

## บทความวิจัย

### Promoting Community Participation in Improving Maternal and Neonatal Health in Ntcheu District, Malawi: Suggestions for the First National Community Health Strategy

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#### บทคัดย่อ

Malawi, a developing country in southern Africa, adopted its first National Community Health Strategy 2017-2022 to strengthen community health through a harmonized and integrated community approach. The challenges faced with community participation in maternal and neonatal health (MNH) contribute to the country's health system failures threatening chances of achieving the sustainable development goals targets in the area. A qualitative case study utilizing a phenomenological approach was used to suit the exploration of challenges in promoting community participation to improve MNH. The study was conducted in Ntcheu district, the central region of Malawi. Thirty-five respondents were purposively sampled from functioning teams and committees at various levels within the district health system. The challenges were explored by using key informant interviews of health managers in Ntcheu district, Malawi. Data was manually analyzed using thematic analysis technique and processed and cleaned using Microsoft excel and word processing programs. The study found the issues presenting as challenges associo-cultural differences detrimental to MNH, problems with community health volunteering, and inadequate health care workers and facilities to respond to community needs. The study recommended integrated health promotion with well-composed MNH messages that capture all sections of society to deal with the socio-cultural issues. The study reinforced the need for good coordination and adequate support for community health volunteer activities. Resource mobilization and building more capacity of the health workforce and facilities to improve service provision are needed to adequately respond to the community needs.

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## Introduction

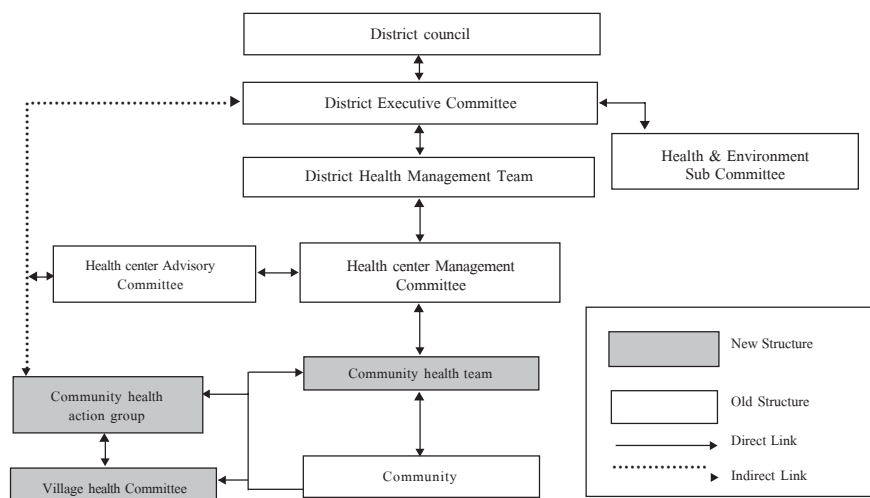
Community participation in health is a process where people assume responsibilities by taking active and direct roles for improving their health and welfare through the development of appropriate health services that suit their needs (Howard-Grabman, Miltenburg, Marston, & Portela, 2017). Community participation is a fundamental principle of primary health care targeted at improving access to and provision of essential health services for rural communities (Preston, Waugh, Larkins, & Taylor, 2010; World Health Organization, 2008). Over the years studies like Preston et al., (Preston et al., 2010), Bath and Walkerman (Bath & Wakerman, 2015) and Rifkin, (Rifkin S. B., 2014) have reaffirmed the benefits of community participation with evidence on significant improvements especially in Maternal and Neonatal Health (MNH).

Malawi is a low-income sub-Saharan country aiming to improve its MNH indicators towards the achievement of Sustainable Development Goals (SDGs) targets (Government of Malawi, 2017a). Through the National Community Health Strategy (NCHS) 2017-2022, the government of Malawi emphasized the promotion of primary health care through community participation, especially in MNH (Government of Malawi, 2017a; 2017b). Under the NCHS 2017-2022, government salaried community-based health workers to promote community participation supported by further community structures that work together with health and local administrative structures (Angwenyi et al., 2018; Government of Malawi, 2017b). At the community level the community health workers are supposed to work to-

gether with community health volunteers (CHVs) in community health teams to harmonize primary and community health interventions (Government of Malawi, 2017b). The health sector prioritized community structures that facilitate community participation at district level that are presented in figure 1 below (Government of Malawi, 2017b).

