Original Research Paper

Exploring the determinants of community-oriented health professions education: A narrative review

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Abstract

Background: Community-oriented education is increasingly prioritized in health professions curricula, but evidence on determinants for effective implementation is dispersed. This study aimed to synthesize the key determinants to guide curriculum design, implementation and evaluation. **Methods:** This narrative review searched PubMed and Scopus databases for relevant studies which were screened against eligibility criteria. The main search terms that were utilized: (community* or "community-oriented" or "community-oriented curriculum" AND "health professions" OR "health professions education"). Determinants were extracted, analyzed thematically, and synthesized narratively. A concept framework was developed to visualize relationships between determinants. **Results:** Of 2789 records screened, 88 studies were included. Determinants were organized into eight themes: community needs´ relevance, priority health problems, integration level, community involvement, cultural sensitivity, social accountability, health systems science, and collaboration with organizations. Determinants centered on aligning education with local contexts and priorities through engaged partnerships. The relationships between determinants were suggested. **Discussion:** This study presents a preliminary framework of determinants crucial for effective community-oriented education in health professions curricula. The expected hurdles were discussed and mitigating actions were suggested. Eight key themes were synthesized from disparate literature sources that underscore the importance of aligning educational initiatives with local contexts and emphasizing partnerships with communities. While this proposed framework provides a valuable starting point, further rigorous inquiry and validation through systematic reviews are necessary to establish definitive determinants.

Keywords: Relevance, Engagement, Cultural sensitivity, Social accountability, Health system, Community-oriented education determinants

Date submitted: 2-May-2024

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Citation: Talaat W, Hamed O. Exploring the determinants of community-oriented health professions education: A narrative review. Educ Health 2024;37:199-217

Online access: www.educationforhealthjournal.org
DOI: 10.62694/efh.2024.81

Published by The Network: Towards Unity for Health

Background

Community-oriented curriculum refers to a curriculum that is designed to address the needs, interests, and concerns of the community where it is being implemented.[1] Prevailing medical curricula predominantly adopt a disease-oriented rather than a health-oriented approach.[1-3] Claramita et al. [2019] indirectly support the idea that a one-size-fits-all curriculum may not be suitable for community-oriented health professions education (COHPE). While their article focuses on community-based education, it underscores the need for contextual learning and alignment with primary health care. This highlights the inherent complexities of designing medical curricula that balance the standardization required for broad medical competencies with the relevance needed to address specific community health needs.[4] By integrating community orientation into the curriculum, students become more focused on people's needs and are equipped to empower people, encourage changes in attitudes and behaviors, and improve their own self-awareness and confidence.[5]

Accreditation bodies worldwide have established quality assurance standards focusing on social

accountability and community-oriented education. This is stated in the World Federation for Medical Education (WFME) global standards for quality improvement of postgraduate medical education in its 2023 revision in Standard 1.1 (pp. 11),[6] the Liaison Committee for Medical Education "Standards for Accreditation of Medical Education Programs Leading to the MD Degree" issued in March 2024 in Standards 6.6 (pp. 8) and 7.5 (pp. 10);[7] and in the ASPIRE Recognition of Excellence in Social Accountability of Schools at www.aspire-to-excellence.org[8] These standards emphasize the alignment of education with local community needs and priorities. This approach aims to produce healthcare professionals who are not only clinically competent but also socially accountable and responsive to the needs of their immediate communities. However, there is a strong commitment to prepare graduates for the global community. The challenge arises from the need to balance these two seemingly conflicting priorities within the medical curriculum. On one hand, there is a demand for medical schools to focus on local community needs and ensure that graduates are equipped to address the specific health challenges faced by the populations they will serve. On the other hand, there is a growing recognition of the interconnectedness of health issues globally and the need for healthcare professionals to have a broader understanding of global health dynamics and the skills to work effectively in diverse cultural and resource-limited settings. One potential critique of this approach is that it may prioritize global health issues at the expense of local community needs. Health professions education that overly emphasizes global health challenges without adequately addressing the specific needs of local communities, risks producing graduates who lack the contextual understanding and cultural competence necessary for effective practice in their own communities. Furthermore, there may be limitations in resources and capacity within medical schools to adequately cover both local and global health priorities within the curriculum. This could result in a dilution of educational efforts or a failure to provide comprehensive training in either area. Medical schools must carefully consider how to integrate community-oriented education with global health perspectives in a way that prioritizes both local relevance and global solidarity, while avoiding the pitfalls of neglecting either aspect. This requires critical analysis of internal and external environments, forecasting risks and preparing proactive responses, thoughtful curriculum design, robust faculty development, and ongoing evaluation to ensure that graduates are adequately prepared to address the complex health issues they will encounter in their careers. [9,10]

The COVID-19 pandemic has underscored the urgency of evaluating medical curricula's adequacy in preparing future doctors to address emerging health challenges in the local and global community.[11] Medical schools have been compelled to adjust their curriculum to address clinical, scientific, and societal issues, including vaccine hesitancy, mental health, and strained public health systems.[12-16] These adjustments highlight the necessity of aligning medical curricula with Community-Oriented Health Professions Education (COHPE) principles, which prioritize equipping medical students to effectively respond to the specific health needs of the communities they serve.[17]

In 1910, Abraham Flexner asserted a shift in physicians' roles towards social and preventive functions necessitating a re-evaluation of medical curricula's orientation towards community needs and priority health issues.[18,19] Clithero et al. [2017] in their study stated that the Training for Health Equity Network (THEnet), a collaboration of health workforce education institutions committed to social accountability, has devised and evaluated a Social Accountability Framework for Health Workforce Education (the Framework) and accompanying toolkit. This initiative aimed to enhance the coherence between health workforce education and outcomes by evaluating the degree to which educational institutions address the requirements of their communities. By connecting education with service provision, the Framework establishes a cyclical process of quality enhancement, ensuring that educational efforts meet community needs and optimize service delivery quality.[20]

Community-oriented education has the potential to transform healthcare delivery by promoting a more holistic and cost-effective approach to addressing health needs both at the individual and population levels. Evidence from health economics underscores the cost-effectiveness and cost-benefit of community-oriented actions.[4,21] However, realizing these benefits requires sustained investment in curriculum development, faculty training, and infrastructure to support community-engaged learning and practice. Additionally, rigorous evaluation and research are needed to demonstrate the impact of community-oriented

education on health outcomes and health economics, providing evidence to inform policy and practice.

