"Post-traumatic stress disorder and associated factors among drivers surviving road traffic crashes in Southwest Ethiopia."	Cross-sectional survey	Drivers in public transport ($n = 398$)	– Age range or mean age: NR – Gender distribution: 100% male – Driving experience: 1 to 5 years (50%) – Employment status: NR
Awoleye et al. (2017)	Nigeria	"Stress, health, and accident risks for commercial drivers in Abuja, Nigeria: causes and correlations."	Cross-sectional survey	Commercial drivers ($n = 509$)	– Age range or mean age: NR (only mentions drivers under and over 40) – Gender distribution: 100% males – Driving experience: NR – Employment status: NR
Benaicha et al. (2017)	Morocco	"Moroccan taxi drivers' fatigue using Pichot questionnaire: a cross-sectional survey."	Cross-sectional survey	Taxi drivers ($n = 300$)	– Age range or mean age: NR – Gender distribution: NR – Driving experience: 8.3 ± 3.5 years – Employment status (working time): daily (57.1%), night (2.3%), and both (40.5%)
Hamzat and Kanmodi (2019)	Nigeria	"Are they using it the right way? A survey of commercial drivers on substance use."	Cross-sectional survey	Commercial drivers ($n = 280$)	– Age range or mean age: Mean age 40.63 years (±10.09) – Gender distribution: All male – Driving years of experience: NR – Employment status: NR
Kitara and Karlsson (2020)	Uganda	"The effects of economic stress and urbanisation on driving behaviors of Boda-boda drivers and accidents in Gulu, Northern Uganda: a qualitative view of drivers."	Qualitative study (interviews)	Boda-boda drivers ($n = 200$)	– Age range or mean age: Mean age 29 years (SD + 13.6), range 16–48 years – Gender distribution: 99.0% male, 1.0% female – Driving experience: Range 1 to 14 years – Employment status: NR
Laraqui et al. (2018)	Morocco	"Prevalence of consumption of psychoactive substances among Moroccan taxi drivers."	Cross-sectional survey	Taxi drivers ($n = 2927$)	– Age range or mean age: 21–73 years, mean age 40.7 years – Gender distribution: All male – Driving experience: Average 11.9 years – Employment status: NR
Mohsen and Hakim (2019)	Egypt	"Workplace stress and its relation to cardiovascular disease risk factors among bus drivers in Egypt"	Cross-sectional survey	Bus drivers ($n = 234$)	– Age range or mean age: Mean age 37.4 ± 9.0 years – Gender distribution: All male – Driving experience: More than 10 years (64.1%) – Employment status: NR
Obadeji et al. (2021)	Nigeria	"Substance use among commercial motorcyclists and its relationship with life satisfaction and significant depressive symptoms."	Cross-sectional survey	Commercial motorcyclists ($n = 456$)	– Age range or mean age: 16 to 65 years, mean age 31.9 years – Gender distribution: NR – Driving experience: NR – Employment status: 60.3% full-time (no other job aside from being a commercial motorcyclist)
Ramukumba and Mathikhi (2016)	South Africa	"Health assessment of taxi drivers in the city of Tshwane."	Qualitative study (interviews, focus groups)	Taxi drivers ($n = 69$)	– Age range or mean age: NR – Gender distribution: 100% male – Driving experience: NR

(*continued on next page*)

Table 1 (*continued*)

Authors and year	Country	Study title	Study Design	Population and sample	Participant Demographics
Tawfik et al. (2025)	Egypt	"Shiftwork and insulin resistance in professional drivers: exploring the association using non-insulin-based surrogate measures."	Cross-sectional survey	Professional drivers (n = 380)	– Employment status: NR – Age range: 22 to 60 years – Gender distribution: 100% male – Driving experience: NR (minimum one year on current shift mentioned) – Employment status: 100% full-time
Uzonwanne (2015)	Nigeria	"The mental health status of taxi drivers in Lagos State, Nigeria."	Cross-sectional survey	Taxi drivers (n = 206)	– Age range: 18–35 years (89 participants), 36 years and above (117 participants) – Gender distribution: NR – Driving experience: 1–10 years (60.2%), 11 years and above (39.5%) – Employment status: NR

Table 2
The prevalence of psychological disorders and substance use.

