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Working in the shadow: The role of security guards in health care – A protocol for a systematic review

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Abstract

Introduction: There is a paucity of literature on the comprehensive roles of security guards in health care, regardless of day-to-day observations of security guards playing an extensive role in this field. Thus, this review will systematically explore the roles of security guards in health care contexts to create a centred body of evidence.

Methods and analysis: The study will systematically review existing quantitative and qualitative peer-reviewed literature on security guards in institutional health care so as to understand their roles. We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a word document. Mendeley software will be used to keep track of references, while the systematic review software, Rayyan, will be used for the screening, inclusion and exclusion of articles. If necessary, reviewer number three will conduct a third review should any disputes arise between the two initial reviewers. Quality assessment of the articles will be measured with the Critical Appraisal Skills Programme (CASP) tool for articles in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study or reflexiveness if it is a quantitative study. Studies dating back 32 years will be incorporated for a comprehensive review.

Ethics and dissemination: This systematic review will use publicly available peer-reviewed data from electronic databases and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

PROSPERO registration number: CRD42022353653

STRENGTHS AND LIMITATIONS OF THIS STUDY

- This systematic review will provide a comprehensive overview of the roles security guards play in health care institutions, a topic that has to date received little attention.
- With the aim of providing a comprehensive overview, both quantitative and qualitative studies will be included.

- In addition to the multidisciplinary databases, the reference sections of the included studies will be searched to find relevant articles that were missed by the search engines or not listed in the selected databases.
- The implementation and reporting of the systematic review will follow the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) to ensure transparency and accuracy.
- Studies which are published in languages other than English will not be included. This limitation can lead to a linguistically caused bias.

Introduction

Background

Many health care facilities employ security guards as part of their security strategy.[1] Adeniyi and Puzi[2] attribute this to violent and aggressive behaviours that are not uncommon in many health care institutions, including hospitals and psychiatric and emergency units.[3–6] Such behaviours are amongst the key reasons for the employment of security guards.[7] Other reasons include the protection of valuable property held in health care facilities, public visitation control and perimeter patrols to protect the privacy and dignity of patients, and the provision of information in large facilities regarding where to find particular wards or units and the rules of visitation and entry. Security guards filter access control and protect the institution through the checking of visitor appointment cards and entry to the correct facility within institutions.[8]

An important function of security guards is safety intervention when patients threaten to harm themselves, staff, or other patients, or when there is a need for physical restraint or de-escalation.[1,9] Thus, a key role is to ensure patient and staff safety by managing violent and aggressive behaviour.[10–12]

Security guards are more likely than health care professionals to be injured at work, with many attacks occurring at night. Clearly, they are on the front line, commonly being deployed to reinforce the overall security programme of health facilities and being called in to situations of elevated risk.[13] In a study on security guards in Finland, 39% reported at least one incident of verbal aggression against them per month, 19% reported at least one threat of physical aggression per month and 15% experienced at least one act of physical aggression per month.[14]

In addition to the official tasks that security guards are contracted for, they may also take on other roles, even if informally.[15] It is clear, therefore, that security guards take on numerous roles and perform several tasks, including, in some instances, tasks for which they are not adequately trained.[16] For instance, security guards may be asked to perform the role of informal interpreters when clinicians are not able to communicate with patients who speak languages which clinicians do not understand.[17,18] A study, conducted in South Africa at a psychiatric hospital, investigated the potential consequences for diagnostic assessments mediated by ad hoc interpreters who were employed as health care workers and household aides. The study found errors in the interpretations, which consequently affected the goals and outcomes of the clinical sessions, some potentially resulting in incorrect diagnoses of the severity of patient psychiatric illness. Within the context of the current research protocol, security guards may be assigned to carry out informal interpreting in the absence of training and support in interpreting skills, and, in addition, these security guards may be unfamiliar with technical medical and psychiatric terminology.[17]

Sefalafala and Webster[19] note that security guards are often amongst the lower paid staff members at a health care facility. Given these pressures, some studies suggest that security guards may be prone to behavioural problems and mental health problems such as substance abuse, antisocial behaviour, physical aggression, and anger.[20] Notwithstanding, it appears that little attention has been given to the work of security guards in health care despite the fact that security guards are part of the broader health care workforce.[20]

This review seeks to systematically examine and synthesise research on the role of security guards in health care. To our knowledge, this will be the first review on this topic. We aim to understand critical processes and outcomes related to the use of security guards in health care. It is possible that the review may lead to recommendations for adequate training and support for this cadre of workers, as well as guidelines and policy recommendations.

Methods and analysis

Types of studies

Qualitative, quantitative and mixed method studies on the roles of security guards will be incorporated in this review. Scientific studies published in English will be included. Any studies reporting on the roles of security guards and their experience of these roles will be included. There is no geographical restriction – we will search for studies from high-, middle- and low-income countries. All studies included must have been peer-reviewed.

Type of participants

Studies must report on the roles and experiences of security guards but there are no other restrictions, for example, studies on health care workers' perceptions of the roles and experiences of security guards will be included.

Search methods for identification of studies

We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a Word document. Mendeley referencing software will be used to manage searched articles, thereafter transferred to the systematic review software, Rayyan, where duplicates will be removed. Screening, inclusion and exclusion of articles will be carried out using Rayyan. Two reviewers will review each study independently. Where there are disagreements across reviewers, a third reviewer will carry out an independent review to resolve differences. We have developed a search strategy that will be adapted to different search engines. In addition to database search results, reference

sections of the included journal articles will be reviewed to identify any relevant articles that were missed by search engines.

A title search will be conducted using the study's keywords, and these will be documented on the title extract and abstract search list. Only articles that fulfil the title inclusion criteria will advance to the second level, which is the abstract search. Articles included will be appraised using the Critical Appraisal Skills Programme (CASP) tool,[21] and then extracted.

Search strategy

The keywords listed in Table 1 will guide the searches. These strings will be expanded based on the information retrieved from selected articles.

Table 1

Search strings for electronic databases

Concept A: Security guards	**Concept B: Health care**
Within Concept A, terms used will include:	Within Concept B, terms used will include:
"security guards" OR "security officers" OR "patrol officers" OR "attendant" OR "manhandle" OR "patient watch" OR "supervision" OR "management" OR "hospital safety" OR "policing" OR "security personnel" OR "hospital security" OR "hospital safeguarding" OR "guard" OR "keeper" OR "watchperson" OR "security officers" OR "hospital monitor" Or "security force".	"hospital" OR "mental health" OR "psychiatric care" OR "inpatient psychiatric units" OR "emergency units" OR "psychiatry" OR "mental health" OR "mental institution" OR "psychiatric hospital" OR "psychiatric ward" OR "mental facility" OR "clinical settings" OR "health" OR "primary care" OR "behavioural unit" OR "clinical settings" OR "health care" OR "health" OR "health service" OR "medical aid" OR "medical assistance" OR "public health care" OR "health care service" OR "health-care" OR "health-related" OR "medical field" OR "clinics" OR "hospitals".

Time period

Articles reviewed will include those published from 1990 to 2022.

Exclusion criteria

This review will exclude grey literature, unpublished articles, opinion pieces, case reports, and publications that do not have primary data and a clear description of the methods used. In cases where studies analysing

the same data are published in more than one journal, we will include the most recent and complete publication. Any articles, research and data prior to 1990 will be excluded, as will studies in languages other than English. Studies that focus on medical personnel and not on security guards will also be excluded (see Table 2).

Inclusion criteria

Studies published in English peer-reviewed journals and open sources accessed from the Stellenbosch University library website will be included. Additionally, this study will focus on all age groups and studies reported in English from 1990 to 2022. This will allow for a comprehensive scope in this niche area (see Table 2).

Table 2

Inclusion and exclusion criteria

	Included	Excluded
Publication type	English peer-reviewed journal articles.	
Study design	All study designs.	
Study population	All studies conducted on security guards of all ages in high-, middle- and low-income countries.	Grey literature, unpublished articles, cases and publications that do not have a clear description of methods used. Any data before 1990.
Exposure variables	N/A	
Outcome variables	All roles, uses and responsibilities reported by studies.	