This review seeks to address the following research questions: What insights can we gather from previous research on integrating community-oriented curriculum into health professions education? What are the research and knowledge gaps that recent studies have identified on the development and perception of community-oriented curricula in health professions education? What evidence exists for the determinants of community-oriented education? Thus, this study aims to investigate and identify the determinants of effective community-oriented health professions education (COHPE), creating a comprehensive guide for designing and implementing such curricula. In this context, determinants refer to the factors that support, facilitate, and influence the successful design and implementation of COHPE. To bridge existing gaps in the literature, this critical narrative review was conducted, recognizing the dispersed and undefined nature of evidence regarding these determinants. By clearly defining and exploring these factors, we aim to provide a thorough understanding that can inform future curriculum development and implementation.

Methods

Review Methodology:

This study aims at synthesizing and compiling COHPE determinants that were scattered all over relevant literature over the years to provide a robust framework that guides the design and implementation of medical curricula. We adopted the Scale for the Assessment of Narrative Review Articles (SANRA) to guide us to search, formulate inclusion and exclusion criteria, critically appraise the literature and appropriately present the evidence.[22]

The ethical approval was obtained from Suez Canal University—Faculty of Medicine Research Ethics Committee (Reference number: 5480#).

Search Strategy:

Time frame:

The search was conducted in January 2023 and no date restrictions were applied.

Databases:

The search was executed through a systematic exploration of two reputable databases, namely PubMed and SCOPUS, recognized for their relevance to healthcare and education, and their broad, multidisciplinary coverage. The search was restricted to studies published in the English language.

Search terms:

The search utilized a combination of Medical Subject Headings (MeSH) terms and free text terms related to the topic of interest. Every search term was further augmented with relevant free text terms, often truncated to encompass alternative word endings where applicable. Complementing the database searches, a manual review of reference lists from pertinent articles was conducted. This supplementary approach contributed a few additional articles to the study, further enriching the breadth and depth of the literature included.

The main search terms that were used were: (community* or "community-oriented" or "community-oriented curriculum" AND "health professions" or "health professions education" OR "Social accountability" OR "Health economics" OR "Cultural diversity"). A specialized academic librarian with expertise in community and population health research conducted the search. The librarian utilized a combination of specific and broader search terms that were deemed relevant to the research questions.

Although the term "determinants" was initially included in the search, it resulted in irrelevant outcomes related to social and health determinants rather than COHPE-specific determinants. This challenge highlighted a literature gap and reinforced the need for our narrative review to synthesize the relevant determinants for COHPE. Our comprehensive search strategy, coupled with manual reviews, ensured that we captured the most relevant and impactful literature to inform our study.

Inclusion and exclusion criteria:

Studies were included if they focused on community-oriented health professions education, curriculum development, and determinants of a community-oriented curriculum, either explicitly or implicitly, as part of the study project. Research papers that were peer-reviewed, literature reviews, conceptual and theoretical articles, conference progress publications, book chapters, and thesis reports were included in this review. Studies of any design (quantitative, qualitative or mixed methods) that are relevant to the topic were included. Studies that were not relevant to the topic or did not meet the inclusion criteria were excluded.

Data extraction and synthesis:
Two independent reviewers (WT & OH) screened the titles and abstracts of the identified studies to determine their eligibility for inclusion. Full-text articles were then retrieved and assessed for eligibility based on the inclusion and exclusion criteria as well as on their relevance to the research questions. Any discrepancies between the reviewers were resolved through discussion and consensus. The data were extracted based on key findings, results, and recommendations relevant to the topic of community-oriented health professions education (COHPE). These extracted data points were then coded thematically to identify determinants of a community-oriented medical curriculum. The coding process involved the following steps:
1. Data Extraction: Key findings, results, and recommendations from each included study were extracted and documented.

2. Color Coding: The extracted data were entered into an Excel spreadsheet and color-coded based on themes and patterns identified in the data.

3. Thematic Analysis: Themes were developed by analyzing the coded data for similarities and recurring patterns. This involved grouping related data points and synthesizing overarching themes that represent the determinants of COHPE.

The findings were synthesized and reported in a narrative format, highlighting the identified determinants of a community-oriented curriculum. The findings of the review were validated and refined through consultation with experts in the field of community-oriented health professions education.

Results
The search identified 2,789 records, of which 946 studies were removed for duplication. The remaining 1,843 studies were screened by title and abstracts, of which 1,000 studies were excluded by title and 744 by abstracts because they were non-peer reviewed, not containing search terms in the abstract or title or not relevant to the research questions. The full text of the remaining 99 studies were included for eligibility, of which 10 studies were excluded because they were not relevant to the research topic, did not implicitly or explicitly point to community-oriented curriculum determinants, or used community-oriented and community-based education synonymously. Finally, 89 studies were eligible for inclusion in this review. (Figure 1)

Characteristics of eligible studies:
The 89 eligible studies included 33 review articles, of which 28 were narrative reviews, 3 systematic reviews, and 2 scoping reviews; 10 original research, 6 qualitative research, 6 book chapters, 5 case studies, and 4 evaluative reports. The remaining 25 studies included 2 conceptual models, 1 white paper, 1 AMEE guide, 1 letter, 2 eye openers, 3 accreditation standards documents, 2 Delphi studies, 3 theses, 2 commentaries, 2 personal viewpoints, 1 monograph, 1 initiative, 1 open forum, 1 policy, 1 editorial, and 1 training module. Most of the studies were from the USA (29) and the least from Latin America (4) (Figure 2). More than half of the studies (54) were published in the period between 2014–2023, and the least before 2008 (Figure 3).

