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Review

Theories, models and frameworks in men's health studies: A scoping review

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Abstract

Background and Objectives: Men's health has been acknowledged as a broad field that comprises not only of male specific diseases, but involves widely differing disciplines. While a significant number of studies have looked into the definition of men's health, there is a lack of concerted attempts to collectively review the theories, models and frameworks in men's health studies. This paper presents an overview of theories, models and frameworks used in past men's health studies. **Material and Methods**: A scoping review was conducted using the Arksey and O'Malley framework. Publications were searched in three electronic databases. Two independent researchers performed publications' selection and data charting. Any disagreement was resolved by consultation with a third researcher. **Results**: One hundred and forty publications were included in this review. Within these publications, 87 theories, models and frameworks were identified. They were found to be generic to either health sciences or social sciences, or specific to men's health. Three type of processes were observed among the theories, models and frameworks, namely, behavioural, cognitive and gender processes. The findings also indicated a lack of publications about theories, models and frameworks in men's health studies from developing countries and outside the western world. **Conclusion**: The results revealed the multidisciplinary nature of men's health. However, due to the fragmentation of theoretical understanding by separate disciplines, an interdisciplinary approach is necessary for this field.

Keywords

Scoping review; Theories; Models; Frameworks; Men's health

1. Introduction

Across the globe, men fare worse than women in terms of mortality. Furthermore, the gap in the mortality between men and women has been widening over the years [1–4]. Not only that, men have a higher burden of disease as compared to women [5, 6]. Studies from the United States and Canada indicate that neglecting to address men's health has resulted in significant economic burden to the countries [7, 8].

The recognition of the underlying problems shown by statistics and the need to address men's health issues alone are not enough. Various efforts to improve the health of men might be counterproductive without an understanding of what constitutes 'men's health'. Defining men's health has been an ongoing debate since the 1990s. It has been acknowledged that men's health is a broad field that comprises not only of male specific diseases, but its scope encompasses widely differing disciplines [9]. Throughout the years, various definitions have been developed to discern what comes under the umbrella of 'men's health' [10–15]. In general, new definitions that emerged departed from previous definitions made, where a later definition is either a reconsideration or an extension of a previous definition. This backward tracing eventually led to the important work by Lloyd, who originally mapped the men's health studies that were conducted in the field [16].

While a significant number of studies have looked into the definition of men's health, there has not been much significant effort to collectively review the theories, models and frameworks

TABLE 1. Definitions of theory, model and framework.

Theoretical object	Definition
Theory	A set of interrelated concepts, definitions and propositions that present a systematic view of events or situations by specifying relations among variables, to explain or predict the events or situations.
Model	A generalised or hypothetical description used to analyse, explain or understand a particular problem in a certain setting or context.
Framework	A structure for presenting concepts, without necessarily preserving interrelationships between individual concepts.

Source: Booth and Carroll's systematic searching for theory [23].

in men's health studies. Theories, models and frameworks can provide hypotheses about causal processes and therefore allow researchers to explicitly test whether they hold or not [17]. In terms of efforts to improve men's health, they highlight the interplay between actions and outcomes. Theories, models and frameworks may also offer insights regarding the contextual conditions in which a policy, programme or intervention is appropriate and provide road maps in the evaluation of their effectiveness [18, 19]. In other words, theories, models and frameworks are important for reflecting on efforts made to improve men's health and to monitor the progress achieved.

This paper presents an overview of the theories, models and frameworks used in past studies about men's health. A scoping review method was utilized to enable a bottom up identification of the microcosm that forms a large part of the theoretical body in the field.

2. Methods

2.1 Approach

The overall direction of this review followed the five stages outlined in Arksey and O'Malley's scoping review method: identifying a research question; identifying relevant studies; selecting studies; charting the data; and collating, summarizing and reporting the results [20]. A scoping review is used in this study because it enables a broad search to gain an overview of the theories, models and frameworks in the academic literature on men's health. The reporting of this paper follows PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews) published by the EQUATOR (Enhancing the QUAlity and Transparency of health Research) Network [21] (refer to Appendix A for the PRISMA-ScR checklist of this article).