Selection of studies to be included in the review

To define the inclusion criteria, most studies utilise the PICO (Population, Intervention, Comparison, Outcome) model. This model is used for quantitative clinical research.[22] This study, therefore, adopts SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type) which is a suitable framework for the inclusion of qualitative, quantitative, and mixed studies[23] (see Table 3).

Table 3

Criteria for including studies in the review

SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type)	
Sample	All security guards working in mental health care, any age, and gender. The review is not restricted to geographical area, examining data from all over the world, thus including the perspectives of health care professionals internationally.
Phenomenon of Interest	The role of security guards in psychiatric care.
Design	Peer-reviewed published literature of any research design.
Evaluation	Characteristics, views, experiences.
Research Type	Qualitative, quantitative and mixed methods peer-reviewed studies.

The Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P) flowchart will be an additional retrieval strategy to document the search.[24] The first step will be screening the literature. A title search will be conducted using the database and the study's keywords, these being documented on the title extract and abstract search list. Only articles that fulfil the title inclusion criteria will advance to the second level, which is the abstract search. The PRISMA flowchart will account for the number of records identified or removed (see Figure 1 below).

[Place Figure 1 about here]

Data extraction and management

We will extract data in word form. The reviewer will also revert to the PRISMA extraction flow chart in order to extract studies initially successful in meeting the criteria. The first reviewer will review first, followed by the second reviewer. The third reviewer will review if there are any disparities between the two initial reviewers. These will be done independently on systematic review software, Rayyan, to avoid error. Extracted data will include study details (author, year of publication, country of study).

Quality appraisal and assessment of bias

Upon selecting articles which fulfil the title and abstract search criteria, articles included will be appraised. The Critical Appraisal Skills Programme (CASP) tool[21] is commonly used,[25] and an adapted version of the CASP tool, proposed by Laher and Hassem[26], will be used in this study. This tool consists of six items for theoretical articles, 11 items for quantitative articles and 10 questions for qualitative articles, which will be used as an appraisal tool in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study and reflexivity if it is a quantitative study.[26]

The CASP tool itself proposes a cut-off for a study after a few questions/checklists, therefore any scoring or grading is not recommended for studies being appraised.[21] The first few questions on the CASP checklist are screening questions; if the answer to them is "yes", then the study is worth proceeding to the remaining questions. An article must fulfil the full checklist in order to advance to the extraction phase.

Data synthesis and analysis

A narrative analysis/synthesis will be conducted to extract text which will then be narrated.[22] Popay et al.[27] outline four elements involved in reporting narratively, namely, 1) Developing a theory of how the intervention works, why and for whom; 2) Developing a preliminary synthesis of findings of included studies; 3) Exploring similarities/relationships in the data; and 4) Assessing the robustness of the synthesis. For the purpose of this study, only elements 2–4 will be included as the aim is not to develop an intervention, but rather to synthesize the roles of security guards in psychiatric institutions. The data will be presented in the form of a qualitative narrative description, in table format. For transparent reporting, the analysis will be guided by the PRISMA statement.

Patient and public involvement

As this is a systematic review protocol, no patients or public will be involved.

Ethics and dissemination

This systematic review will use publicly available peer-reviewed data from the 10 identified search engines (Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and PubMED) and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

Authors' contributions: LS, LiSh and SHR conceptualised the study. LiSh was responsible for drafting the protocol in close consultation with LS and SHR. QC, PS and TR provided significant edits to the protocol. All authors revised and approved the manuscript.

Competing interests statement: None declared.

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Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

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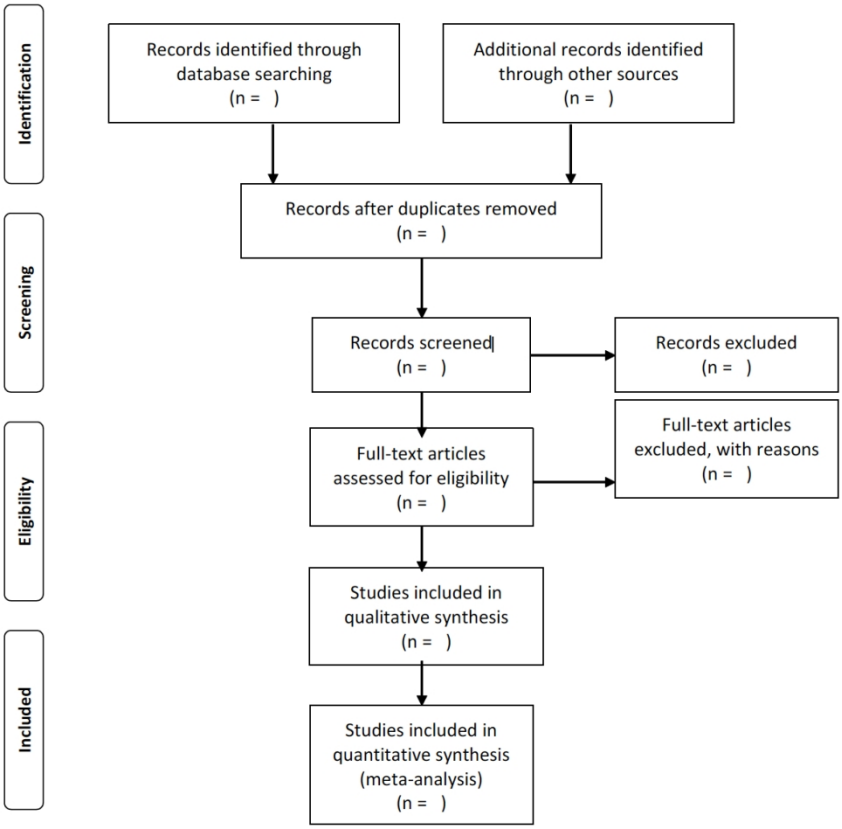

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

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Secondary Subject Heading:	Health policy, Public health, Mental health
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Methods and analysis: The study will systematically review existing quantitative and qualitative peer-reviewed literature on security guards in institutional health care so as to understand their roles. We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a word document. Mendeley software will be used to keep track of references, while the systematic review software, Rayyan, will be used for the screening, inclusion and exclusion of articles. If necessary, reviewer number three will conduct a third review should any disputes arise between the two initial reviewers. Quality assessment of the articles will be measured with the Critical Appraisal Skills Programme (CASP) tool for articles in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study or reflexiveness if it is a quantitative study. Studies dating back 32 years will be incorporated for a comprehensive review.

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Concept A: Security guards	**Concept B: Health care**
Within Concept A, terms used will include:	Within Concept B, terms used will include:
"security guards" OR "security officers" OR "patrol officers" OR "attendant" OR "manhandle" OR "patient watch" OR "supervision" OR "management" OR "hospital safety" OR "policing" OR "security personnel" OR "hospital security" OR "hospital safeguarding" OR "guard" OR "keeper" OR "watchperson" OR "security officers" OR "hospital monitor" Or "security force".	"hospital" OR "mental health" OR "psychiatric care" OR "inpatient psychiatric units" OR "emergency units" OR "psychiatry" OR "mental health" OR "mental institution" OR "psychiatric hospital" OR "psychiatric ward" OR "mental facility" OR "clinical settings" OR "health" OR "primary care" OR "behavioural unit" OR "clinical settings" OR "health care" OR "health" OR "health service" OR "medical aid" OR "medical assistance" OR "public health care" OR "health care service" OR "health-care" OR "health-related" OR "medical field" OR "clinics" OR "hospitals".

Time period

Articles reviewed will include those published from 1990 to 2022 to provide a comprehensive examination and synthesisation of the existing research.

Exclusion criteria

This review will exclude grey literature, unpublished articles, opinion pieces, case reports, and publications that do not have primary data and a clear description of the methods used. In cases where studies analysing the same data are published in more than one journal, we will include the most recent and complete publication. Any articles, research and data prior to 1990 will be excluded, as will studies in languages other than English. Studies that focus on medical personnel and not on security guards will also be excluded (see Table 2).