Determinants were extracted and analyzed thematically, resulting in eight central themes related to effective community-oriented medical curricula. The results were organized and presented in a framework under these eight themes which constitute the community-oriented curriculum, namely: relevance to community needs; prioritizing health problems; level of integration of community orientation in the curriculum; community empowerment and engagement; cultural sensitivity and safety; social accountability; incorporation of health systems science; and partnerships with governmental and non-governmental organizations; then, themes were unfolded to their relevant criteria. The determinants of community-oriented health professions education (COHPE) are interrelated through several bidirectional influences. Relevance to community needs informs prioritizing health problems and is shaped by partnerships with community organizations. Prioritizing health problems encourages community engagement, which in turn fosters social accountability. The integration of community orientation in the curriculum enhances cultural sensitivity, and vice versa. Incorporating health systems science aids in forming effective partnerships and is driven by social accountability. These interconnections ensure a dynamic, cohesive and responsive educational framework that addresses both community-specific health issues and help curriculum developers see how they interact and influence each other in a robust community-oriented education program (Figure 4). Figure 5 shows the number of publications that supported each theme, whereby social accountability was addressed in 28 studies, followed by 21 studies on cultural sensitivity, and

18 studies in community empowerment; and the least were 5 studies on incorporating HSS. Table 1 provides a clear and concise overview of the studies supporting each theme in the community-oriented health professions education.

Discussion

Surveying the literature related to COHPE, this study recognized that developing a community-oriented curriculum in health professions education is a complex endeavor that requires careful consideration of various determinants to ensure its effectiveness and relevance. This study delved into eight critical determinants that play a pivotal role in shaping a curriculum that is rooted in the needs and priorities of the community it serves; and which encompass a wide range of factors. Each of these determinants interacts with one another, creating a dynamic framework that shapes the overall design of a community-oriented curriculum.

Table 1: Studies supporting each theme in community-oriented health professions education

Theme	Studies	Number of Studies
Relevance to Community Needs	2;17;23;24;25;26;27;28;29;30;31;32	12
Priority Health Problems	7;18;19;20;21;31;33;34;35	9
Level of Integration	5;11;12;13;15;16;24;29;32;34;36;37;38;39;40;41	16
Community Empowerment	14;23;26;33;34;38;41;42;43;44;45;46;47;48;49;50;51;52	18
Cultural Sensitivity	49;53;54;55;56;57;58;59;60;61;62;63;64;65;66;67;68;69;70;71;72	21
Social Accountability	9;10;11;30;31;33;35;36;43;48;50;73;74;75;76;77;78;79;80;81;82;83;84;85;86;87;88;89	28
Health Systems Science	37;39;80;89;90	5
Partnering with Organizations and Government	28;40;41;47;74;91;92	7

Figure 1: Flow diagram showing the selection strategy.

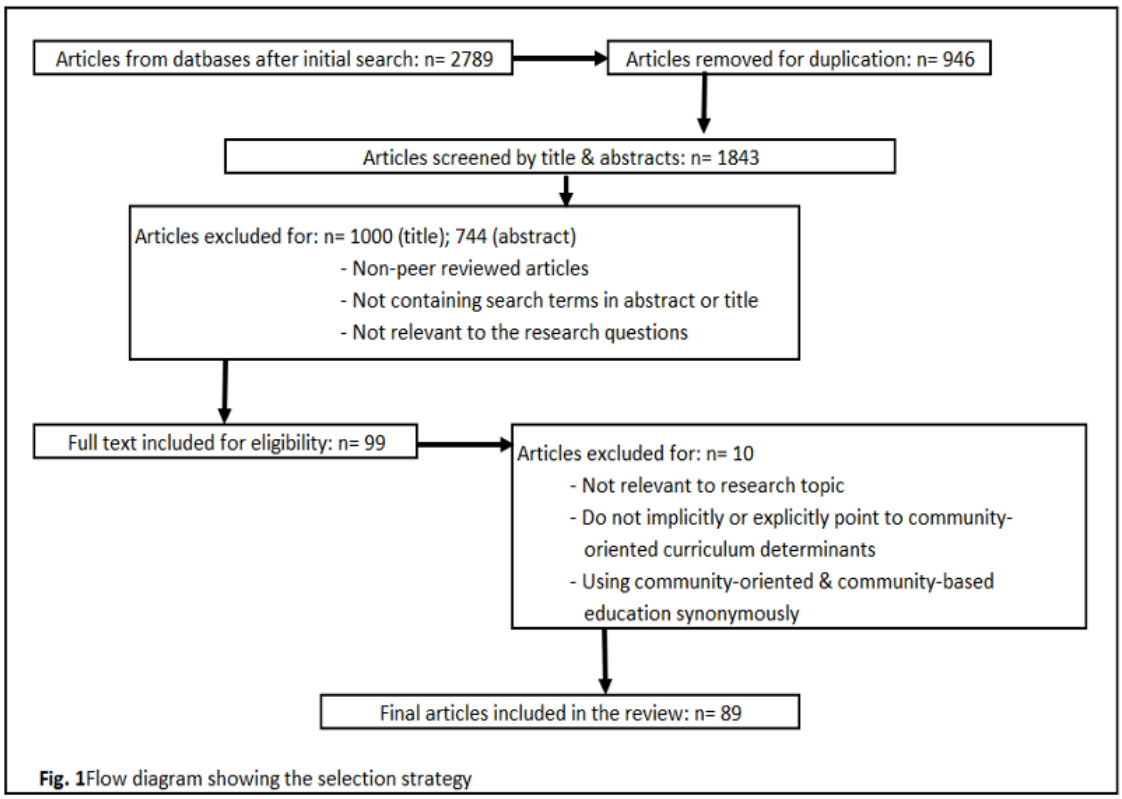


Fig. 1 Flow diagram showing the selection strategy

Figure 2: Number of publications per country/region.