Disorders	Prevalence	Country	Authors
Depression	43.6%	Nigeria	(Uzonwanne, 2015)
	26.1%	Ethiopia	(Alenko et al., 2019)
	26.0%	Nigeria	(Obadeji et al., 2021)
Anxiety	14.5%	Nigeria	(Uzonwanne, 2015)
Stress	28%	Nigeria	(Awoleye et al., 2017)
	83.3%	Egypt	(Mohsen & Hakim, 2019)
	88.2% to 89.6%	Egypt	(Tawfik et al., 2025)
PTSD	12.6%	Ethiopia	(Alenko et al., 2019)
Insomnia	59.9%	Nigeria	(Uzonwanne, 2015)
	NS	Morocco	(Benaicha et al., 2017)
	52.8% to 76%	Egypt	(Tawfik et al., 2025)
Intellectual disorders	38.4%	Nigeria	(Uzonwanne, 2015)
General Psychopathology	45.6%	Nigeria	(Uzonwanne, 2015)
Somatic Disorders	39.9%	Nigeria	(Uzonwanne, 2015)
Substance Use (*)	24.9% to 81.0%	Ethiopia	(Alenko et al., 2019)
	20.2% to 79.71%	South Africa	(Ramukumba & Mathikhi, 2016)
	65%	Egypt	(Mohsen & Hakim, 2019)
	67.9% to 73.6%	Egypt	(Tawfik et al., 2025)
	5% to 76.2%	Morocco	(Benaicha et al., 2017)
	2.0% to 36.6%	Morocco	(Laraqui et al., 2018)
	0.4% to 47.9%	Nigeria	(Hamzat & Kanmodi, 2019)
	53.7% to 61%	Nigeria	(Obadeji et al., 2021)
	1.8% to 51.0%	Nigeria	(Akande et al., 2023)
	8.5% to 22%	Nigeria	(Awoleye et al., 2017)
	NS	Uganda	(Kitara & Karlsson, 2020)

(*) Details on substance-specific prevalence are presented in Table 3. NS = Not specified.

for Nicotine Dependence (FTND), the Cannabis Abuse Screening Test (CAST), and the DETA (Diminuer, Entourage, Trop, Alcool) scale in Morocco (Laraqui et al., 2018), while structured questionnaires were also used to assess substance use in Morocco, Nigeria, and South Africa (Akande et al., 2023; Benaicha et al., 2017; Hamzat & Kanmodi, 2019; Laraqui et al., 2018; Ramukumba & Mathikhi, 2016). Given these differences, the diversity of tools—some locally validated and others globally standardized—likely contributed to the variability in prevalence estimates reported across settings, highlighting the importance of instrument selection and cultural contextualization in mental health research among taxi and other commercial drivers.

3.2.2. Psychological disorders and substance use

A detailed review of mental health issues among taxi and other commercial drivers across twelve studies reveals serious concerns, showing different rates of mental health problems and how they vary by country (Table 2). In this review, depression was frequently noted, with rates changing significantly depending on where the study took place and the tools used for assessment. In Ethiopia, depression was 26.0% among taxi drivers using a self-reporting questionnaire (Alenko et al., 2019), while in Nigeria, the rate of depression (PHQ-9) among commercial motorcyclists ranged from 26.0% in Ekiti State (Obadeji et al., 2021) to as high as 43.6% among taxi drivers in Lagos, as measured by the API (Uzonwanne, 2015). PTSD was particularly prevalent among Ethiopian drivers

Table 3
Substance-specific prevalence among taxi and other commercial drivers.