Inclusion criteria

Studies published in English peer-reviewed journals and open sources accessed from the Stellenbosch University library website will be included. Additionally, this study will focus on all age groups and studies reported in English from 1990 to 2022. This will allow for a comprehensive scope in this niche area (see Table 2).

Table 2

Overall approach to inclusion and exclusion criteria

	Included	Excluded
Publication type	English peer-reviewed journal articles.	
Study design	All study designs.	
Study population	All studies conducted on security guards of all ages in high-, middle- and low-income countries.	Grey literature, unpublished articles, cases and publications that do not have a clear description of methods used. Any data before 1990.
Exposure variables	N/A	
Outcome variables	All roles, uses and responsibilities reported by studies.	

Selection of studies to be included in the review

To define the inclusion criteria, most studies utilise the PICO (Population, Intervention, Comparison, Outcome) model. This model is used for quantitative clinical research.[21] This study, therefore, adopts SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type) which is a suitable framework for the inclusion of qualitative, quantitative, and mixed studies[22] (see Table 3). Screening, inclusion and exclusion of articles will be carried out using Rayyan. The screening process involves title and abstract screening by two independent reviewers, followed by full text screening by two independent reviewers. Where there are disagreements across the two reviewers, a third reviewer will carry out an independent review to resolve differences.

Table 3

SPIDER approach for selecting studies

SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type)

Sample	Security guards working in health care and other health care providers, any age, and gender. The review is not restricted to geographical area, examining data from all over the world, thus including the perspectives of health care professionals internationally.
Phenomenon of Interest	The role of security guards in healthcare.
Design	Peer-reviewed published literature of any research design.
Evaluation	Characteristics, views, experiences.
Research Type	Qualitative, quantitative and mixed methods peer-reviewed studies.

The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flowchart will be an additional retrieval strategy to document the search.[23] The first step will be screening the literature. A title search will be conducted using the database and the study's keywords, these being documented on the title extract and abstract search list. Only articles that fulfil the title inclusion criteria will advance to the second level, which is the abstract search. The PRISMA flowchart will account for the number of records identified or removed (see Figure 1 below).

[Place Figure 1 about here]

Quality appraisal and assessment of bias

Upon selecting articles which fulfil the title and abstract search criteria, articles included will be appraised. The Critical Appraisal Skills Programme (CASP) tool[24] is commonly used,[25] and an adapted version of the CASP tool, proposed by Laher and Hassem[26], will be used in this study. This tool consists of six items for theoretical articles, 11 items for quantitative articles and 10 questions for qualitative articles, which will be used as an appraisal tool in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study and reflexivity if it is a quantitative study.[26]

The CASP tool itself proposes a cut-off for a study after a few questions/checklists, therefore any scoring or grading is not recommended for studies being appraised.[24] The first few questions on the CASP checklist are screening questions; if the answer to them is "yes", then the study is worth proceeding to the remaining questions. An article must fulfil the full checklist in order to advance to the extraction phase.

Data extraction and management

To extract data, reviewer number 1 will conduct data extraction in Word. Extracted data will be tabularised to include study details (author, year of publication, country of study). Additionally, studies sought through chain referencing will be extracted.

Data synthesis and analysis

A narrative analysis/synthesis will be conducted to extract text which will then be narrated.[21] Popay et al.[27] outline four elements involved in reporting narratively, namely, 1) Developing a theory of how the intervention works, why and for whom; 2) Developing a preliminary synthesis of findings of included studies; 3) Exploring similarities/relationships in the data; and 4) Assessing the robustness of the synthesis. For the purpose of this study, only elements 2–4 will be included as the aim is not to develop an intervention, but rather to synthesize the roles of security guards in healthcare. The data will be presented in the form of a qualitative narrative description, in table format. For transparent reporting, the analysis will be guided by the PRISMA statement.

The planned start of the review will be as soon as the protocol has been accepted (probably in March 2023) and is expected to be completed in April 2024.

Patient and public involvement

As this is a systematic review protocol, no patients or public will be involved.

Ethics and dissemination

This systematic review will use publicly available peer-reviewed data from the 10 identified search engines (Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and PubMED) and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

Authors' contributions: LS, LiSh and SHR conceptualised the study. LiSh was responsible for drafting the protocol in close consultation with LS and SHR. QC, PS and TR provided significant edits to the protocol. All authors revised and approved the manuscript.

Competing interests statement: None declared.

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Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

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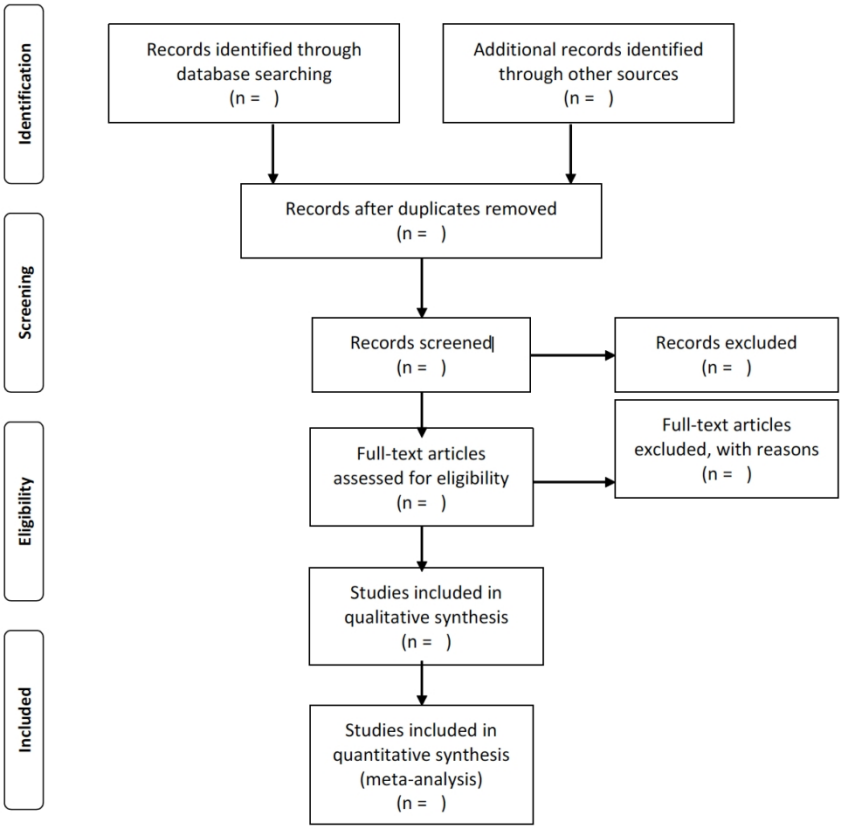

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

245x222mm (144 x 144 DPI)

PRISMA-P (Preferred Reporting Items for Systematic review and Meta-Analysis Protocols) 2015 checklist: recommended items to address in a systematic review protocol*

Section and topic	Item No	Checklist item	Page/line
ADMINISTRATIVE INFORMATION			
Title:			
Identification	1a	Identify the report as a protocol of a systematic review	p.1/line 1
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	N/A
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	p.2/line 46
Authors:			
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	p.1/line 1-19
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	p.9/line 196-198
Support:			
Sources	5a	Indicate sources of financial or other support for the review	p.9/line 200-201
Sponsor	5b	Provide name for the review funder and/or sponsor	N/A
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	N/A
INTRODUCTION			
Rationale	6	Describe the rationale for the review in the context of what is already known	p.4/5/ line 59-100
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	p.5/line 96-100 p. 7/line 143-150
METHODS			
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	p. 6/8/ line 125-158
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	p. 5/6/ line 112-127
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	p. 6/ /table 1

Study records:			
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	p. 8/9/ line 172-175
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	p. 7/ line 142-150
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	p. 8/9 / line172-175
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	p. 7/8 / line 142-150, table 3
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	p.7 / table 2
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	p. 8/ line 160-171
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	p. 9 / line 176-184
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2, Kendall's τ)	N/A
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	N/A
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	p. 9 / line 176-184
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	N/A
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	p.8 line 168

*** It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items. Amendments to a review protocol should be tracked and dated. The copyright for PRISMA-P (including checklist) is held by the PRISMA-P Group and is distributed under a Creative Commons Attribution Licence 4.0.**

From: Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart L, PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2015 Jan 2;349(jan02 1):g7647.