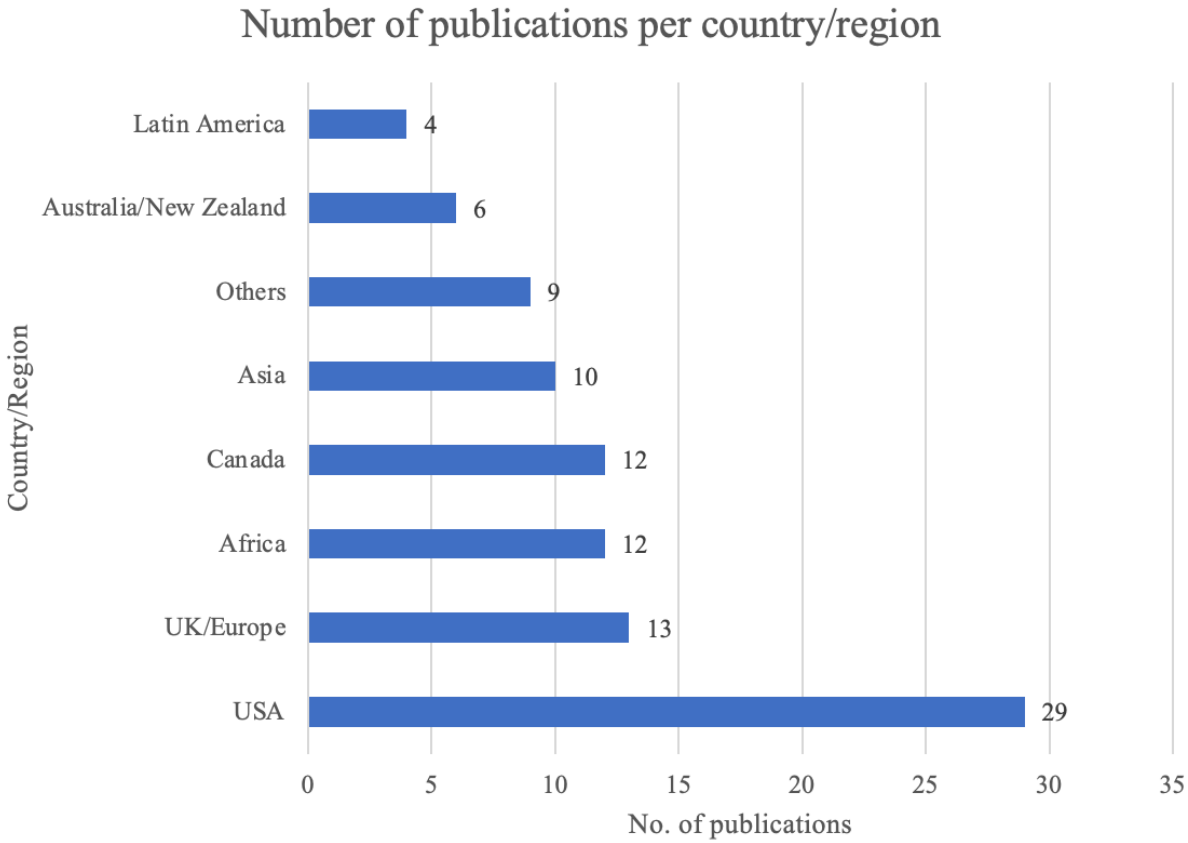


Figure 3: Number of publications between 1990-2023.

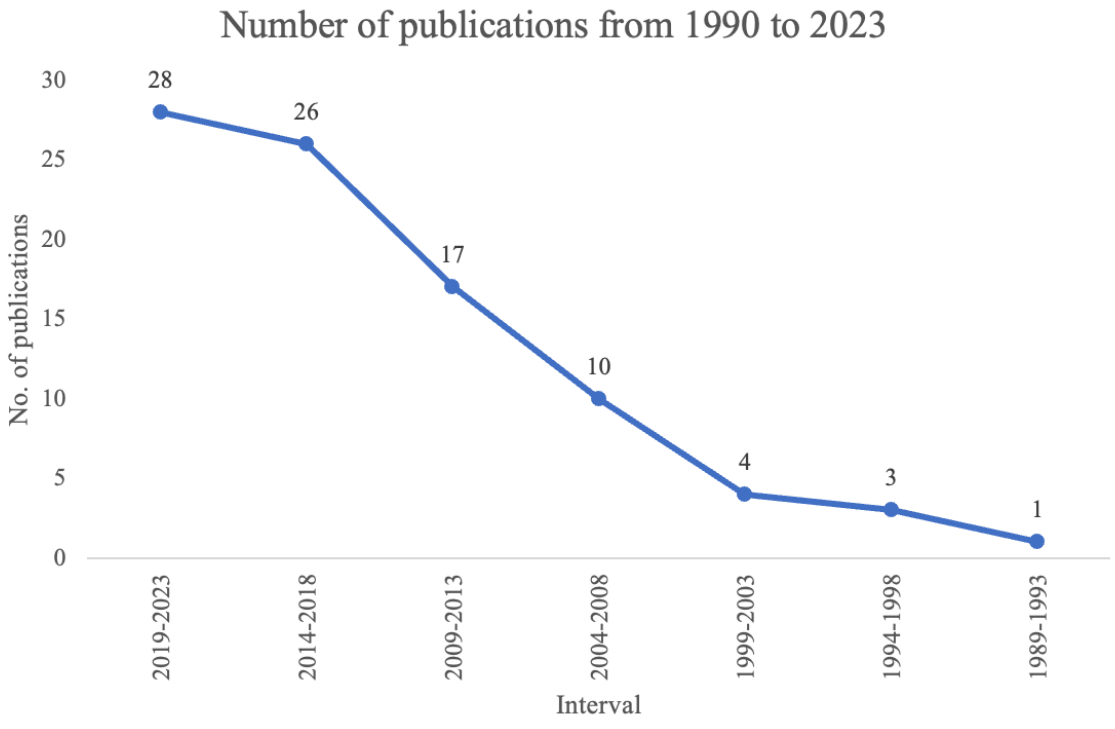


Figure 4: Dynamic Concept Framework showing interrelations and interdependence among the determinants of community-oriented education.