Authors and year	Country	Alcohol	Tobacco	Cannabis	Tramadol	Other substances	Poly-substance use
Akande et al. (2023)	Nigeria	51.0%	27.30%	8.5%	7.8%	Alcoholic herbal mixtures: 16%, Kolanut: 10.5%, Coffee: 1.8%	NR
Alenko et al. (2019)	Ethiopia	54.8%	53.3%	24.9%	NR	Khat: 81%	NR
Awoleye et al. (2017)	Nigeria	22%	22%	NR	NR	NR	Tobacco+Alcohol: 8.5%
Benaicha et al. (2017)	Morocco	5.0%	32.2%	NR	NR	Caffeine: 76.2%, Tea: 74.2%	NR
Hamzat and Kanmodi (2019)	Nigeria	10.7% (current use) 47.9% (use 2 weeks before data collection)	47.9%	16.1%	6.4%	Codeine: 4.6% Kola nut: 41.8% Caffeine: 13% Cocaine: 0.4% Local stimulant tea: 27.1% Amphetamine: 1.4%	NR
Kitara and Karlsson (2020)	Uganda	Reported (% NS)	NR	NR	NR	NS	NS
Laraqui et al. (2018)	Morocco	10.5%	36.6%	18.4%	NR	Hookah: 7.3%, Tobacco snuff: 5.8%, Others: 2.7%	Tobacco+Alcohol: 6.8%, Tobacco+Cannabis: 4.1%, Tobacco+Alcohol+Cannabis: 2.0%
Mohsen and Hakim (2019)	Egypt	NR	65%	NR	NR	NR	NR
Obadeji et al. (2021)	Nigeria	Lifetime: 47.6%, Current: 40.8%	Lifetime: 23.7%, Current: 18.6%	Lifetime: 9.9%, Current: 8.6%	Lifetime: 21.7%, Current: 17.8%	Sedatives: 8.6% lifetime, Amphetamines: 6.1% lifetime, Cocaine: 0.9% lifetime	NR
Ramukumba and Mathikhi (2016)	South Africa	Reported (% NS)	Reported (%NS)	Reported (%NS)	NR	NR	Cigarette smoking, dagga, and alcohol: 79.71% Using only one of these substances: 20.2%
Tawfik et al. (2025)	Egypt	NR	NS	NS	NR	Smoking (NS): 73.6% of daywork drivers, and 67.9% of shiftwork drivers	NR

NR = Not reported; NS = Not specified.

who had experienced road traffic accidents, with a rate of 12.6% detected through the TSQ—highlighting a clear connection between traumatic work experiences and PTSD (Alenko et al., 2019).

Three studies reported stress rates with wide variations, influenced by different work environments and evaluation methods (Awoleye et al., 2017; Mohsen & Hakim, 2019; Tawfik et al., 2025). For instance, stress levels ranged from 28.0% among commercial drivers in Abuja, Nigeria (Awoleye et al., 2017) to a striking 83.3% among bus drivers in Egypt (Mohsen & Hakim, 2019). In comparison, a study in Egypt found a very high proportion of drivers reported elevated stress levels. Moderate-to-severe stress affected 89.6% of daywork drivers and 88.2% of shiftwork drivers according to the PSS-10 scale, indicating that stress was widespread and comparable between the two groups (Tawfik et al., 2025).

A study by Mohsen and Hakim (2019) identified factors such as prolonged sitting hours, inadequate social support, and experiences of violence from passengers as key contributors to heightened stress levels among bus drivers. Anxiety prevalence among taxi drivers has been less thoroughly researched—one study conducted in Nigeria by Uzonwanne (2015) found that 14.5% of drivers reported experiencing anxiety. This level of anxiety was lower than that found for mood disorders or other mental health issues, which could reflect differences in how psychological distress was recognized and reported. The prevalence of insomnia was significantly different across three studies (Benaicha et al., 2017; Tawfik et al., 2025; Uzonwanne, 2015). In Lagos, Nigeria, nearly 60% of taxi drivers reported insomnia (59.9%) (Uzonwanne, 2015). In comparison, a study in Egypt found moderate-to-severe insomnia in 52.8% of daywork drivers, compared with 76% of shiftwork drivers, indicating that sleep disturbance was substantially more common among those working rotating or night shifts, as measured by the Insomnia Severity Index (ISI) (Tawfik et al., 2025). Intellectual disorders (38.4%), general psychopathology (45.6%), and somatic disorders (39.9%) were also documented, with these conditions primarily reported among taxi drivers in Nigeria, based on the API tool (Uzonwanne, 2015).