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The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

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Primary Subject Heading:	Global health
Secondary Subject Heading:	Health policy, Public health, Mental health
Keywords:	PUBLIC HEALTH, Quality in health care < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, GENERAL MEDICINE (see Internal Medicine), PSYCHIATRY

The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

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Keywords: security guards, health care, roles, hospital

The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

Abstract

Introduction: There is a paucity of literature on the comprehensive roles of security guards in health care, regardless of day-to-day observations of security guards playing an extensive role in this field. Thus, this review will systematically explore the roles of security guards in health care contexts to create a centred body of evidence.

Methods and analysis: The study will systematically review existing quantitative and qualitative peer-reviewed literature on security guards in institutional health care so as to understand their roles. We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a word document. Mendeley software will be used to keep track of references, while the systematic review software, Rayyan, will be used for the screening, inclusion and exclusion of articles. If necessary, reviewer number three will conduct a third review should any disputes arise between the two initial reviewers. Quality assessment of the articles will be measured with the Critical Appraisal Skills Programme (CASP) tool for articles in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study or reflexiveness if it is a quantitative study. Studies dating back 32 years will be incorporated for a comprehensive review.

Ethics and dissemination: This systematic review will use publicly available peer-reviewed data from electronic databases and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

PROSPERO registration number: CRD42022353653

STRENGTHS AND LIMITATIONS OF THIS STUDY

- With the aim of providing a comprehensive overview, both quantitative and qualitative studies will be included.
- In addition to the multidisciplinary databases, the reference sections of the included studies will be searched to find relevant articles that were missed by the search engines or not listed in the selected databases.
- The implementation and reporting of the systematic review will follow the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) to ensure transparency and accuracy.

- Studies which are published in languages other than English will not be included, which can lead to a linguistically caused bias.

Introduction

Background

Many health care facilities employ security guards as part of their security strategy.[1] Adeniyi and Puzi[2] attribute this to violent and aggressive behaviours that are not uncommon in many health care institutions, including hospitals and psychiatric and emergency units.[3–6] Such behaviours are amongst the key reasons for the employment of security guards.[7] Other reasons include the protection of valuable property held in health care facilities, public visitation control and perimeter patrols to protect the privacy and dignity of patients, and the provision of information in large facilities regarding where to find particular wards or units and the rules of visitation and entry. Security guards filter access control and protect the institution through the checking of visitor appointment cards and entry to the correct facility within institutions.[8]

An important function of security guards is safety intervention when patients threaten to harm themselves, staff, or other patients, or when there is a need for physical restraint or de-escalation.[1,9] Thus, a key role is to ensure patient and staff safety by managing violent and aggressive behaviour.[10–12]

Security guards are more likely than health care professionals to be injured at work, with many attacks occurring at night. Clearly, they are on the front line, commonly being deployed to reinforce the overall security programme of health facilities and being called in to situations of elevated risk.[13] In a study on security guards in Finland, 39% reported at least one incident of verbal aggression against them per month, 19% reported at least one threat of physical aggression per month and 15% experienced at least one act of physical aggression per month.[14]

In addition to the official tasks that security guards are contracted for, they may also take on other roles, even if informally.[15] It is clear, therefore, that security guards take on numerous roles and perform several tasks, including, in some instances, tasks for which they are not adequately trained.[16] For instance, security guards may be asked to perform the role of informal interpreters when clinicians are not able to communicate with patients who speak languages which clinicians do not understand.[17,18] A study, conducted in South Africa at a psychiatric hospital, investigated the potential consequences for diagnostic assessments mediated by ad hoc interpreters who were employed as health care workers and household aides. The study found errors in the interpretations, which consequently affected the goals and outcomes of the clinical sessions, some potentially resulting in incorrect diagnoses of the severity of patient psychiatric illness. Within the context of the current research protocol, security guards may be assigned to carry out informal interpreting in the absence of training and support in interpreting skills, and, in addition, these security guards may be unfamiliar with technical medical and psychiatric terminology.[17]

Sefalafala and Webster[19] note that security guards are often amongst the lower paid staff members at a health care facility. Given these pressures, some studies suggest that security guards may be prone to behavioural problems and mental health problems such as substance abuse, antisocial behaviour, physical aggression, and anger.[20] Notwithstanding, it appears that little attention has been given to the work of security guards in health care despite the fact that security guards are part of the broader health care workforce.[20]

This review seeks to systematically examine and synthesise research on the role of security guards in health care. To our knowledge, this will be the first review on this topic. We aim to understand critical processes and outcomes related to the use of security guards in health care. It is possible that the review may lead to recommendations for adequate training and support for this cadre of workers, as well as guidelines and policy recommendations.

Methods and analysis

Types of studies

Qualitative, quantitative and mixed method studies on the roles of security guards will be incorporated in this review. Scientific studies published in English will be included. Any studies reporting on the roles of security guards and their experience of these roles will be included. There is no geographical restriction – we will search for studies from high-, middle- and low-income countries. All studies included must have been peer-reviewed.

Type of participants

Studies must report on the roles and experiences of security guards but there are no other restrictions, for example, studies on health care workers' perceptions of the roles and experiences of security guards will be included.

Search methods for identification of studies

We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a Word document. Mendeley referencing software will be used to manage searched articles, thereafter transferred to the systematic review software, Rayyan, where duplicates will be removed. We have developed a search strategy that will be adapted to different search engines (see Table 1). In addition to database search results, reference sections of the included journal articles will be reviewed to identify any relevant articles that were missed by search engines.

Search strategy

The keywords listed in Table 1 will guide the searches. These strings will be expanded based on the information retrieved from selected articles.

Table 1

Search strings for electronic databases

Concept A: Security guards	**Concept B: Health care**
Within Concept A, terms used will include:	Within Concept B, terms used will include:
"security guards" OR "security officers" OR "patrol officers" OR "attendant" OR "manhandle" OR "patient watch" OR "supervision" OR "management" OR "hospital safety" OR "policing" OR "security personnel" OR "hospital security" OR "hospital safeguarding" OR "guard" OR "keeper" OR "watchperson" OR "security officers" OR "hospital monitor" Or "security force".	"hospital" OR "mental health" OR "psychiatric care" OR "inpatient psychiatric units" OR "emergency units" OR "psychiatry" OR "mental health" OR "mental institution" OR "psychiatric hospital" OR "psychiatric ward" OR "mental facility" OR "clinical settings" OR "health" OR "primary care" OR "behavioural unit" OR "clinical settings" OR "health care" OR "health" OR "health service" OR "medical aid" OR "medical assistance" OR "public health care" OR "health care service" OR "health-care" OR "health-related" OR "medical field" OR "clinics" OR "hospitals".

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Articles reviewed will include those published from 1990 to 2022 to provide a comprehensive examination and synthesisation of the existing research.

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Inclusion criteria

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Table 2

Overall approach to inclusion and exclusion criteria

	Included	Excluded
Publication type	English peer-reviewed journal articles.	
Study design	All study designs.	
Study population	All studies conducted on security guards of all ages in high-, middle- and low-income countries.	Grey literature, unpublished articles, cases and publications that do not have a clear description of methods used. Any data before 1990.
Exposure variables	N/A	
Outcome variables	All roles, uses and responsibilities reported by studies.	

Selection of studies to be included in the review

To define the inclusion criteria, most studies utilise the PICO (Population, Intervention, Comparison, Outcome) model. This model is used for quantitative clinical research.[21] This study, therefore, adopts SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type) which is a suitable framework for the inclusion of qualitative, quantitative, and mixed studies[22] (see Table 3). Screening, inclusion and exclusion of articles will be carried out using Rayyan. The screening process involves title and abstract screening by two independent reviewers, followed by full text screening by two independent reviewers. Where there are disagreements across the two reviewers, a third reviewer will carry out an independent review to resolve differences.