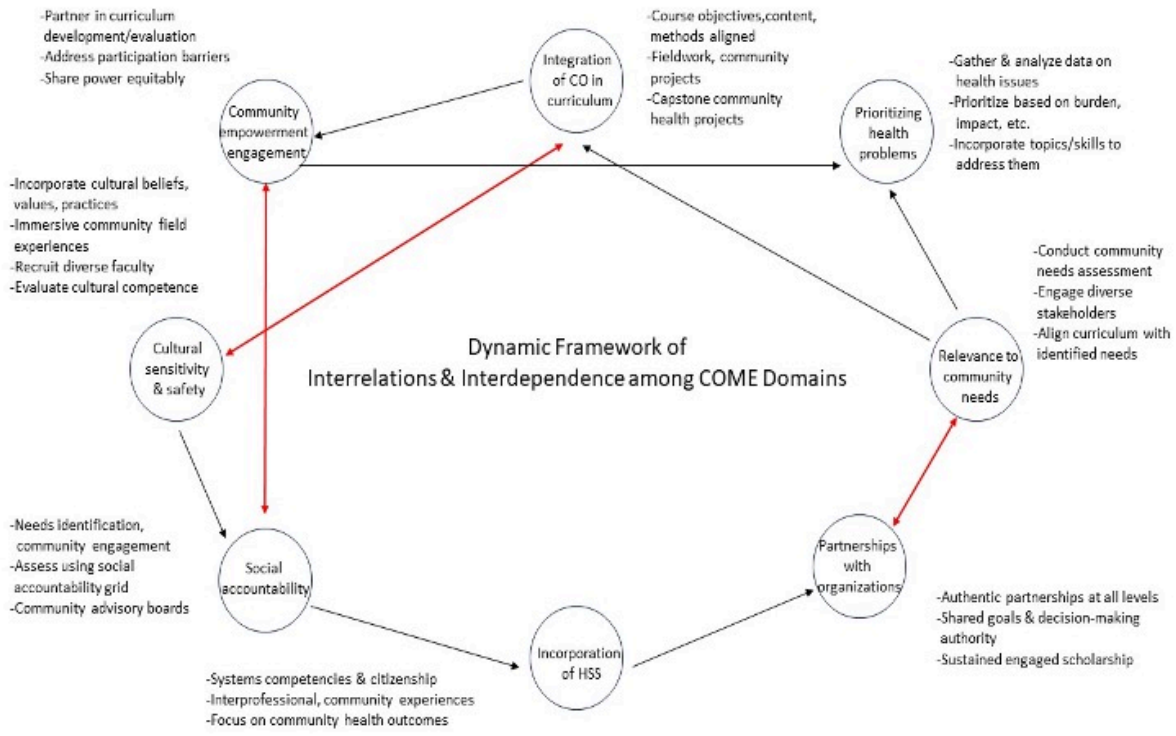
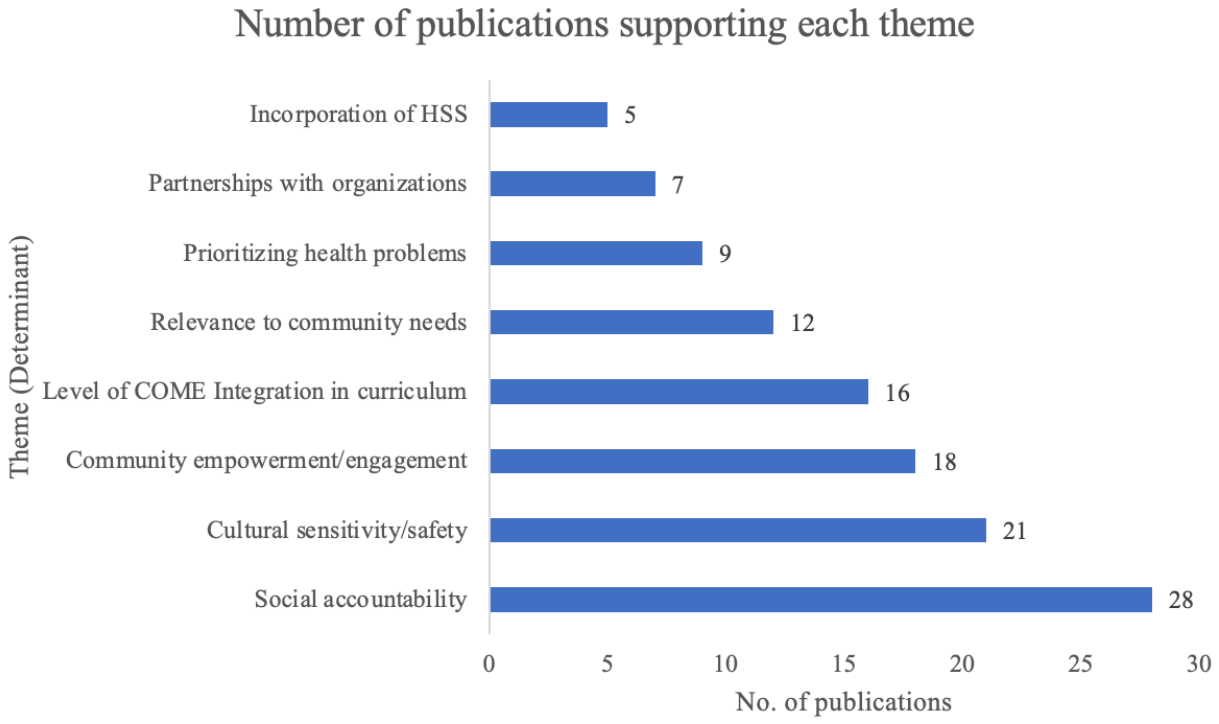


Figure 5: Number of publications supporting each theme.