Substance use was influenced by work-related demands, cultural norms, and accessibility (Table 3). Eleven studies reported substance use among taxi and other commercial drivers with significant variations across countries, notably Egypt, Nigeria, Morocco, and South Africa (Akande et al., 2023; Alenko et al., 2019; Awoleye et al., 2017; Benaicha et al., 2017; Hamzat & Kanmodi, 2019;

Kitara & Karlsson, 2020; Laraqui et al., 2018; Mohsen & Hakim, 2019; Obadeji et al., 2021; Ramukumba & Mathikhi, 2016; Tawfik et al., 2025). Alcohol use ranged from 5% to 54.8%, with the highest prevalence reported in Nigeria (51%) (Akande et al., 2023) and Ethiopia (54.8%) (Alenko et al., 2019), and the lowest in Morocco (Benaicha et al., 2017). Tobacco use was also high, at 23.7% to 53.3%, particularly in Ethiopia, Morocco, and Nigeria (Akande et al., 2023; Alenko et al., 2019; Benaicha et al., 2017; Hamzat & Kanmodi, 2019; Laraqui et al., 2018; Obadeji et al., 2021), where it was frequently used to maintain alertness during extended driving shifts. A study by Awoleye et al. (2017) found that high alcohol and tobacco use were more prevalent among higher-stress drivers (30% each) than lower-stress drivers (19% each), with elevated risks of high stress (alcohol: RR = 1.61, 95% CI: 1.15–2.24; tobacco: RR = 1.56, 95% CI: 1.12–2.18). Combined use showed the strongest association (RR = 2.05, 95% CI: 1.59–4.93).

Substance consumption, such as Cannabis, Khat, and Tramadol, was often linked to coping with occupational stress, fatigue reduction, long or irregular driving schedules, and social norms (Akande et al., 2023; Alenko et al., 2019; Hamzat & Kanmodi, 2019; Obadeji et al., 2021). Cannabis use, ranging from 8.5% to 24.9%, was more common in Ethiopia, Morocco, and Nigeria (Akande et al., 2023; Alenko et al., 2019; Laraqui et al., 2018; Obadeji et al., 2021), with drivers often perceiving it as a stimulant that enhances energy and induces relaxation. High levels of khat use (an amphetamine-like substance) were reported in Ethiopia (81%) (Alenko et al., 2019), while tramadol use among drivers in Nigeria ranged from 7.8% to 21.7% (Akande et al., 2023; Hamzat & Kanmodi, 2019; Obadeji et al., 2021).

The use of substances such as herbal stimulants, caffeine products, kola nut, hookah, snuff, and sedatives demonstrates considerable variation in both Nigeria and Morocco (Akande et al., 2023; Awoleye et al., 2017; Hamzat & Kanmodi, 2019; Laraqui et al., 2018; Obadeji et al., 2021). In these nations, cultural practices regarding stimulant beverages and herbal mixtures significantly shape consumption patterns (Awoleye et al., 2017; Laraqui et al., 2018). Furthermore, poly-substance use was prevalent, ranging from 4.1% to 79.71%, with South Africa reporting the highest rates (Awoleye et al., 2017; Laraqui et al., 2018; Ramukumba & Mathikhi, 2016). Mixed-use patterns often involved simultaneous consumption of alcohol, cannabis, and tobacco, indicating habitual and entrenched behaviors rather than isolated substance use (Laraqui et al., 2018; Ramukumba & Mathikhi, 2016). These patterns collectively illustrate how occupational demands, socio-cultural contexts, and the need for coping strategies significantly contribute to substance use among taxi and other commercial drivers across African settings (Table 3).

3.3. Factors associated with psychological disorders and substance use

Evidence from this study revealed that psychological disorders and substance use among taxi and other commercial drivers were linked to demanding work schedules, job stress, socioeconomic hardship, and cultural stigmatization. Young age, single status, lower education, and shorter job tenure increase vulnerability.