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Phenomenon of Interest	The role of security guards in healthcare.
Design	Peer-reviewed published literature of any research design.
Evaluation	Characteristics, views, experiences.
Research Type	Qualitative, quantitative and mixed methods peer-reviewed studies.

The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flowchart will be an additional retrieval strategy to document the search.[23] The first step will be screening the literature. A title search will be conducted using the database and the study's keywords, these being documented on the title extract and abstract search list. Only articles that fulfil the title inclusion criteria will advance to the second level, which is the abstract search. The PRISMA flowchart will account for the number of records identified or removed (see Figure 1 below).

[Place Figure 1 about here]

Quality appraisal and assessment of bias

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A narrative analysis/synthesis will be conducted to extract text which will then be narrated.[21] Popay et al.[27] outline four elements involved in reporting narratively, namely, 1) Developing a theory of how the intervention works, why and for whom; 2) Developing a preliminary synthesis of findings of included studies; 3) Exploring similarities/relationships in the data; and 4) Assessing the robustness of the synthesis. For the purpose of this study, only elements 2–4 will be included as the aim is not to develop an intervention, but rather to synthesize the roles of security guards in healthcare. The data will be presented in the form of a qualitative narrative description, in table format. For transparent reporting, the analysis will be guided by the PRISMA statement.

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Patient and public involvement

As this is a systematic review protocol, no patients or public will be involved.

Ethics and dissemination

This systematic review will use publicly available peer-reviewed data from the 10 identified search engines (Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and PubMED) and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

Authors' contributions: LS, LiSh and SHR conceptualised the study. LiSh was responsible for drafting the protocol in close consultation with LS and SHR. QC, PS and TR provided significant edits to the protocol. All authors revised and approved the manuscript.

Competing interests statement: None declared.

Funding statement: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

References

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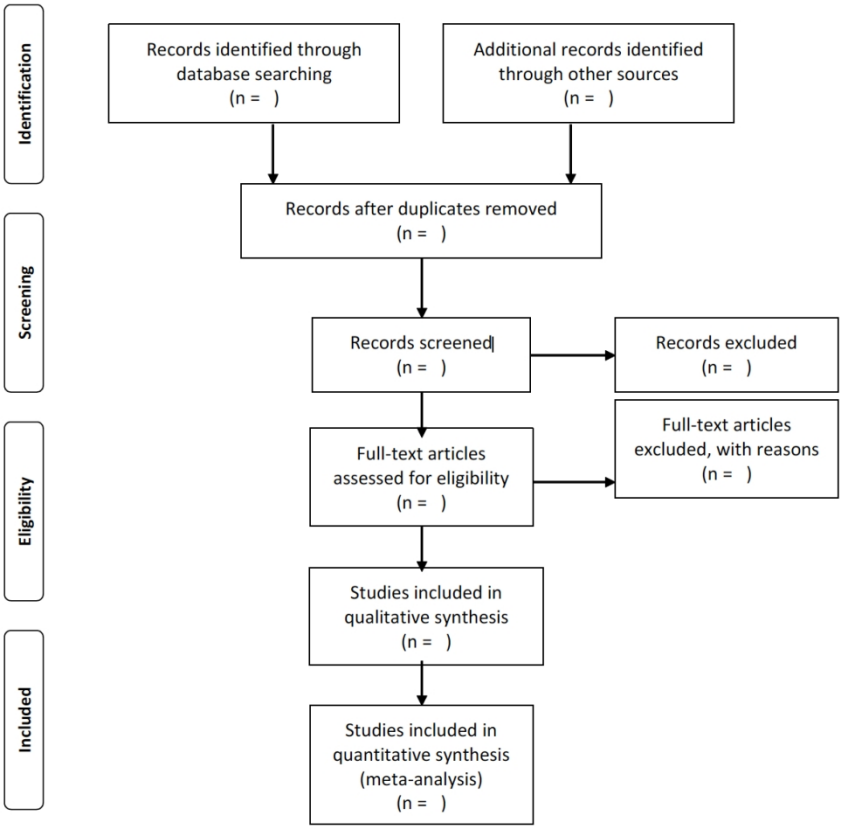

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

245x222mm (144 x 144 DPI)

PRISMA-P (Preferred Reporting Items for Systematic review and Meta-Analysis Protocols) 2015 checklist: recommended items to address in a systematic review protocol*

Section and topic	Item No	Checklist item	Page/line
ADMINISTRATIVE INFORMATION			
Title:			
Identification	1a	Identify the report as a protocol of a systematic review	p.1/line 1
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	N/A
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	p.2/line 46
Authors:			
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	p.1/line 1-19
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	p.9/line 196-198
Support:			
Sources	5a	Indicate sources of financial or other support for the review	p.9/line 200-201
Sponsor	5b	Provide name for the review funder and/or sponsor	N/A
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	N/A
INTRODUCTION			
Rationale	6	Describe the rationale for the review in the context of what is already known	p.4/5/ line 59-100
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	p.5/line 96-100 p. 7/line 143-150
METHODS			
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	p. 6/8/ line 125-158
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	p. 5/6/ line 112-127
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	p. 6/ /table 1

Study records:			
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	p. 8/9/ line 172-175
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	p. 7/ line 142-150
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	p. 8/9 / line172-175
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	p. 7/8 / line 142-150, table 3
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	p.7 / table 2
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	p. 8/ line 160-171
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	p. 9 / line 176-184
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2, Kendall's τ)	N/A
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	N/A
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	p. 9 / line 176-184
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	N/A
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	p.8 line 168

*** It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items. Amendments to a review protocol should be tracked and dated. The copyright for PRISMA-P (including checklist) is held by the PRISMA-P Group and is distributed under a Creative Commons Attribution Licence 4.0.**

From: Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart L, PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2015 Jan 2;349(jan02 1):g7647.

The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

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Word count: 2.218 (excluding title page, references, figures and tables)

Keywords: security guards, health care, roles, hospital

The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

Abstract

Introduction: There is a paucity of literature on the comprehensive roles of security guards in health care, regardless of day-to-day observations of security guards playing an extensive role in this field. Thus, this review will systematically explore the roles of security guards in health care contexts to create a centred body of evidence.

Methods and analysis: The study will systematically review existing quantitative and qualitative peer-reviewed literature on security guards in institutional health care so as to understand their roles. We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a word document. Mendeley software will be used to keep track of references, while the systematic review software, Rayyan, will be used for the screening, inclusion and exclusion of articles. If necessary, reviewer number three will conduct a third review should any disputes arise between the two initial reviewers. Quality assessment of the articles will be measured with the Critical Appraisal Skills Programme (CASP) tool for articles in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study or reflexiveness if it is a quantitative study. Studies dating back 32 years will be incorporated for a comprehensive review.

Ethics and dissemination: This systematic review will use publicly available peer-reviewed data from electronic databases and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

PROSPERO registration number: CRD42022353653

STRENGTHS AND LIMITATIONS OF THIS STUDY

- With the aim of providing a comprehensive overview, both quantitative and qualitative studies will be included.
- In addition to the multidisciplinary databases, the reference sections of the included studies will be searched to find relevant articles that were missed by the search engines or not listed in the selected databases.
- The implementation and reporting of the systematic review will follow the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) to ensure transparency and accuracy.

- Studies which are published in languages other than English will not be included, which can lead to a linguistically caused bias.