Suggested Determinants of Community-Oriented Education:

Determinant. 1: Relevance to Community Needs [12 studies]

Community-oriented education hinges on its relevance to community needs, thereby fostering active citizenship and positive community impact.[2,17,23,24] To ensure this relevance, conducting a comprehensive needs assessment involving diverse stakeholders is essential.[24,25] Various methods such as community surveys, focus groups, leader interviews, and data analysis are employed for this purpose.[26] The insights gained from these assessments inform the development of a tailored curriculum that addresses specific community health concerns and employs objective-oriented modular systems. For example, if a community exhibits high rates of obesity, the curriculum may include modules on healthy habits and physical activity;[27] if the community exhibits elevated levels of youth violence, it is advisable to incorporate modules addressing the factors, risk assessment, and management of violence into the curriculum.[28] Establishing an education strategy rooted in community needs is not only essential for empowering individuals to effect positive changes within their communities, but also for fostering the creation of stronger and more resilient communities.[29-31]

Despite its potential benefits, community-oriented education faces several obstacles. Tailored curricula may be perceived as academically less rigorous compared to standardized ones. Additionally, translating community needs into defined competencies and assessments poses methodological challenges. Faculty members may also lack the necessary skills in community-based pedagogies, and building enduring relationships with communities requires significant time and resources.[30] Furthermore, balancing local relevance with global health perspectives presents inherent tensions. Proactive measures, such as faculty development initiatives and community capacity-building efforts, are crucial for navigating these challenges effectively.[30,32]

Determinant. 2: Priority Health Problems [9 studies]

Identifying key health concerns is fundamental for effective healthcare planning and resource allocation. Involving communities in this process is crucial to ensure that interventions are responsive and have a meaningful impact, ultimately leading to improved health outcomes. To incorporate this into the curriculum, it is necessary to collect and analyze data, ranking issues based on factors such as prevalence, preventability, treatability, burden of illness, and economic impact. [7,19-21] The curriculum should then address these prioritized problems, equipping graduates with the skills to tackle major health challenges within their communities. This approach aligns with findings from the literature, which emphasize the importance of tailoring health professions education to community-specific health needs.[18] Regular reviews and updates of priority issues, as highlighted by multiple studies, are essential to maintain the relevance of the curriculum. [17-18]

Despite the benefits of aligning curricula with health concerns, there are significant barriers to overcome. Determining priorities requires community engagement and consensus-building, which can be resource-intensive.[33,34] Limited access to up-to-date community health data poses challenges for data collection. Prioritizing certain topics may also lead to the neglect of others in already packed curricula. Furthermore, as health needs evolve, curricula must be continually updated, necessitating flexibility and adaptability. [31,35]

Determinant. 3: Level of Integration of the Curriculum to reflect Community Orientation [16 studies]

To foster a program-wide commitment to community focus, it is vital to embed community orientation into the curriculum from its inception.[29] This requires aligning all curriculum components with community health priorities, institutional values, faculty development initiatives, student assessments, and graduate competency frameworks.[24,36,37] This shift reorients curricula from being solely patient-centered to encompassing a broader population-centered approach.[13,15] A comprehensive integration of community-oriented principles across the curriculum and learning environment equips graduates with the necessary skills to collaborate effectively with communities, thereby enhancing local health and equity.[29,32,38] To effectively achieve this integration, innovative teaching methods (like community visits and projects), should be embraced to provide students with hands-on experiences.[34] Clinical placements in community settings further deepen this exposure by facilitating early interactions with diverse populations.[11,16,39] Additionally, engaging in capstone projects that address real community issues in collaboration with local partners enriches

students' practical learning experiences.[5,37] Students encountering challenges like unexpected situations and communication obstacles may prompt guidance from both faculty members and community partners.[40] Additionally, potential barriers such as addressing logistical complexities associated with community placements, overcoming faculty resistance, and navigating crowded and fragmented curricula;[12] could impede successful integration of community orientation in health professions education .[34,41] Implementing proactive measures such as structured coordination offices, faculty development initiatives, student orientation programs, and community capacity-building endeavors is essential for effectively integrating community orientation into health professions education .

Determinant. 4: Community Empowerment and Engagement [18 studies]

In a COHPE curriculum, community empowerment and engagement are prioritized as key determinants. This involves actively involving community members in all stages of curriculum development, implementation, evaluation, and improvement processes.[26] Community members are thus recognized as genuine partners, and their perspectives, values, and priorities are respected and integrated into educational activities. Through meaningful engagement, community members are empowered to participate in decision-making processes related to healthcare education and delivery and impart a sociological perspective to the curriculum.[34,42-46]

Incorporating sociological perspectives throughout the curriculum provides students with a deeper understanding of the social determinants of health and the broader societal contexts in which healthcare operates. This includes exploring topics such as social inequalities, cultural diversity, power dynamics, and community dynamics.[47]

The relationship between community empowerment and engagement and the incorporation of sociological perspectives interplay with the previous Determinant. 3 and should be reflected in various aspects of the curriculum:

1. Curricular Content: Sociological concepts and theories should be integrated into core courses, such as public health, medical ethics, and health policy, to help students understand the social dimensions of health and healthcare delivery. Case studies and discussions explore real-world examples of community engagement and empowerment initiatives.[38,48]

2. Experiential Learning: Students should engage in community-based learning experiences, such as clinical placements, community health projects, and service-learning opportunities. These experiences provide firsthand exposure to community dynamics and sociocultural factors that influence health outcomes, fostering empathy, cultural competence, and collaboration with community members.[41,49,50]

3.Interdisciplinary Collaboration: Collaborative partnerships with sociologists, social workers, community organizers, and other social scientists enrich students' learning experiences and facilitate holistic innovative interdisciplinary approaches to addressing complex community health issues. An example of these curricula which could be used in benchmarking a COHPE curriculum are those provided by Ohio State and New York Universities.[14,41,51]

4. Professional Development: Faculty development initiatives focus on enhancing educators' understanding of sociological perspectives and effective strategies for integrating them into the curriculum. Training programs provide faculty with the skills and resources needed to facilitate community engagement, promote cultural humility, and support students in addressing social determinants of health. [23,33]

Barriers to community participation include time constraints, where both students and faculty may struggle to allocate sufficient time for meaningful community engagement. Additionally, power differentials between academic institutions and communities can hinder effective collaboration. Students' understanding and receptiveness toward community co-education can be challenging. Some students may lack awareness of the importance of community-based learning. Curricula co-created with communities may appear less rigorous and standardized. Faculty may, on the other side, resist perceived encroachment on their curricular authority and expertise; hence, balancing faculty autonomy with community input is crucial for successful collaboration. Also, developing reciprocal relationships between academic institutions and communities requires time and trust-building. Addressing access barriers and promoting bidirectional communication, transparency, and capacity-building are essential for maximizing the benefits of

community empowerment in health professions education.[52]