3.3.1. Occupational risk factors

Eight studies found that the occupational risks associated with taxi driving—long working hours, irregular shifts, physically demanding schedules, and hazardous traffic conditions—significantly increased the likelihood of mental health disorders (Alenko et al., 2019; Awoleye et al., 2017; Benaicha et al., 2017; Mohsen & Hakim, 2019; Obadeji et al., 2021; Ramukumba & Mathikhi, 2016; Tawfik et al., 2025; Uzonwanne, 2015). Two studies, Tawfik et al. (2025) and Benaicha et al. (2017), found a correlation between shift work and daily rhythm disruptions. Additionally, direct occupational hazards, such as road accidents, expose drivers to traumatic experiences, resulting in conditions like PTSD (Alenko et al., 2019). General workplace stress and shiftwork were associated with vulnerability to insomnia, mood disorders, general psychopathology, and somatic disorders (Mohsen & Hakim, 2019; Tawfik et al., 2025; Uzonwanne, 2015). Substance use among professional drivers reflected occupational pressures, such as long, irregular hours, schedule demands, pleasure-seeking, and precarious work, which were linked to alcohol, tobacco, cannabis, tramadol, and stimulant use for coping (Akande et al., 2023; Hamzat & Kanmodi, 2019; Laraqui et al., 2018; Obadeji et al., 2021; Ramukumba & Mathikhi, 2016). In Nigeria, drivers most commonly used substances for sleep prevention while driving (Hamzat & Kanmodi, 2019), capturing stimulant-seeking to endure long, irregular shifts. Similarly, Akande et al. (2023) found that drivers used psychoactive substances to help keep awake while driving. In Morocco, work–sleep disruption and fatigue were linked to consumption, with significant associations between fatigue and "tobacco use… regularity of sleep… [and] sleeping at the wheel" (Benaicha et al., 2017), underscoring the use of tobacco as an alertness aid. Laraqui et al. (2018) reported that an "irregular rhythm at work was associated with high prevalence of all toxic habits," and that "stress increased tobacco smoking among one-third" of drivers, linking atypical hours and strain to smoking, alcohol, and cannabis. Economic pressures and income insecurity exacerbate risky behaviors on the road, channelling coping mechanisms toward alcohol and other substances (Kitara & Karlsson, 2020). The ease of access to substances through peers and on-route vendors, combined with explicit "alertness" motives, integrates use into daily driving routines (Hamzat & Kanmodi, 2019). In trauma-exposed environments, harmful cannabis use correlated with post-crash PTSD symptoms, linking substance use directly to occupational trauma (Alenko et al., 2019).

3.3.2. Demographic, socioeconomic, and cultural factors

This scoping review identified a link between demographic, socioeconomic, and cultural factors and substance use. In Nigeria, Akande et al. (2023) observed that "among the factors found to be significantly associated with substance abuse […] were ethnicity ($p = 0.002$) and religion ($p = 0.009$)", underscoring how socio-cultural affiliation stratifies risk among commercial drivers, independent of occupational exposures. Furthermore, Akande et al. (2023) reported that Muslim drivers had significantly lower odds of psychoactive substance abuse than Christian drivers (OR = 0.183, 95% CI 0.039–0.855; $p = 0.031$). In Morocco, Laraqui et al. (2018) reported clear sociodemographic gradients, noting that "the prevalence of consumption of psychoactive substances is inversely proportional to

socioeconomic status," that "the prevalence of toxic habits among our taxi drivers living alone was more important than that of married drivers" and that recorded alcohol use "was probably underestimated due to religious beliefs, cultural habits, regulations, and laws because alcohol consumption is not allowed by Islam". The results from Laraqui et al. (2018) revealed that marital status, socioeconomic position, and prevailing religious and cultural norms influence both the actual use and its detectability in surveys.

Mental health outcomes among taxi drivers were associated with age, educational level, and job tenure (Uzonwanne, 2015). For instance, drivers aged 18–35 report higher psychological distress than older peers (Uzonwanne, 2015). Marital status was critical as single drivers experienced more significant mental health distress than married drivers, reflecting lower social support and increased life pressures (Uzonwanne, 2015). Educational attainment also impacted mental health vulnerabilities—drivers with lower qualifications, such as the SSCE, demonstrate markedly different psychological outcomes compared to those with higher education (OND/NCE or HND/BSc) (Uzonwanne, 2015). Job tenure influences mental health status, with drivers employed for shorter periods typically reporting higher mental distress than their more experienced counterparts (Uzonwanne, 2015).