Introduction

Background

Many health care facilities employ security guards as part of their security strategy.[1] Adeniyi and Puzi[2] attribute this to violent and aggressive behaviours that are not uncommon in many health care institutions, including hospitals and psychiatric and emergency units.[3–6] Such behaviours are amongst the key reasons for the employment of security guards.[7] Other reasons include the protection of valuable property held in health care facilities, public visitation control and perimeter patrols to protect the privacy and dignity of patients, and the provision of information in large facilities regarding where to find particular wards or units and the rules of visitation and entry. Security guards filter access control and protect the institution through the checking of visitor appointment cards and entry to the correct facility within institutions.[8]

An important function of security guards is safety intervention when patients threaten to harm themselves, staff, or other patients, or when there is a need for physical restraint or de-escalation.[1,9] Thus, a key role is to ensure patient and staff safety by managing violent and aggressive behaviour.[10–12]

Security guards are more likely than health care professionals to be injured at work, with many attacks occurring at night. Clearly, they are on the front line, commonly being deployed to reinforce the overall security programme of health facilities and being called in to situations of elevated risk.[13] In a study on security guards in Finland, 39% reported at least one incident of verbal aggression against them per month, 19% reported at least one threat of physical aggression per month and 15% experienced at least one act of physical aggression per month.[14]

In addition to the official tasks that security guards are contracted for, they may also take on other roles, even if informally.[15] It is clear, therefore, that security guards take on numerous roles and perform several tasks, including, in some instances, tasks for which they are not adequately trained.[16] For instance, security guards may be asked to perform the role of informal interpreters when clinicians are not able to communicate with patients who speak languages which clinicians do not understand.[17,18] A study, conducted in South Africa at a psychiatric hospital, investigated the potential consequences for diagnostic assessments mediated by ad hoc interpreters who were employed as health care workers and household aides. The study found errors in the interpretations, which consequently affected the goals and outcomes of the clinical sessions, some potentially resulting in incorrect diagnoses of the severity of patient psychiatric illness. Within the context of the current research protocol, security guards may be assigned to carry out informal interpreting in the absence of training and support in interpreting skills, and, in addition, these security guards may be unfamiliar with technical medical and psychiatric terminology.[17]

Sefalafala and Webster[19] note that security guards are often amongst the lower paid staff members at a health care facility. Given these pressures, some studies suggest that security guards may be prone to behavioural problems and mental health problems such as substance abuse, antisocial behaviour, physical aggression, and anger.[20] Notwithstanding, it appears that little attention has been given to the work of security guards in health care despite the fact that security guards are part of the broader health care workforce.[20]

This review seeks to systematically examine and synthesise research on the role of security guards in health care. To our knowledge, this will be the first review on this topic. We aim to understand critical processes and outcomes related to the use of security guards in health care. It is possible that the review may lead to recommendations for adequate training and support for this cadre of workers, as well as guidelines and policy recommendations.

Methods and analysis

Types of studies

Qualitative, quantitative and mixed method studies on the roles of security guards will be incorporated in this review. Scientific studies published in English will be included. Any studies reporting on the roles of security guards and their experience of these roles will be included. There is no geographical restriction – we will search for studies from high-, middle- and low-income countries. All studies included must have been peer-reviewed.

Type of participants

Studies must report on the roles and experiences of security guards but there are no other restrictions, for example, studies on health care workers' perceptions of the roles and experiences of security guards will be included.

Search methods for identification of studies

We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a Word document. Mendeley referencing software will be used to manage searched articles, thereafter transferred to the systematic review software, Rayyan, where duplicates will be removed. We have developed a search strategy that will be adapted to different search engines (see Table 1). In addition to database search results, reference sections of the included journal articles will be reviewed to identify any relevant articles that were missed by search engines.

Search strategy

The keywords listed in Table 1 will guide the searches. These strings will be expanded based on the information retrieved from selected articles.

Table 1

Search strings for electronic databases

Concept A: Security guards	**Concept B: Health care**
Within Concept A, terms used will include:	Within Concept B, terms used will include:
"security guards" OR "security officers" OR "patrol officers" OR "attendant" OR "manhandle" OR "patient watch" OR "supervision" OR "management" OR "hospital safety" OR "policing" OR "security personnel" OR "hospital security" OR "hospital safeguarding" OR "guard" OR "keeper" OR "watchperson" OR "security officers" OR "hospital monitor" Or "security force".	"hospital" OR "mental health" OR "psychiatric care" OR "inpatient psychiatric units" OR "emergency units" OR "psychiatry" OR "mental health" OR "mental institution" OR "psychiatric hospital" OR "psychiatric ward" OR "mental facility" OR "clinical settings" OR "health" OR "primary care" OR "behavioural unit" OR "clinical settings" OR "health care" OR "health" OR "health service" OR "medical aid" OR "medical assistance" OR "public health care" OR "health care service" OR "health-care" OR "health-related" OR "medical field" OR "clinics" OR "hospitals".

Time period

Articles reviewed will include those published from 1990 to 2022 to provide a comprehensive examination and synthesisation of the existing research.

Exclusion criteria

This review will exclude grey literature, unpublished articles, opinion pieces, case reports, and publications that do not have primary data and a clear description of the methods used. In cases where studies analysing the same data are published in more than one journal, we will include the most recent and complete publication. Any articles, research and data prior to 1990 will be excluded, as will studies in languages other than English. Studies that focus on medical personnel and not on security guards will also be excluded (see Table 2).

Inclusion criteria

Studies published in English peer-reviewed journals and open sources accessed from the Stellenbosch University library website will be included. Additionally, this study will focus on all age groups and studies reported in English from 1990 to 2022. This will allow for a comprehensive scope in this niche area (see Table 2).

Table 2

Overall approach to inclusion and exclusion criteria

	Included	Excluded
Publication type	English peer-reviewed journal articles.	
Study design	All study designs.	
Study population	All studies conducted on security guards of all ages in high-, middle- and low-income countries.	Grey literature, unpublished articles, cases and publications that do not have a clear description of methods used. Any data before 1990.
Exposure variables	N/A	
Outcome variables	All roles, uses and responsibilities reported by studies.	

Selection of studies to be included in the review

To define the inclusion criteria, most studies utilise the PICO (Population, Intervention, Comparison, Outcome) model. This model is used for quantitative clinical research.[21] This study, therefore, adopts SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type) which is a suitable framework for the inclusion of qualitative, quantitative, and mixed studies[22] (see Table 3). Screening, inclusion and exclusion of articles will be carried out using Rayyan. The screening process involves title and abstract screening by two independent reviewers, followed by full text screening by two independent reviewers. Where there are disagreements across the two reviewers, a third reviewer will carry out an independent review to resolve differences.

Table 3

SPIDER approach for selecting studies

SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type)

Sample	Security guards working in health care and other health care providers, any age, and gender. The review is not restricted to geographical area, examining data from all over the world, thus including the perspectives of health care professionals internationally.
Phenomenon of Interest	The role of security guards in healthcare.
Design	Peer-reviewed published literature of any research design.
Evaluation	Characteristics, views, experiences.
Research Type	Qualitative, quantitative and mixed methods peer-reviewed studies.

The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flowchart will be an additional retrieval strategy to document the search.[23] The first step will be screening the literature. A title search will be conducted using the database and the study's keywords, these being documented on the title extract and abstract search list. Only articles that fulfil the title inclusion criteria will advance to the second level, which is the abstract search. The PRISMA flowchart will account for the number of records identified or removed (see Figure 1 below).

[Place Figure 1 about here]

Quality appraisal and assessment of bias

Upon selecting articles which fulfil the title and abstract search criteria, articles included will be appraised. The Critical Appraisal Skills Programme (CASP) tool[24] is commonly used,[25] and an adapted version of the CASP tool, proposed by Laher and Hassem[26], will be used in this study. This tool consists of six items for theoretical articles, 11 items for quantitative articles and 10 questions for qualitative articles, which will be used as an appraisal tool in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study and reflexivity if it is a quantitative study.[26]

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Authors' contributions: LS, LiSh and SHR conceptualised the study. LiSh was responsible for drafting the protocol in close consultation with LS and SHR. QC, PS and TR provided significant edits to the protocol. All authors revised and approved the manuscript.

Competing interests statement: None declared.

Funding statement: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

References

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The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

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The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

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The Role of Security Guards in Healthcare Settings: A Protocol for a Systematic Review

Abstract

Introduction: There is a paucity of literature on the comprehensive roles of security guards in health care, regardless of day-to-day observations of security guards playing an extensive role in this field. Thus, this review will systematically explore the roles of security guards in health care contexts to create a centred body of evidence.