The district council is the overall administrator of all public institutions at district level, followed by the district executive committee which is responsible for the overall development and direction of the district policies including the health sector. Then there is Health and environment sub-committee which is a sub-committee that responds to health needs on behalf of the district executive committee. There is also the district health management team which oversees coordination, planning, supervision, and monitoring the implementation of the health agenda followed by Health center management committee whose role is to oversee planning and implementation of health services at the health center level. At the health center level, there is the Health center advisory committee which is a committee of community volunteers which bridges the community and the health center. The Community health team is a team of community health workers and volunteers working together in harmonizing primary and community health interventions and finally the Community health action group is a complimentary structure to the community health team overseeing a group of village health committees linking them to other local administrative structures.





**Figure1:** community structures that facilitate community participation at district level

Although challenges are reported within the Malawi health system regarding community participation in MNH services, evaluation of the millennium development goals (MDGs) showed Malawi registering a decline in maternal and neonatal mortality ratios (Government of Malawi, 2017a). The neonatal mortality rate was estimated to be 31 and 27 per 1000 live births for 2010 and 2016 respectively (Government of Malawi, 2017a). This surpassed the MDG target of 45 per 1000 live births for neonatal mortality rate (Government of Malawi, 2017a). While the maternal mortality ratio was estimated at 439 per 100,000 live births in 2016, down from 675 per 100,000 in 2010 (Government of Malawi, 2017a). However, Malawi's maternal mortality ratio remained very high compared with other countries in the same region like South Africa with 138, Zambia 224 and Tanzania 398 per 100,000 live births respectively (Alkema et al., 2016). The existence of challenges in maternal health puts women in Malawi at high-risk of dying, such that they are 14 times more likely to die from child birth problems as compared to those in high income countries (Alkema et al., 2016). Studies have

also indicated that Malawi, among other countries, is unlikely to achieve the MNH SDGs targets (Alkema et al., 2016; Fullman et al., 2017). In particular, target one and two of SDG three-targeting a reduction in the maternal mortality ratio to less than 70 per 100,000 live births and reduce neonatal mortality ratio to 12 per 1000 live births by 2030 globally (Nations, 2015).

Major direct obstetric causes of maternal and neonatal deaths in Malawi include; post-partum hemorrhage, sepsis, complications of abortion, hypertensive disorder, prematurity and birth asphyxia (Government of Malawi, 2017a; Marks, Dietsch, & Sidebotham, 2016; Mgawadere, Unkels, Kazembe, & van den Broek, 2017). The reported direct obstetric causes can be addressed through effective community interventions that mitigate their associated factors (Gilmore & McAuliffe, 2013; Rosato et al., 2008). The continued prevalence of obstetric problems suggests the presence of community participation gaps in MNH. The implication is that Malawi's health system cannot leverage and maximize the perceived gains of community participation to improve MNH services as envisaged by

the planners. Therefore, Ntcheu district, in Malawi, was selected to explore the challenges faced by the District Health Management Team (DHMT) in promoting community participation to improve MNH services according to the NCHS 2017-2022 strategy.

### Materials and methods

The qualitative case study utilizing a phenomenological design was used to suit the exploration of challenges in promoting community participation to improve MNH. The study was conducted in Ntcheu district, the central region of Malawi. Ntcheu is one of the rural districts in Malawi with a population of about 588,038 and a total of 845 villages (Malawi National Statistical Office [NSO] & ICF, 2017). Almost the entire rural population in the district relies on primary health care services offered through a network of government and non-governmental health facilities. One district hospital with a 280-bed capacity serves as a secondary level referral facility supporting the primary health care units.

Thirty-five respondents were purposively sampled from functioning teams and committees at various levels within the district health system. Purposive sampling helps the researcher to access a particular subset of the population (Etikan, Musa, & Alkassim, 2016). This method was chosen to allow focus only on those who have a significant role in community participation activities in health within the established structures. The new community structures set up under the NCHS 2017-2022 were not fully established and functioning at the time of the study. For data three participants from the participating