Four studies found that taxi and other commercial drivers often operated under precarious socioeconomic conditions characterized by low wages, income instability, insufficient social protection, and limited educational access (Akande et al., 2023; Hamzat & Kanmodi, 2019; Kitara & Karlsson, 2020; Uzonwanne, 2015). Studies by Akande et al. (2023) linked financial insecurities to elevated substance use rates, particularly involving psychoactive substances such as alcohol, cannabis, tramadol, and tobacco, which are frequently used as coping mechanisms. Cultural expectations and societal stigma further exacerbate these pressures. In Uganda, Kitara and Karlsson (2020) identified significant emotional distress among drivers, closely linked to societal obligations, familial pressures, and community expectations. In Nigeria, cultural attitudes toward mental health impede help-seeking behavior, leading drivers to normalise issues like anxiety and somatic complaints such as headaches and gastrointestinal discomfort, as reported by Uzonwanne (2015).

3.4. Strategies to improve mental health for taxi and other commercial drivers

This review found that there are few specialized programs tackling mental health problems among taxi and other commercial drivers, even though psychological disorders are common in this group. Eight studies proposed strategies—mainly preventive and educational, concentrating on reducing stress, educating about substance use, improving sleep hygiene, and providing general health service referrals (Akande et al., 2023; Alenko et al., 2019; Hamzat & Kanmodi, 2019; Laraqui et al., 2018; Obadeji et al., 2021; Ramukumba & Mathikhi, 2016; Tawfik et al., 2025; Uzonwanne, 2015). In Nigeria, a study by Obadeji et al. (2021) highlighted the need for screening psychological disorders among taxi drivers, particularly those related to substance abuse, and referring high-risk individuals to treatment units. Research by Akande et al. (2023) and Hamzat and Kanmodi (2019) proposed including substance abuse education in health programs for drivers. Both Laraqui et al. (2018) in Morocco and Ramukumba and Mathikhi (2016) in South Africa emphasized the importance of implementing regular mental and physical health screenings within the transport sector, and of integrating mental health into occupational health services.

System-level actions in Morocco highlight co-designed prevention, including "information and sensitisation campaigns… individual communications and collective actions," as well as "road safety legislation and regulations… the cornerstone of prevention," and expanding "medical coverage and welfare," and improving "stressful working conditions" (Laraqui et al., 2018). Health-promotion levers include better screening and education to raise treatment uptake among high-stress drivers (Awoleye et al., 2017). Alenko et al. (2019) stressed the importance of providing psychological support for drivers who have PTSD. Kitara and Karlsson (2020) and Uzonwanne (2015) recommended mental health and drug awareness programs, emphasizing the need to address cultural stigmas associated with mental health, and encouraging drivers to seek professional mental health services. Additionally, Tawfik et al. (2025) highlighted the need for interventions that address sleep problems and health issues related to shift work, suggesting that better sleep practices, stress management training, and regular health check-ups could be beneficial.

4. Discussion

This review underscores the substantial psychological burden among taxi and other commercial drivers across Africa, revealing depression, anxiety, stress, insomnia, post-traumatic stress symptoms, and substance use disorders as the most common interrelated conditions (Alenko et al., 2019; Mohsen & Hakim, 2019; Obadeji et al., 2021; Tawfik et al., 2025; Uzonwanne, 2015). Despite variations in prevalence across countries and tools, findings consistently show that psychological disorders stem largely from the harsh occupational environment, such as job insecurity, economic pressures, informal labor conditions, congestion, and workplace hazards (Alenko et al., 2019; Obadeji et al., 2021; Uzonwanne, 2015). Furthermore, mental health challenges were associated with substance use, including alcohol, cannabis, stimulants, and opioids (Akande et al., 2023; Laraqui et al., 2018; Obadeji et al., 2021).

International evidence corroborates this review's findings, indicating significant psychological distress among taxi and other commercial drivers worldwide (Abedi et al., 2024; Barut Tusun & Emiroğlu, 2023; Davidson et al., 2020; Kaul et al., 2019; Marín-Berges et al., 2025). In Australia, approximately one-third of urban taxi drivers reported very high psychological distress, escalating to 61% experiencing high or very high distress in recent data (Davidson et al., 2020). In India, 90% of auto-rickshaw drivers have experienced depression, and 60% have shown symptoms of anxiety, mostly at mild to moderate levels (Kaul et al., 2019). Additional studies revealed depression prevalence rates of 60.5% among Indian drivers in one study (Rathi et al., 2019) and 40.1% among Spanish drivers (Marín-Berges et al., 2025). Sleep disturbances markedly increased risk, with Iranian drivers suffering from sleep disorders showing a sevenfold increase in depression rates (Abedi et al., 2024). The literature shows that anxiety affects nearly half of the drivers studied (47% and 46.3%) (Marín-Berges et al., 2025; Rathi et al., 2019), while stress prevalence ranges from 36.5% to 52.1% (Marín-

Berges et al., 2025; Rathi et al., 2019). Substance use was prevalent, with 83.3% of drivers in India utilizing tobacco (Kaul et al., 2019), often recognized—though poorly understood—as a coping mechanism for occupational stress (Barut Tusun & Emiroğlu, 2023).