Determinant. 5: Cultural Sensitivity/Safety [21 studies]

Efficacy of cultural competence education within community-oriented curricula can be significantly enhanced by incorporating principles of cultural safety to effectively address power differentials and systemic discrimination prevalent within healthcare systems. [49,53-56] This determinant is interconnected with Determinant. 4. Transitioning from a culture-blind to a culture-centered approach is fundamental in this development process.[57] To implement these principles effectively within the Community-Oriented Health Professions Education (COHPE) curriculum, several strategies can be employed. One such strategy is immersive community fieldwork, which aligns with principles of experiential and situated learning. In this approach, learners actively engage in authentic experiences within real-world contexts.[58] Epistemologically, immersive community fieldwork supports a constructivist approach to learning, emphasizing the active construction of knowledge through firsthand experiences and reflective practice.[59] Activities include community health assessments, home visits, and participatory research projects, all of which provide rich opportunities for learning and engagement. Immersive community fieldwork provides students cultural lenses, enhancing deeper understanding of the multifaceted nature of health and illness within diverse communities.[60] Moreover, it fosters the development of cultural humility; whereby through engaging with community members in their own environments, students cultivate self-reflection, openness to learning from others, recognizing the expertise of communities in shaping health outcomes, and sensitivity towards diverse cultural perspectives.[61,62] Evaluating cultural competency involves assessing students' ability to communicate effectively with patients from different cultural backgrounds, and their capacity to provide culturally sensitive care. Methods include diverse standardized patient encounters, reflective writing on cultural humility, and OSCEs targeting cultural competency domains.[61]

However, competence alone risks reductionism without the lens of safety and can risk oversimplifying complex cultural dynamics.[63] This requires self-reflection, and lifelong learning from communities.[64,65] Integrating cultural safety and competence helps students understand how culture affects health beliefs, addresses systemic care barriers, and aligns care with community priorities.[66-69]

Challenges in integrating cultural safety and competence include vague terminology, selecting appropriate pedagogies, securing resources, and establishing effective community partnerships.[70]

Overcoming barriers to cultural education and competency development in health professions education requires a multifaceted approach that addresses faculty training to develop the necessary skills and knowledge to incorporate culturally responsive teaching methods and establish meaningful partnerships with diverse communities.[57,71] Moreover, a curriculum that prioritizes the acquisition of knowledge at the expense of lifelong learning skills and cultural competencies may fail to adequately prepare students for the complexities of modern healthcare practice. Assessment tools may also lack accuracy in evaluating students' cultural competency, potentially overlooking essential aspects of cultural understanding, communication, and responsiveness.[56] Cultural immersion may also risk "voyeurism" without critical reflection; so, it is essential to incorporate structured reflection activities into cultural immersion programs to help students process their experiences, and gain deeper insights into cultural diversity.[64] It is crucial to empower students not only to recognize disparities in healthcare but also to understand their role and responsibility in addressing these systemic issues. While fostering awareness and critical reflection are essential first steps, students should also be supported by educational activities that enable them to advocate for systemic change within healthcare organizations and the broader community. Even if direct involvement with policymakers to change policies is not feasible, engaging students in learning activities where they analyze healthcare policies, identify disparities, and advocate for change is crucial for addressing structural barriers to health equity.[72] Establishing clear definitions, ensuring consistent usage of terminology, and providing training for educators and learners are key steps to resolve the conceptual ambiguity surrounding terminology for culture-centered education.[53]

Determinant. 6: Social Accountability [28 studies]

Social accountability in health professions education emphasizes the alignment of educational activities, research endeavors, and service provisions with the health priorities of the

community being served.[30,35,73] Integrating social accountability into a COHPE curriculum involves recognizing that health professions education extends beyond transmitting technical skills, emphasizing the ethical commitment to address community health needs by contextualizing medical knowledge and skills within the social, economic, and cultural realities of communities.[11,36] From a pedagogical standpoint, a COHPE curriculum incorporates teaching methods that actively involve students in community-based learning experiences, such as community placements, service-learning projects, interprofessional training, and participatory research initiatives.[43,74-80]

In a COHPE curriculum, it is imperative to include participatory research methods that engage community members in addressing priority health issues, alongside a comprehensive understanding of health economics. Incorporating health economics into the curriculum ensures that students are equipped to analyze healthcare access, costs, and delivery through a health equity lens. This multifaceted approach aligns with the core principle of addressing community needs within health professions education in Determinant. 1.[31,81,82] Strategies to foster accountability and reinforce its incorporation in the curriculum is to include it into institutional missions and values.[33,83] Assessing students' ability to effectively engage with communities is multifaceted; it may involve evaluating their participation in community-based activities, such as conducting needs assessments, or organizing health promotion events.[50]

Assessing students' advocacy skills involves activities that may include analyzing advocacy projects or policies, evaluating their participation in advocacy campaigns and simulating debates advocating with policymakers. Assessing students' proficiency in interdisciplinary collaboration and teamwork requires methods as structured/simulated team-based activities, participatory research, case-based discussions involving healthcare professionals from different disciplines, and peer evaluations of teamwork skills.[48]

On the other hand, assessing institutions for accountability involves tools like the social accountability grid, THEnet framework, and Boelen's CPU model that help evaluate schools' societal alignment,[84-86] underpinned by the excellence benchmarks set by the Association of Medical Education in Europe (AMEE).[87]

Despite the conceptual ambiguity of social accountability and the limitations of assessment tools at the institutional and curricular levels, our synthesis of the literature suggests that institutions can achieve clarity in defining social accountability through collaborative efforts among stakeholders to establish clear objectives and expectations.[9] This conclusion is drawn from multiple studies that emphasize the importance of stakeholder collaboration in setting clear and actionable goals. Refinement of assessment criteria may involve identifying key competencies and outcomes related to social accountability and aligning assessment methods accordingly. Evaluation frameworks for accountability are often subjective and underdeveloped;[86] so, development of robust evaluation frameworks is essential for continual refinement of the assessment processes to ensure validity and reliability.[10,88] Moreover, integrating health economics principles, such as cost-effectiveness analysis, may conflict with community priorities and the overarching aims of social justice.[89] However, strategies such as curricular integration, faculty development initiatives, student orientation programs, and the refinement of evaluation metrics are essential in maximizing social accountability despite these obstacles.