2.2 Scoping for publications

Publications were identified by searching three electronic databases, namely PubMed and CINAHL on 10th January 2018, as well as Web of Science on 11th January 2018. Men's health experts were also contacted for publication suggestions. In addition, reference mining was conducted among the selected publications to identify more publications that are relevant. Only publications in English language were considered and no restrictions were imposed on year and type of publication.

To identify a theory, model or framework, Blaikie's [22] definition was operationalized; 'it is an explanation of a pattern or regularity that has been observed, the cause or reason for which need to be understood' (p.125). A search strategy was developed by adapting the BeHEMoTh procedure conceived by Booth and Caroll [23]. It combined the concepts of 'men', 'health', 'theory/model/framework' and 'behaviour/determinant/masculinity' (Appendix B). Table 1 lists the definitions of theory, model and framework as described in the BeHEMoTh procedure. The third concept predefines criteria for the retrieval of theories, models and frameworks, while simultaneously excludes non-theoretical models such as statistical models or technical models. The fourth concept, originally limited to behaviour of interest in the BeHEMoTH procedure, was expanded to also include other relevant theories, models or frameworks regarding the masculine or gender aspects of men.

2.3 Selecting publications

Two researchers independently performed all the phases of selection including screening of titles, abstracts and full-texts. Any disagreements were resolved through discussion and if needed, by consultation with a third researcher for any unresolved disagreements. Two criteria were used in this selection process: (1) publication about men AND about the health of men, (2) publication containing at least a theory, model or framework.

2.4 Charting the data

For each publication, we recorded three categories of information onto a 'data charting form' using Microsoft Excel spreadsheet. First is the publication's general information: Author(s), author(s)' country of affiliation, year of publication, title, and publication type. Second is the specific information about the study: Objective, method type, study population, and country of study population. Third is the information about its theory, model or framework: name, and a brief description. A data charting pilot was conducted with 20 publications to test the reliability of the form before the full data charting was commenced. Two researchers conducted the data charting independently. Any disagreements were resolved through discussion. If a disagreement cannot be resolved, a third researcher was consulted.

2.5 Collating and summarizing

Information extracted by data charting pertaining to the characteristics of the included publications were analysed and presented as descriptive summaries. To describe the identified theories, models and frameworks, they were categorized according to the specificity of the theoretical aspect they focused on, and whether this aspect narrows down into the health or social aspect of men. Furthermore, theories, models and frameworks were grouped according to the types of process they covered. The usage of theories, models and frameworks in the included publications were also observed.

2.6 Additional analysis

Lloyd's review was conducted more than two decades ago, and the scope was limited to men's health studies published in the United Kingdom. Even though this paper is based on theories, models and frameworks in men's health studies, the distribution of countries in terms of authors' affiliation and study populations were also noted. This analysis resulted in an overview of the range of countries that the users (the authors who used the theories, models and frameworks) and the subjects (the men that were studied) were from.

TABLE 2. Characteristics of included publications.

Year	Number of publications (%)
1977-1979	2 (1.4)
1980-1989	4 (2.9)
1990-1999	9 (6.4)
2000-2009	40 (28.6)
2010-2017	85 (60.7)
Publication type	
Research article, n = 127	
Quantitative	53 (41.7)
Qualitative	39 (30.7)
Mixed-method	3 (2.4)
Review	32 (25.2)
Thesis, n = 13	
Quantitative	7 (53.8)
Qualitative	5 (38.5)
Mixed-method	1 (7.7)

3. Results

3.1 Characteristics of included publications

A total of 13,177 publications were identified in the initial stage of the search. After the screening process, 140 publications were eventually included in this review (Fig. 1; refer to Appendix D for a full citation list). In general, the number of included publications increased exponentially every decade between the years 1977 and 2017. Two publication types were noted (research paper and thesis) and four method types were used (quantitative, qualitative, mixed methods and reviews) (Table 2).

3.2 Theories, models and frameworks identified

From the included publications, 87 theories, models and frameworks were identified (Table 3; refer Appendix C for brief descriptions of identified theories, models and frameworks and its sources). The theories, models and frameworks showed several different specificities. Half of them were generic to health sciences (50.6%, n = 44), and the remaining were generic to social sciences (22.9%, n = 20) or specific to men's health (26.4%, n = 23). From the publications specific to men's health, nine displayed a directed clinical focus for men, e.g., diabetes, depression and colorectal cancer, while the rest were about the broad aspect of men's health.