Unaddressed or inadequately managed mental health conditions substantially affect drivers' performance and road safety by impairing the cognitive, emotional, and behavioral functions required for safe and effective driving (Uvais, 2019). The literature shows that anxiety and depression impair driving ability, attention, threat processing, and executive control, increasing driving errors, traffic violations, and erratic driving styles (Alavi et al., 2017; Hidalgo-Muñoz et al., 2023; Taş et al., 2025; Traficante et al., 2024). A study conducted in Iran on a cohort of 800 bus and truck drivers revealed that diagnosed depression and anxiety disorders elevate the odds of road traffic accidents by approximately 2.4 and 2.7 times, respectively, even after accounting for age and driving history (Alavi et al., 2017). Among Nigerian commercial taxi drivers, structural equation modelling indicates that deliberate violations—such as speeding, running red lights, overloading, and alcohol use—along with driving errors significantly predict accident involvement, with violations having a stronger influence (Taiwo et al., 2024). Mental and medical issues, combined with traffic and financial stress, can impair vigilance and impulse control, endangering passenger safety (Taiwo et al., 2024). Major mental disorders increase crash risk and reduce driving fitness (Unsworth et al., 2017; Uvais, 2019), and some treatments for those disorders, such as Benzodiazepine anxiolytics, can impair lane-keeping, braking, and reaction times during real or simulated driving (Hidalgo-Muñoz et al., 2023).

Many countries and international organizations have implemented traffic safety strategies to reduce road injuries (Fourie et al., 2023; Morimoto et al., 2022). However, traditional approaches that focus on infrastructure, vehicle safety, and law enforcement often neglect drivers' psychological fitness (Sharif & Saleem, 2025). The lack of comprehensive national data, insufficient policy attention, the informal taxi industry, and resistance to change allow drivers' health issues to go unnoticed until they reach critical stages, resulting in economic and healthcare burdens on individuals and public systems (Bourne, 2025; Fobosi, 2021b; Sharif & Saleem, 2025). Furthermore, inadequate occupational health coverage increases risks, particularly for drivers in informal sectors (Bourne, 2025). In South Africa, the National Land Transport Act (NLTA) and its 2024 Amendment regulate taxis, minibuses, and buses, addressing traffic violations and driver conduct (Republic of South Africa, 2024). Despite these legal measures, the taxi industry in South Africa has historically resisted regulation and has seen limited strategic intervention from the state. Although government monitoring exists, numerous operators fail to comply with Department of Employment and Labour (DoEL) regulations, and some run businesses without proper licenses (Fobosi, 2021b). This highlights notable shortcomings in enforcement and points to regulatory vulnerabilities within the sector (Fobosi, 2021b), leading to prevalent taxi-related road injuries and mortality (Gobind, 2018; Mchunu et al., 2025), safety concerns, anxiety, and depressive disorders (Eagle & Kwele, 2019; Gobind, 2018; Kwele, 2016).

This review reveals that several interventions show promise for improving the mental health of taxi and other commercial drivers. Brief psychoeducation with structured referrals was beneficial (Obadeji et al., 2021), while lifestyle-based strategies targeting sleep hygiene and shift management help reduce distress (Benaicha et al., 2017; Tawfik et al., 2025). Substance use awareness, culturally sensitive education, and routine occupational screenings are recommended (Hamzat & Kanmodi, 2019; Kitara & Karlsson, 2020; Laraqui et al., 2018; Ramukumba & Mathikhi, 2016; Uzonwanne, 2015). Evidence shows that the “Driving to Health” app improved mental health awareness (Davidson et al., 2020) and that the Ethiopian campaigns reduced accidents, though stigma and literacy barriers persist (Asefa et al., 2015; Barut Tusun & Emiroğlu, 2023).