Determinant. 7: Incorporation of Health Systems Science in Community-oriented Curriculum [5 studies]

Health professions education historically prioritized basic and clinical sciences, but health systems science (HSS) is transforming curricula by formalizing systems-level competencies.[89] Accreditors now require systems-based practice training.[37] HSS expanded as a "third pillar" alongside basic and clinical sciences, encompassing competencies like healthcare policy, public health, teamwork, health IT, value-based care, quality improvement, and systems thinking. This expansion enables learners to engage in authentic experiences, cultivating a cadre of "systems citizens" capable of collaborative work across diverse health teams and organizations.[39] The experiential learning inherent in COHPE resonates with the principles of HSS and systems citizenship. Furthermore, the alignment between HSS and COHPE is underscored by shared competency frameworks, which highlight the synergistic relationship between the two domains.[89] For instance, competencies related to understanding healthcare policy and advocacy, promoting health equity, collaborating with interdisciplinary teams, utilizing health information technology, engaging in

quality improvement initiatives, and employing systems thinking approaches are typically integral components of both HSS and COHPE frameworks.[37,89]

By highlighting these shared competencies, the competency frameworks highlight that proficiency in HSS is essential for effectively implementing community-oriented approaches to health professions education and practice. Conversely, a strong foundation in COHPE principles enhances learners' abilities to navigate complex healthcare systems, advocate for community health needs, and contribute meaningfully to healthcare system reform efforts.[90]

Strategies like faculty development, community and policymakers' engagement, spiral curriculum mapping, authentic projects, and competency evaluation can maximize HSS-COHPE synergies, despite barriers.[37,80,89,90]

Determinant. 8: Partnering with Organizations and Local Government Health Authorities [7 studies]

Partnering with governmental and non-governmental organizations (NGOs) is crucial in the context of a community-oriented health professions education (COHPE) curriculum for several reasons.

Firstly, governmental and NGOs often have deep-rooted connections within communities and possess valuable insights into the social, economic, and health-related challenges faced by these populations. By collaborating with these organizations, medical education institutions can gain access to real-world data, community perspectives, and resources that are essential for designing curriculum content that is relevant, responsive, and effective in addressing community health needs.[41,47,91]

Secondly, partnering with governmental and NGOs provides students with opportunities for hands-on learning experiences in community settings. Through internships, service-learning projects, and research collaborations facilitated by these organizations, students can gain practical exposure to community health issues, develop cultural competence,[74,92] and enhance their interpersonal skills while working alongside experienced professionals and community members.

Furthermore, engaging with governmental and NGOs fosters a spirit of social accountability among medical students which interconnects with Determinant. 6. By actively participating in initiatives aimed at improving community health outcomes, students develop a heightened sense of responsibility towards serving the needs of marginalized and underserved populations.[28] This commitment to social responsibility aligns with the core principles of COHPE.

In evaluating a COHPE curriculum, the extent and quality of partnerships with governmental and NGOs can serve as a key determinant of its effectiveness and relevance. A curriculum that demonstrates robust collaboration with these entities is more likely to offer students meaningful learning experiences, foster a deeper understanding of community health issues, and prepare future healthcare professionals to be advocates for positive change within their communities.[28,40]

Conclusion and Recommendations

To summarize the findings in relation to our research questions:

1. **Insights from previous research on integrating community-oriented curriculum:** The literature review revealed that successful community-oriented health professions education (COHPE) requires a curriculum that is relevant to community needs, prioritizes health problems, and integrates community orientation at various levels. Additionally, empowering and engaging the community, ensuring cultural sensitivity and safety, and fostering social accountability are crucial for effective curriculum development. Partnerships with governmental and non-governmental organizations and the incorporation of health systems science further support the successful implementation of COHPE.

2. Research and knowledge gaps in the development and perception of community-oriented curricula: Despite extensive literature, explicit determinants for COHPE were not clearly defined. Our thematic analysis synthesized eight key determinants. This synthesis highlights the need for more empirical research to validate these determinants and explore their implementation in different contexts.

3. Evidence for the determinants of community-oriented education: The synthesized determinants provide a comprehensive framework for understanding the factors that influence the design and implementation of COHPE. This evidence

underscores the importance of aligning medical curricula with the synthesized determinants.
By integrating these elements, educational institutions can produce well-rounded healthcare professionals equipped to address the multifaceted challenges of community health. Our study underscores the importance of addressing these synthesized determinants and identified gaps to enhance the effectiveness of community-oriented health professions education.

Limitations of the review

This review has some inherent restrictions that preclude definitive conclusions. The search focused solely on two academic databases and English publications, risking omission of potentially relevant studies. Screening and selection were done by two reviewers, allowing individual biases to influence study inclusion. This was overcome by using clear and objective inclusion criteria and standardizing the screening process and utilizing a consensus-based approach, where discrepancies in study inclusion decisions were resolved through discussion and mutual agreement between both reviewers. The determinants were not explicitly delineated in the literature; rather, they were synthesized from the data. This requires systematic validation of the proposed determinants and their hypothesized impact on educational outcomes. Causality between determinants and outcomes cannot be inferred given the nature of the narrative methodology. More rigorous systematic reviews are warranted to substantiate the evidence linking proposed determinants to COHPE.

Despite these limitations, this narrative review consolidates available literature and provides a preliminary framework of determinants to guide future studies and systematic analyses. However, judicious appraisal of the evidence is advised given the aforementioned restrictions inherent to the narrative review methodology.

Future Studies

This narrative review reveals critical areas for future research to build a robust evidence base for determinants of effective community-oriented curricula. This necessitates a multifaceted research agenda that embraces ***validation studies*** to verify the hypothetical relationships between determinants posited in the concept framework. ***Delphi studies*** can also help achieve consensus on key determinants across diverse settings. Additionally, assessment tools must be developed to evaluate integration of determinants into curricula and measure their implementation through ***evaluative studies.***

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