Additionally, the identified theories, models and frameworks illustrated three types of processes in relation to the health of population under study. The first type is the behavioural process, which connects men's health to the ways they behave. The second type is the cognitive process that entails men's mental processes of understanding as the factors influencing their health outcomes. The third type is the gender process of men as a male; this is not in reference to a biological context, but a social or cultural context which relates to their health. As can be seen in Table 3, these processes are mostly interrelated within the theoretical works, and only a few publications exclusively elucidated a singular process: behaviour (n = 8), cognitive (n = 9), and gender (n = 1). Among the 87 theories, models and frameworks, only the syndemic theory did not involve any of the three processes. Despite its stark contrast with the rest, this theory was still included because of its clinical relevance to men's health.

3.3 Common theories, models and frameworks

Several theories, models and frameworks were more commonly found than others (Table 4), specifically the health belief model, Connell's social organization of masculinity, theory of planned behaviour, and transtheoretical model of behaviour change.

In terms of methods, the theory of planned behaviour and transtheoretical model of behaviour change were frequently used in quantitative studies, whereas Connell's social organization of masculinity was normally employed in qualitative studies. The health belief model were used in both quantitative and qualitative studies.

3.4 Application of theories, models and frameworks

There are publications with more than one theory, model or framework identified. For every instance of theory, model or framework identified, their utilization for the research reported in the corresponding publication was further evaluated. This process, as a result, produced 191 instances where the theories, models and frameworks were utilized in the included publications.

The theories, models and frameworks were found to be used in three distinct ways. Most of them were utilized to inform or guide researchers to create a theoretical or conceptual framework underpinning the study (62.7%, n = 120). Theories, models and frameworks were also applied as a broad framework to provide perspective for literary discussions (24.1%, n = 46). Lastly, they were used as basis for analyses and interpretation of the findings (13.1%, n = 25).

3.5 Countries of authors' affiliation and study populations

The included publications involved 440 unique authors that were affiliated to institutions located in 24 countries (Table 5). Most of the authors were affiliated to institutions in high-income countries and more than half were from the United States. It was also observed that a substantial number of authors were affiliated to institutions in western countries (92.3%, n = 406). The country classification used here follows the information from the World Population Review [24].

The majority of included publications were written by teams in which all authors were affiliated to institutions in high-income countries (92.9%, n = 130). In contrast, only