Methods and analysis: The study will systematically review existing quantitative and qualitative peer-reviewed literature on security guards in institutional health care so as to understand their roles. We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a word document. Mendeley software will be used to keep track of references, while the systematic review software, Rayyan, will be used for the screening, inclusion and exclusion of articles. If necessary, reviewer number three will conduct a third review should any disputes arise between the two initial reviewers. Quality assessment of the articles will be measured with the Critical Appraisal Skills Programme (CASP) tool for articles in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study or reflexiveness if it is a quantitative study. Studies dating back 32 years will be incorporated for a comprehensive review.

Ethics and dissemination: This systematic review will use publicly available peer-reviewed data from electronic databases and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

PROSPERO registration number: CRD42022353653

STRENGTHS AND LIMITATIONS OF THIS STUDY

- With the aim of providing a comprehensive overview, both quantitative and qualitative studies will be included.
- In addition to the multidisciplinary databases, the reference sections of the included studies will be searched to find relevant articles that were missed by the search engines or not listed in the selected databases.
- The implementation and reporting of the systematic review will follow the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) to ensure transparency and accuracy.

- Studies which are published in languages other than English will not be included, which can lead to a linguistically caused bias.
- This study employs a systematic review method of reviewing data. This approach that is rigorous, transparent and ensures results are trustworthy; however additional results might be identified by following another design.

Introduction

Background

Many health care facilities employ security guards as part of their security strategy.[1] Adeniyi and Puzi[2] attribute this to violent and aggressive behaviours that are not uncommon in many health care institutions, including hospitals and psychiatric and emergency units.[3–6] Such behaviours are amongst the key reasons for the employment of security guards.[7] Other reasons include the protection of valuable property held in health care facilities, public visitation control and perimeter patrols to protect the privacy and dignity of patients, and the provision of information in large facilities regarding where to find particular wards or units and the rules of visitation and entry. Security guards filter access control and protect the institution through the checking of visitor appointment cards and entry to the correct facility within institutions.[8]

An important function of security guards is safety intervention when patients threaten to harm themselves, staff, or other patients, or when there is a need for physical restraint or de-escalation.[1,9] Thus, a key role is to ensure patient and staff safety by managing violent and aggressive behaviour.[10–12]

Security guards are more likely than health care professionals to be injured at work, with many attacks occurring at night. Clearly, they are on the front line, commonly being deployed to reinforce the overall security programme of health facilities and being called in to situations of elevated risk.[13] In a study on security guards in Finland, 39% reported at least one incident of verbal aggression against them per month, 19% reported at least one threat of physical aggression per month and 15% experienced at least one act of physical aggression per month.[14]

In addition to the official tasks that security guards are contracted for, they may also take on other roles, even if informally.[15] It is clear, therefore, that security guards take on numerous roles and perform several tasks, including, in some instances, tasks for which they are not adequately trained.[16] For instance, security guards may be asked to perform the role of informal interpreters when clinicians are not able to communicate with patients who speak languages which clinicians do not understand.[17,18] A study, conducted in South Africa at a psychiatric hospital, investigated the potential consequences for diagnostic assessments mediated by ad hoc interpreters who were employed as health care workers and household aides. The study found errors in the interpretations, which consequently affected the goals and outcomes of the clinical sessions, some potentially resulting in incorrect diagnoses of the severity of patient psychiatric illness. Within the context of the current research protocol, security guards may be assigned to carry out informal interpreting in the absence of training and support in interpreting skills, and, in addition, these security guards may be unfamiliar with technical medical and psychiatric terminology.[17]

Sefalafala and Webster[19] note that security guards are often amongst the lower paid staff members at a health care facility. Given these pressures, some studies suggest that security guards may be prone to behavioural problems and mental health problems such as substance abuse, antisocial behaviour, physical aggression, and anger.[20] Notwithstanding, it appears that little attention has been given to the work of security guards in health care despite the fact that security guards are part of the broader health care workforce.[20]

This review seeks to systematically examine and synthesise research on the role of security guards in health care. To our knowledge, this will be the first review on this topic. We aim to understand critical processes and outcomes related to the use of security guards in health care. It is possible that the review may lead to recommendations for adequate training and support for this cadre of workers, as well as guidelines and policy recommendations.

Methods and analysis

Types of studies

Qualitative, quantitative and mixed method studies on the roles of security guards will be incorporated in this review. Scientific studies published in English will be included. Any studies reporting on the roles of security guards and their experience of these roles will be included. There is no geographical restriction – we will search for studies from high-, middle- and low-income countries. All studies included must have been peer-reviewed.

Type of participants

Studies must report on the roles and experiences of security guards but there are no other restrictions, for example, studies on health care workers' perceptions of the roles and experiences of security guards will be included.

Search methods for identification of studies

We will conduct the systematic review on 10 electronic databases: Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and Pubmed. Data extraction will be in the form of a Word document. Mendeley referencing software will be used to manage searched articles, thereafter transferred to the systematic review software, Rayyan, where duplicates will be removed. We have developed a search strategy that will be adapted to different search engines (see Table 1). In addition to database search results, reference sections of the included journal articles will be reviewed to identify any relevant articles that were missed by search engines.

Search strategy

The keywords listed in Table 1 will guide the searches. These strings will be expanded based on the information retrieved from selected articles.

Table 1

Search strings for electronic databases

Concept A: Security guards	**Concept B: Health care**
Within Concept A, terms used will include:	Within Concept B, terms used will include:
"security guards" OR "security officers" OR "patrol officers" OR "attendant" OR "manhandle" OR "patient watch" OR "supervision" OR "management" OR "hospital safety" OR "policing" OR "security personnel" OR "hospital security" OR "hospital safeguarding" OR "guard" OR "keeper" OR "watchperson" OR "security officers" OR "hospital monitor" Or "security force".	"hospital" OR "mental health" OR "psychiatric care" OR "inpatient psychiatric units" OR "emergency units" OR "psychiatry" OR "mental health" OR "mental institution" OR "psychiatric hospital" OR "psychiatric ward" OR "mental facility" OR "clinical settings" OR "health" OR "primary care" OR "behavioural unit" OR "clinical settings" OR "health care" OR "health" OR "health service" OR "medical aid" OR "medical assistance" OR "public health care" OR "health care service" OR "health-care" OR "health-related" OR "medical field" OR "clinics" OR "hospitals".

Time period

Articles reviewed will include those published from 1990 to 2022 to provide a comprehensive examination and synthesisation of the existing research.

Exclusion criteria

This review will exclude grey literature, unpublished articles, opinion pieces, case reports, and publications that do not have primary data and a clear description of the methods used. In cases where studies analysing the same data are published in more than one journal, we will include the most recent and complete publication. Any articles, research and data prior to 1990 will be excluded, as will studies in languages other than English. Studies that focus on medical personnel and not on security guards will also be excluded (see Table 2).

Inclusion criteria

Studies published in English peer-reviewed journals and open sources accessed from the Stellenbosch University library website will be included. Additionally, this study will focus on all age groups and studies reported in English from 1990 to 2022. This will allow for a comprehensive scope in this niche area (see Table 2).

Table 2

Overall approach to inclusion and exclusion criteria

	Included	Excluded
Publication type	English peer-reviewed journal articles.	
Study design	All study designs.	
Study population	All studies conducted on security guards of all ages in high-, middle- and low-income countries.	Grey literature, unpublished articles, cases and publications that do not have a clear description of methods used. Any data before 1990.
Exposure variables	N/A	
Outcome variables	All roles, uses and responsibilities reported by studies.	

Selection of studies to be included in the review

To define the inclusion criteria, most studies utilise the PICO (Population, Intervention, Comparison, Outcome) model. This model is used for quantitative clinical research.[21] This study, therefore, adopts SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type) which is a suitable framework for the inclusion of qualitative, quantitative, and mixed studies[22] (see Table 3). Screening, inclusion and exclusion of articles will be carried out using Rayyan. The screening process involves title and abstract screening by two independent reviewers, followed by full text screening by two independent reviewers. Where there are disagreements across the two reviewers, a third reviewer will carry out an independent review to resolve differences.

