

Maternal health research in sub-Saharan Africa: time for more attention to community engagement – a scoping review

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Centuries of not asking community members what they need

- Historically too little involvement of the local community during North-South collaborations¹ → effect on research outcomes → erroneous interventions
- Relatively worse in maternal health (MH) research, as women are structurally excluded from decisions on their health in L(M)ICs^{2,3}
- Causal relation or not: disproportionately high maternal mortality rates in sub-Saharan Africa (SSA), and current decline not on track for the MH Sustainable Development Goal^{4,5}
- Community engagement (CE) has the potential to improve MH in SSA

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Defining community engagement is complex

- Study objective: to identify different CE approaches used in MH research in SSA through a scoping review
- Further interpretation through narrative synthesis with strengths-weaknesses-opportunities-threats (SWOT) analysis
- Obstacle during screening: no universal definition of CE in literature⁶ → Decision to take CE as overarching term and use definition of CE from Centers for Disease Control and Prevention: *“the process of working collaboratively with groups of people who are affiliated by geographic proximity, special interests, or similar situations with respect to issues affecting their well-being”*(CDC, 1997)⁷

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From screening to inductive analysis

- Search terms: synonyms of CE, MH and SSA
- Searched five academic and two grey literature-oriented databases to also detect local reports
- 1381 entries Title/Abstract screened for CE in any type of MH research in SSA → 287 Full-Text → 141 inclusions
- Data analysis: narrative synthesis in an inductive manner, i.e. identifying and categorizing approaches bottom-up

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14 CE approaches within interventional MH research

- Unexpected finding: nearly all eligible papers studied CE in MH **interventions**: either interventional participatory research projects or reports about CE in MH programs
 - Potential explanation: interventional research more ethical in L(M)ICs as it directly benefits the community
- Most studies: CE aided success of MH interventions

Fourteen CE approaches resulting from narrative synthesis (highest → lowest occurrence):

1. Awareness campaigns	6. Community health workers	12. Community-based drug distribution
2. Community-based evaluation	7. Task shifting	13. Community-based registration
3. Community consultation	8. Community mobilization	14. Social accountability initiatives
4. Participatory research	9. Capacity building	
5. Male involvement	10. Community leader endorsement	
	11. Community-based transportation	

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Key take-away messages

- CE is important for ethical and successful implementation of MH interventions and interventional research
- There is a lack of knowledge on CE approaches for non-interventional MH research
- The eight themes resulting from this review affect the effectivity of CE in MH interventions
- Local context determines which of the eight themes are most important and beneficial in that particular setting

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Eight main themes for successful CE

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SWOT analysis

- SWOT analysis: facilitating and impeding internal and external factors → performed for all fourteen CE approaches
- Further analysis of relationships in the data → eight main components/conditions for successful CE (see 6)

Strengths

- Implementation relevant to community itself
- Use of local knowledge
- Triggers motivation and ownership

Weaknesses

- Time-consuming
- Many different opinions
- Solutions not directly replicable to other communities

Opportunities

- Existing community structures and local initiatives
- Multidisciplinary collaboration
- Sufficient collective MH knowledge
- Integration with other CE approaches

Threats

- Marginalized groups often less involved
- No financial buffer to spend time on research projects
- Power disparities

SWOT analysis for CE-approach 4: Participatory research

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Limitations

- Broad research question made it possible to explore existing data and obtain an overview of the evidence → But also led to complex and heterogeneous data that was difficult to analyze and categorize
- Unclear terminology of CE-related terms in literature → High chance of missing synonyms in the search string
- Papers only reporting on the performed CE in the discussion section → Missed eligible inclusions due to search in Title/Abstract

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What's next?

- Plan for 2024: set up a research agenda for hypertensive disorders of pregnancy in Ghana, in collaboration with Action on Preeclampsia (APEC) Ghana, a CE expert through years of patient advocacy work
- Use the outcomes of this review for designing an inclusive and engaging process
- Side project: analyze and report on the CE activities of APEC Ghana

→ please help us learn: what is your experience with CE in research in L(M)ICs? Which components were most important? Which did not have the envisioned effect?

Call to action: in the future, please plan how you will perform CE during your research projects and report on it afterwards, so that we can fill this knowledge gap.

More information on <https://apecghana.org/>

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