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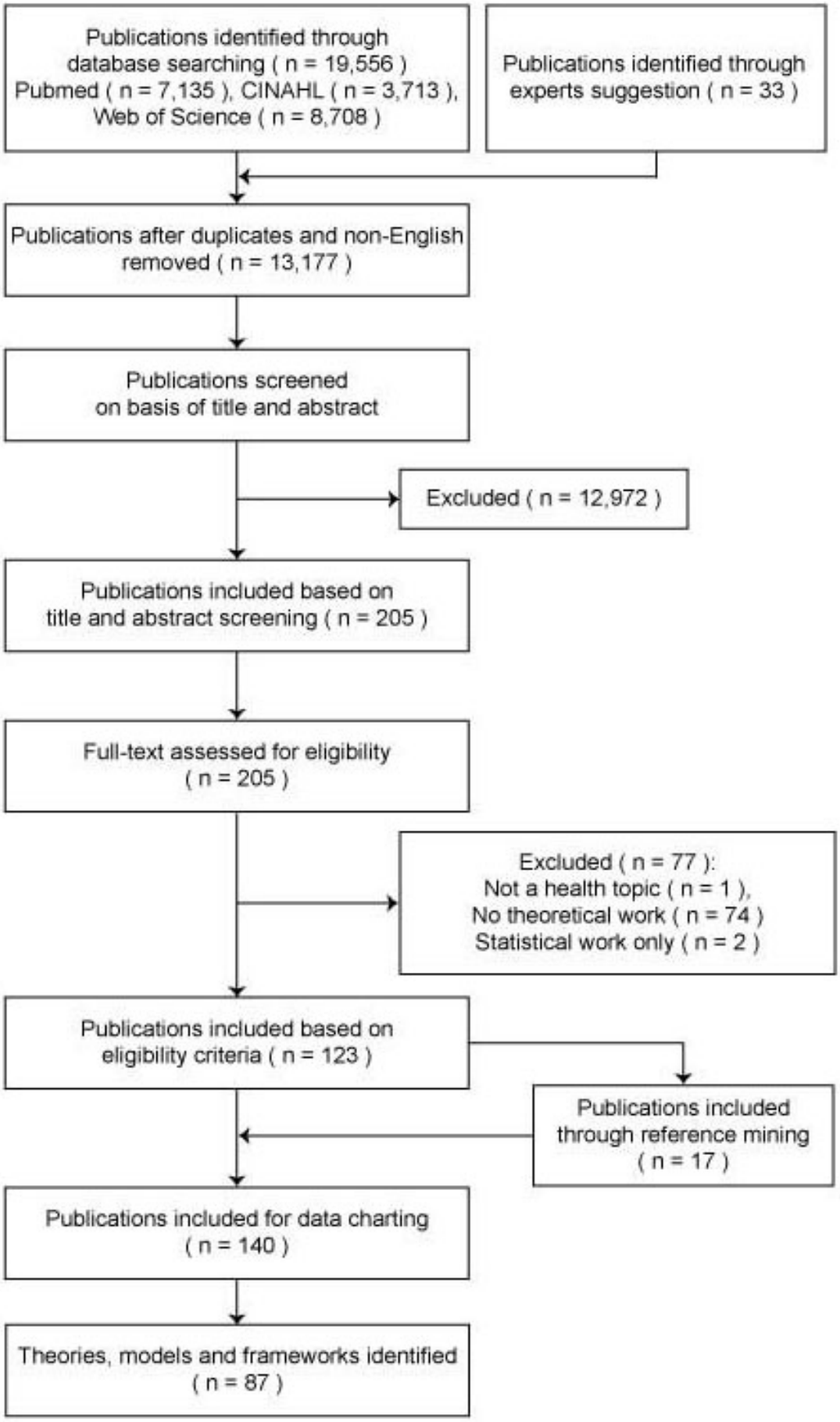

FIG. 1. Flow diagram of publications scoping.

TABLE 3. Specificities and processes observed in 87 identified theories, models and frameworks.

Theory/Model/Framework	Specificity			Process observed		
	Generic to health sciences	Generic to social sciences	Specific to men's health	Behaviour	Cognitive	Gender
Sex role socialization		•		•	•	•
Diathesis-stress model of illness	•				•	
Diathesis-stress model of male mortality			•	•	•	•
Health belief model	•			•	•	
Modified health belief model	•			•	•	
Theory of perceptual psychology	•			•	•	
Pender's health promotion model	•				•	
Theory of planned behaviour	•			•	•	
Extended version of theory of planned behaviour	•			•	•	
Theory of planned behaviour predicting sexual help-seeking intentions			• (Clinical)	•	•	•
Cognitive health behaviour model	•			•	•	
Social cognitive theory	•			•	•	
Theory of reasoned action	•			•	•	
Transtheoretical model of behaviour change	•			•	•	
Social constructionist theory		•		•	•	•
Courtenay's theory of gender and health			•	•	•	•
Critical feminist perspective		•		•	•	•
Foucault's notion of 'gaze' and 'surveillance'		•		•	•	
Whitehead's Big Man/Little Man Complex (BM/LMC)/model of masculine transformation		•		•	•	•
Social ecological model	•			•		
A model for understanding sexual health among Asian American/Pacific Islander (AAPI) men who have sex with men (MSM) in the United States			•		•	
Social psychological theory	•			•	•	
Leininger's culture care diversity and universality theory	•			•	•	
Erikson's life cycle model	•			•	•	
Vaillant and Milofsky modification of Erikson's life cycle model	•			•	•	
Gerschick and Miller's three 'R' framework			•	•	•	•
Connell's social organization of masculinity		•		•	•	•
Cognitive escape model	•			•	•	
A theoretical model of preventive health behavioural intentions	•			•	•	
Watson's male body schema			•	•		•
Robertson's relationship model between health and hegemonic masculinity			•	•	•	•
Theoretical model of the predictors of sexual risk behaviours			•	•	•	
Mexican American men's health care conceptual model			•	•	•	•
Conceptual model of health dimension and health behavioural determinants of male Arab-Muslims			•	•	•	
Foucalt's notion of 'technologies of the self'		•		•	•	
Roy's adaptation model	•			•	•	
Embodiment theory		•		•		
Self-regulation theory	•			•	•	
A theoretical framework using notions of disruption and liminality	•			•	•	
Communities of practice framework		•		•	•	
Gender-centered diabetes management education ecological framework			• (Clinical)	•	•	•
The Andersen behavioural model of health services utilization	•			•	•	
Modified behavioural model of health service use for African American Men treated with prostate cancer			•	•	•	

TABLE 3. Continued.