Table 3

SPIDER approach for selecting studies

SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research Type)

Sample	Security guards working in health care and other health care providers, any age, and gender. The review is not restricted to geographical area, examining data from all over the world, thus including the perspectives of health care professionals internationally.
Phenomenon of Interest	The role of security guards in healthcare.
Design	Peer-reviewed published literature of any research design.
Evaluation	Characteristics, views, experiences.
Research Type	Qualitative, quantitative and mixed methods peer-reviewed studies.

The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flowchart will be an additional retrieval strategy to document the search.[23] The first step will be screening the literature. A title search will be conducted using the database and the study's keywords, these being documented on the title extract and abstract search list. Only articles that fulfil the title inclusion criteria will advance to the second level, which is the abstract search. The PRISMA flowchart will account for the number of records identified or removed (see Figure 1 below).

[Place Figure 1 about here]

Quality appraisal and assessment of bias

Upon selecting articles which fulfil the title and abstract search criteria, articles included will be appraised. The Critical Appraisal Skills Programme (CASP) tool[24] is commonly used,[25] and an adapted version of the CASP tool, proposed by Laher and Hassem[26], will be used in this study. This tool consists of six items for theoretical articles, 11 items for quantitative articles and 10 questions for qualitative articles, which will be used as an appraisal tool in terms of the research aims, methodology used, sample, data analysis, presentation of findings, values of the research, as well as trustworthiness if it is a qualitative study and reflexivity if it is a quantitative study.[26]

The CASP tool itself proposes a cut-off for a study after a few questions/checklists, therefore any scoring or grading is not recommended for studies being appraised.[24] The first few questions on the CASP checklist are screening questions; if the answer to them is "yes", then the study is worth proceeding to the remaining questions. An article must fulfil the full checklist in order to advance to the extraction phase.

Data extraction and management

To extract data, reviewer number 1 will conduct data extraction in Word. Extracted data will be tabularised to include study details (author, year of publication, country of study). In addition to author, year of

publication, country of study, information on the roles and responsibilities of security guards in healthcare settings, including the scope of their work, how their roles as perceived by fellow healthcare workers and their impact on their workplace and patients will be extracted.

Data synthesis and analysis

A narrative analysis/synthesis will be conducted to extract text which will then be narrated.[21] Popay et al.[27] outline four elements involved in reporting narratively, namely, 1) Developing a theory of how the intervention works, why and for whom; 2) Developing a preliminary synthesis of findings of included studies; 3) Exploring similarities/relationships in the data; and 4) Assessing the robustness of the synthesis. For the purpose of this study, only elements 2–4 will be included as the aim is not to develop an intervention, but rather to synthesize the roles of security guards in healthcare. The data will be presented in the form of a qualitative narrative description, in table format. For transparent reporting, the analysis will be guided by the PRISMA statement.

The planned start of the review will be as soon as the protocol has been accepted (probably in March 2023) and is expected to be completed in April 2024.

Patient and public involvement

As this is a systematic review protocol, no patients or public will be involved.

Ethics and dissemination

This systematic review will use publicly available peer-reviewed data from the 10 identified search engines (Biomed Central, SocIndex, ScienceDirect, Google Scholar, JSTOR, PsycARTICLES, PsycINFO, Scopus, Web of Science and PubMED) and will therefore not require an ethical review, but rather, an ethics waiver. The systematic review protocol will be submitted for ethics waiver clearance from the Stellenbosch University Health Research Ethics Committee. The findings from this review will be disseminated through peer-reviewed publications and conferences.

Authors' contributions: LS, LiSh and SHR conceptualised the study. LiSh was responsible for drafting the protocol in close consultation with LS and SHR. QC, PS and TR provided significant edits to the protocol. All authors revised and approved the manuscript.

Competing interests statement: None declared.

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Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

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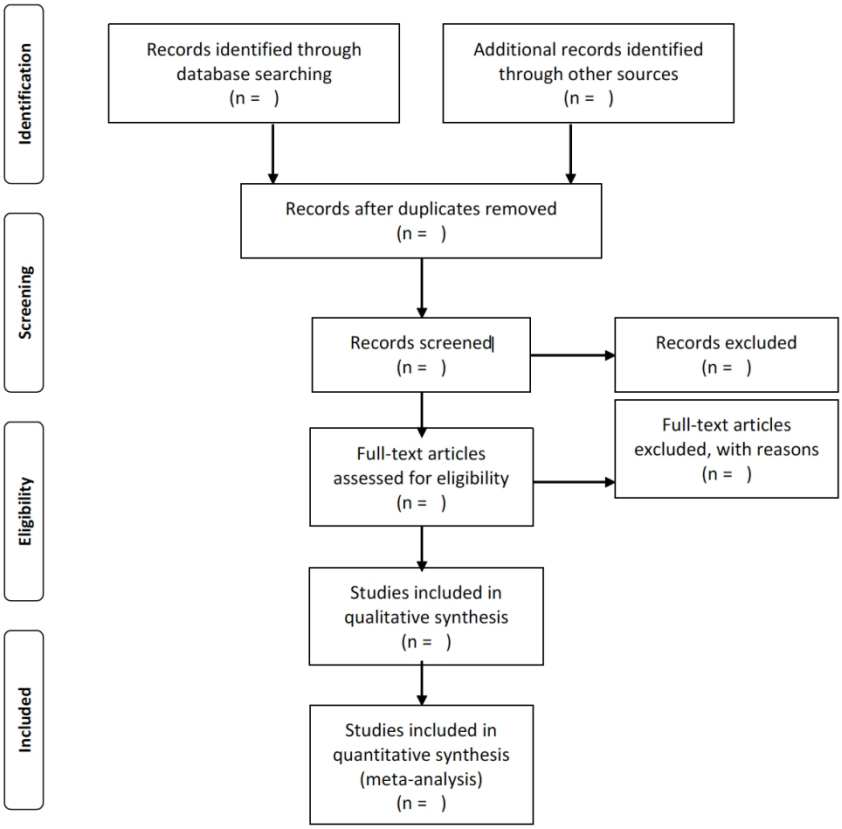

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of study selection process.

245x222mm (144 x 144 DPI)

PRISMA-P (Preferred Reporting Items for Systematic review and Meta-Analysis Protocols) 2015 checklist: recommended items to address in a systematic review protocol*

Section and topic	Item No	Checklist item	Page/line
ADMINISTRATIVE INFORMATION			
Title:			
Identification	1a	Identify the report as a protocol of a systematic review	p.1/line 1
Update	1b	If the protocol is for an update of a previous systematic review, identify as such	N/A
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	p.2/line 46
Authors:			
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	p.1/line 1-19
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments	p.9/line 196-198
Support:			
Sources	5a	Indicate sources of financial or other support for the review	p.9/line 200-201
Sponsor	5b	Provide name for the review funder and/or sponsor	N/A
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol	N/A
INTRODUCTION			
Rationale	6	Describe the rationale for the review in the context of what is already known	p.4/5/ line 59-100
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	p.5/line 96-100 p. 7/line 143-150
METHODS			
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	p. 6/8/ line 125-158
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	p. 5/6/ line 112-127
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	p. 6/ /table 1

Study records:			
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	p. 8/9/ line 172-175
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	p. 7/ line 142-150
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	p. 8/9 / line172-175
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications	p. 7/8 / line 142-150, table 3
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	p.7 / table 2
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	p. 8/ line 160-171
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	p. 9 / line 176-184
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2, Kendall's τ)	N/A
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	N/A
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	p. 9 / line 176-184
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	N/A
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	p.8 line 168

*** It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items. Amendments to a review protocol should be tracked and dated. The copyright for PRISMA-P (including checklist) is held by the PRISMA-P Group and is distributed under a Creative Commons Attribution Licence 4.0.**

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