4.1. *Limitations of the study*

This review has notable limitations. The variability in measurement tools and diagnostic criteria used across the included studies makes it challenging to compare and synthesize prevalence rates. Different studies employed various screening instruments—such as the PHQ-9, ISI, TSQ, API, and structured questionnaires—which may lead to inconsistent estimates of psychological disorders. The geographical diversity of the studies, which span multiple African countries with distinct socioeconomic, cultural, and health system contexts, limits the generalizability of the findings. Additionally, most reviewed studies employed cross-sectional designs, which limited the ability to make causal inferences about the identified contributing factors. As this was a scoping review rather than a meta-analysis, effect sizes were not calculated, and pooled estimates could not be generated due to heterogeneity in study designs, measurement tools, and cut-off criteria. Consequently, the findings provide a descriptive mapping of existing evidence rather than a quantifiable measure of magnitude, limiting direct cross-country comparisons.

4.2. *Implications*

The findings of this review carry significant implications for healthcare systems, research agendas, and transport policies concerning taxi and other commercial drivers. In the healthcare sector, integrating routine mental health screenings into occupational health services is essential. Driver-focused services should encompass culturally responsive psychoeducation, structured referral pathways, and accessible substance use treatment. Healthcare professionals must be trained to identify occupation-specific stressors—such as extended working hours, income instability, and road hazards—to enhance targeted care. While mental illness does not inherently render an individual unfit to drive, fitness-to-drive evaluations must assess symptom severity, functional impairment, and treatment adherence through specialized, standardized assessment frameworks that balance public safety with non-discriminatory practices.

From a research perspective, longitudinal studies and rigorously controlled intervention trials are necessary to elucidate causal pathways between occupational exposures and mental health outcomes. Consistent application of validated instruments (e.g., PHQ-9, PSS-10, API, ISI), transparent reporting of effect sizes, and comprehensive subgroup, stability, and sensitivity analyses would strengthen evidence synthesis. Qualitative research is also vital for understanding lived experiences and barriers to care.

Psychological disorders can impair attention, executive functioning, judgment, and psychomotor performance, thereby increasing crash risk and jeopardizing passenger safety. Consequently, transport regulations should enforce evidence-based limits on working hours, enhance occupational safety measures, and incorporate structured mental health screenings into licensing and monitoring systems. Although these findings primarily pertain to Africa, they possess global relevance, informing policies, workplace regulations, and driver well-being strategies worldwide.

5. Conclusion

This review highlights the significant psychological disorders that taxi and other commercial drivers face across various African countries. Many drivers experience issues such as depression, insomnia, stress, PTSD, anxiety, and elevated rates of substance use. These mental health problems are closely tied to the demands of taxi driving, which include long working hours, irregular shifts, and safety risks on the road. Additionally, factors such as economic instability, cultural stigma, limited access to healthcare, and demographic vulnerabilities contribute to this distress. Despite clear evidence that taxi and other commercial drivers are at a heightened risk for mental health issues, there are few programs designed to support them. Psychological disorders among taxi drivers impair concentration, decision-making, and reaction time, increasing crash risk and unsafe driving behaviors. Associated fatigue, irritability, and substance use further compromise passenger safety and service quality.

There is a need for targeted mental health screening and supportive occupational interventions. This could encompass regular mental health assessments and fitness-to-drive evaluations as part of workplace health programs, customized educational resources regarding mental health, culturally sensitive services, socioeconomic support, and improvements in working conditions. Moreover, stronger regulation of commercial transportation may contribute to reducing psychological distress and substance use among drivers. Future studies should emphasize rigorous longitudinal and intervention-based research to establish causality, evaluate intervention effectiveness, and guide policy development. A comprehensive, systematic approach to addressing the identified determinants has the potential to substantially improve occupational mental health and the overall quality of life of taxi and other commercial drivers.

Clinical trial number

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CRediT authorship contribution statement

Alexis Harerimana: Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Resources, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Gugu Mchunu:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Methodology, Formal analysis, Conceptualization.

Consent to participate

Not applicable.

Consent for publication

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Declaration of competing interest

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Data availability

All data generated or analyzed during this study are included in this published article.

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