Theory/Model/Framework	Specificity			Process observed		
	Generic to health sciences	Generic to social sciences	Specific to men's health	Behaviour	Cognitive	Gender
			(Clinical)			
Self efficacy theory	•			•	•	
The HIMM (health, illness, men and masculinities) framework			•	•		•
Critical psychology	•			•	•	
Information-motivation-behavioural skills model	•			•	•	
Modified information-motivation-behavioural skills model	•			•	•	
Butler's performativity		•		•		•
Kleinman's explanatory model of illness	•			•	•	
Family stress theory		•		•	•	
Syndemic theory	•					
Intersectionality theory		•				•
McKenzie's model of information practices		•		•		
The transdiagnostic model of male distress			• (Clinical)	•	•	
Minority stress theory	•				•	
Adapted minority stress model	•				•	•
Sociocultural health behaviour model	•			•	•	
A framework for conceptualizing depression for African American males over the adult life course			• (Clinical)		•	•
Bourdieu's theory of practice		•		•	•	
A conceptual framework for understanding how the subjective sexual experiences of military personnel are structured by the military field		•		•	•	
Emotion management theory		•		•	•	
A conceptual framework to explain men's colorectal cancer screening behaviour			• (Clinical)	•	•	•
Integrative model on men's reflections on cancer rehabilitation			• (Clinical)		•	•
Diaz's theoretical model of effects of social oppression on unprotected sexual intercourse.			•	•	•	
The integrative model of behavioural prediction (IM)	•			•	•	
Model of HPV vaccine intentions among vaccine-eligible male sexual minorities			• (Clinical)		•	
The Gelberg-Andersen behavioural model for vulnerable populations	•			•		
Masculine body ideologies		•		•	•	•
Health selection theory			•	•	•	•
Cockerham's health lifestyles theory		•		•		
PRECEDE model	•			•		
Model of sexual compulsivity	•			•	•	
Phenomenological variant of ecological systems theory (PVEST)	•				•	
Prototype perspective	•			•	•	
Attachment theory	•		•			
Bourdieu's concept of capital		•		•		
Dialogical self theory		•			•	
Empowerment theory	•			•	•	
Critical thinking and cultural affirmation model	•			•	•	
The men in life environments (MILE) HIV prevention conceptual framework			• (Clinical)	•	•	
Reactance theory	•			•	•	
Model of African American men's barrier to help seeking			•	•	•	•
Problem behaviour theory	•			•	•	
The interpersonal theory of suicide	•			•	•	
Social action theory	•			•		
Theory of normative contentment			•	•		•

TABLE 4. Common theories, models and frameworks identified and its distribution of method type utilized in conducting research on men's health.

Theory/Model/Framework	Method type			
	Quantitative	Qualitative	Mixed Method	Review
Health belief model, f = 19	10	8	-	1
Connell's social organization of masculinity, f = 16	1	10	1	4
Theory of planned behaviour, f = 14	12	1	1	
Transtheoretical model of behaviour change, f = 10	9	1	-	-

TABLE 5. Distribution of authors in terms of country affiliation by country income.

Author's country affiliation	Number of authors
High income country (n = 411)	
United States of America	280
United Kingdom	29
Canada	25
Australia	24
Denmark	15
Sweden	5
Finland	4
Ireland	4
Israel	4
Netherlands	4
Switzerland	4
Belgium	3
Norway	3
Puerto Rico	3
New Zealand	2
Germany	1
Slovak Republic	1
Upper-middle income country (n = 22)	
Iran	12
China	4
South Africa	4
Belize	2
Lower-middle income country (n = 3)	
India	2
Kenya	1
Low income country (n = 4)	
Malawi	4

Note: Country classification by income follows the World Bank [25].

four publications were the joint work of authors affiliated to institutions in upper-middle-income countries. Teams comprising of authors from high-income countries with lower income countries authored a small number of publications: high-income with upper-middle-income (2.1%, n = 3), high-income with lower-middle-income (1.4%, n = 2), high-income with low-income (0.7%, n = 1). Interestingly, similar cultural patterns were observed where teams comprised fully of authors from western countries co-authored a big number of publications (91.4%, n = 128). Whereas, teams of all authors from non-western countries authored only seven publications, while teams of authors comprising of those from western and non-western countries co-authored a negligible number of five publications.

In terms of study populations, three groups were identified within the included publications: populations located in a single country (91.4%, n = 128), populations involving multiple countries (2.1%, n = 3), and broad reviews that were not limited to any specific country (6.4%, n = 9) (Table 6). Most study populations were men from high-income countries and all of these were from western countries, except for two studies on men from Israel and Puerto Rico. Half of the study populations were from the United States, and the second largest group consisted of study populations from the United Kingdom.

4. Discussion

This scoping review is the first to provide a broad coverage of theories, models and frameworks in the field of men's health. The theories, models and frameworks identified in this review are those specifically used by researchers to study men and their health. These were found to be either generic to health sciences, social sciences or specific to men's health. Three type of processes were observed among the theories, models and frameworks, namely, behavioural, cognitive and gender. The theories, models and frameworks were also found to be utilized in three distinct ways in men's health studies.

On the specificities of theories, models and frameworks identified, the variations seem to imply focus on the theoretical positions in either health or social domains. In the health domain of men's health, researchers observed or theorized patterns with theories, models and frameworks that are generic to health sciences. On the other hand, observations or theorizations on the social aspects of men largely utilized theories, models and frameworks that are generic to social sciences. It can be said the theories, models and frameworks were borrowed or originated from various disciplines such as sociology, psychology and behavioural medicine. This demonstrates the multidisciplinary nature of research in the field of men's health.

Apart from the health science or social science origins, certain theories, models and frameworks had emerged from research in men's health itself by synergizing both the health and social aspects of men. This review also uncovered three recurrent types of processes among the identified theories, models and frameworks, i.e., behavioural, cognitive and gender processes. Focus on specific aspects or processes undeniably leads studies to certain bodies of literature within an individual academic discipline. However, these aspects and processes are interrelated. In addition, Table 3 suggests that the processes often compound one another, suggesting that multidisciplinary research collaborations alone may not be adequate to understand these compounding processes. Interdisciplinary research that integrates knowledge and methods by synthesizing the approaches of various disciplines may be better suited for this field.

Furthermore, the interdisciplinary approach offers a solu-

TABLE 6. Distribution of study populations in terms of country and method type.

	Method Type				Grand Total
	Quantitative	Qualitative	Mixed Method	Review	
Country of study population	(n = 60)	(n = 44)	(n = 4)	(n = 32)	(n = 140)
High income country (n = 115)	49	41	3	22	115
United States of America	42	18	-	17	77
United Kingdom	1	11	1	3	16
Canada	3	1	-	2	6
Australia	1	3	1	-	5
Denmark	-	1	1	-	2
New Zealand	-	2	-	-	2
Norway	-	2	-	-	2
Finland	1	-	-	-	1
Israel	-	1	-	-	1
Netherlands	1	-	-	-	1
Puerto Rico	-	1	-	-	1
Sweden	-	1	-	-	1
Upper-middle income country (n = 9)	6	2	1	-	9
China	2	1	-	-	3
Iran	3	-	-	-	3
South Africa	1	1	-	-	2
Belize	-	-	1	-	1
Lower-middle income country (n = 2)	2	-	-	-	2
India	1	-	-	-	1
Kenya	1	-	-	-	1
Low income country (n = 2)	1	1	-	-	2
Haiti	1	-	-	-	1
Malawi	-	1	-	-	1
Multiple countries (n = 3)	2	-	-	1	3
14 European countries	1	-	-	-	1
Australia, New Zealand, United Kingdom and United States of America	1	-	-	-	1
8 south Asian countries	-	-	-	1	1
Broad review without narrowing to any country (n = 9)	-	-	-	9	9

tion to overcome the fragmentation that occurs in men's health research. It was found that the majority of theories, models and frameworks were used to inform or guide studies by creating an underpinning theoretical or conceptual framework. Utilization in this manner may come from different theoretical and conceptual origins, but it would be a disadvantage if the outcomes of a study were redundant. For example, the health belief model, theory of reasoned action, theory of planned behaviour, social cognitive theory and transtheoretical model of behaviour change were shown to have similar or identical elements among them [26]. The application of these mentioned theories, models and frameworks in a similar context in men's health studies may produce results that are essentially the same. This can be viewed as producing mini literatures for each of the theories, models and frameworks, as they provide little contribution to cumulative knowledge across the broad field of men's health. However, the fragmented literatures could be better integrated with the broad framework of literary discussions to generate learned knowledge of multiple disciplines, where the similarities or differences between different theories, models and frameworks are made clearer. It is important to note that the mini literatures produced are inexorable albeit the problems of fragmentation. It is natural for theories, models and frameworks to be utilized for different research problems as well as tested and modified to suit researchers' needs and investigations. By nature, research enterprises are cumulative; the same applies for theories, models and frameworks. Glanz and Maddock pointed out that the multitude of theoretical products can be confusing, but few will always rise to prominence because they are best supported empirically and theoretical products that resonate with researchers would proliferate further inquiry [27]. The aim of interdisciplinary approach then shifts from attaining a singular overarching unified theory of men's health, towards continuing and extending the dialogue in potential directions for this field.

Our findings also indicate the lack in publications of theories, models and frameworks in men's health studies from developing countries and outside the western world. Even collaborations between high-income country-based authors and those from lower income incomes, or collaborations of western country-based authors with those from non-western countries, were rarely noted. Similar patterns were also observed in terms of populations of men being studied; the data involved was largely concentrated in western and developed countries. This raises questions about the transferability of qualitative outcomes and the generalizability of quantitative outcomes produced to the rest of the world. The scantiness of the publications from developing countries and outside the western world is also a cause of concern because a country's capacity for publication is intimately linked to research development [28]. The culture-

health interplay of men from western countries may be different from that experienced by men from non-western countries. The body of theoretical literature describing men's health should not exclude men in developing countries and those of a different culture from the West, whose health might be worse and in desperate need of health intervention.

4.1 Limitation and challenges

The conclusion about the lack of publications on developing countries and outside the western world may be subject to selection bias. Publications written in languages other than English are not captured by our systematic search because this scoping review only considered publications in the English language.

Ideally, theories, models, and frameworks are discrete objects in academic literature. Yet during the process of selecting publications, the naming conventions were discovered to be often inconsistent and sometimes the name did not even include one of the three terms. In addition, sometimes a name may not adequately describe the attributes of a theory, model or framework as defined by the BeHEMoTh procedure that was used for this scoping review exercise [23]. This suggests a dearth of common definitions for theories, models and frameworks among researchers in the field of men's health that originates from various disciplines. The inconsistencies in naming convention prevented the identified theories, models and frameworks from being categorised into their own individual groupings. Therefore, further analysis by different theoretical levels was not possible.

In addition, the data quality of studies included and the validity of theories, models and frameworks in relation to empirical data were not assessed. We believe these tasks are better suited for reviews of a specific singular theory, model or framework as compared to the current aim of providing an overview of them in men's health studies.

5. Conclusions

The question of defining 'men's health' has been approached by offering definitions in an attempt to capture the essence that is constituted within it. Definitions have expanded the frame of the field beyond the simplistic notion that men's health is primarily about male-specific illnesses and a narrow medical interpretation of health as this does not encompass the idea of well-being. This scoping review adds on to the previous works of definitions by mapping the theoretical materialisation in existing studies on men's health. The results revealed the multidisciplinary nature of men's health. However, multidisciplinary collaborations alone may be insufficient to overcome the fragmentation of theoretical understanding by separate disciplines. Researchers from each respective discipline must take into account the information learned in other disciplines; not doing so might pose limitations on the understanding of men's health. This direction echoes Courtenay's call for an interdisciplinary approach in the field of men's health [29]. An interdisciplinary approach makes it necessary to address a variety of disciplinary differences and methodological challenges. As a result, this approach will enrich research in men's health as well as strengthen the inferences that can be made about men and the health of various populations of men.

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CONFLICT OF INTEREST

The authors declare that there are no conflicts of interests.

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