teams and committees were targeted except for the DHMT. The DHMT, the main health policy implementer in the district, served as the main unit of the study. Each of the five members has a direct and significant role in community participation activities. Participants from other levels were incorporated into the study based on their working relationships with the DHMT in MNH related community activities. Chairpersons and secretaries of the participating committees and teams were targeted as key representatives and record keepers respectively. An additional member was picked from the rest of the committee or team based on availability. Participants from the District Executive Committee (DEC), the main committee that deals with policy and control in the district and, included a representative of the head of the district, chairperson and secretary of the health and environment subcommittee (a committee that focuses on issues of health and environment on behalf of DEC). Participants from DHMT included five out of the eight members based on their direct roles and functions in MNH community health activities. Nine members were drawn from three Health Center Management Committees (HCMCs) from three participating facilities (chosen based on operational size as big, medium, and small to represent the different categories). Another nine members were drawn from the Health Center Advisory Committees (HCACs) with three per participating facility, and nine more from the Village Health Committees (VHCs) under which the participating facilities are stationed. Withdrawal rate of the participants was zero. Table 1 provides a summary of the study participants.



**Table 1:** Summary of study participants

Participant position	No. of participants per facility	No. of facilities	Total no. of participants
District executive committee	3	-	3
District health management team	5	-	5
Health center management committee	3	3	9
Health center advisory committee	3	3	9
Village health committee	3	3	9
Total			35

Key informant in-depth interviews were the main data collection method used in the study to accommodate differences among the respondents according to level and position. The interviews took forty-five minutes each. The interviews were conducted either in English or Chichewa (Malawi's national language) depending on the choice of the respondents. Data collection was conducted from December 2018 to January 2019 through an iterative probing process. Semi-structured interview guides with questions designed differently to suit the different levels and positions of the respondents were used. The questions explored views and experiences on community participation from those directly involved with planning and implementation of MNH community activities within the DHS, which were analyzed using triangulation method to prove the given information. The questions also inquired about the achievements and failures realized through community participation in MNH along with the associated positive and negative facilitating factors. Further probing for details was done depending on the issues that were raised during the interviews. A voice recording device was used with consent from the participants during the interviews to aid transcription and record keeping.

Data were manually analyzed using thematic analysis technique and processed and cleaned

using Microsoft excel and word processing programs. A language expert helped with translation between English and Chichewa of the study tools and transcripts. After thorough reading and understanding of the content of the data, text extracts containing common assigned codes were grouped. Generation of themes was undertaken by interweaving the grouped data quotes into synthesized conceptual issues supported by other related literature. The data obtained was triangulated for convergence of information to ensure the trustworthiness of the results, then member checking was done at two stages. First, the completed transcripts were shared with the participants for confirmation and correction of the views captured. Second, an experienced external researcher in the same field reviewed the entire process that resulted in revisions and improvements in the generated themes. The themes that were generated are discussed in the results section, with examples of the data extracts from the interviews.

An approval from the national health sciences research committee of Malawi, numbered 2186, was obtained dated 28<sup>th</sup> November 2018. Ntcheu district authorities have also given their permission. Participation in the study was purely voluntary. Participants provided written consent upon understanding the details of the study. Privacy and confidentiality of the participants'

information have been observed with strictness, and only codes were used for the participant's identification.

## Results

In this study, the interviews were conducted from 35 participants. 5 were from the District Management team, 9 were from 3 Health Centre Management Committees, 3 from District Executive Committee, 9 participants from 3 Health Centre Advisory Committees and 9 participants were from 3 Village Health Committees. Of all these participants 15 participants were females and 20 participants were males, 25 participants were of the age ranging from 36 to 45 years of age and 10 participants were of ages ranging from 46 to 55 years of age.

The study identified the following three themes as challenges to community participation, issues of socio-cultural difference, issues of community health volunteering, and issues of inadequate health care workers and facilities.

## Themes

### 1) Issues of socio-cultural differences

The data obtained indicated the presence of some cultural issues that are not consistent with MNH requirements. As one of the health managers (DHMT 1) shared:

*"There is poor health-seeking behavior among communities, and at times, preference is on non-recommended health providers like traditional and unskilled birth attendants who are not legally certified to provide such services. Most people follow traditional patterns after their parentage and some religious beliefs. They do not utilize available health information and services. As a result, we experience problems such as child marriages and high fertility rates from early pregnancies due to lack of aspiring carrier expectations, societal*

*norms and poverty, poor family planning methods uptake."*

Gender issues were also part of the socio-cultural challenges to community participation presented. A health center in charge (HCMC 1) spoke about some issues that affect male participation:

*"There are prevailing cultural influences that portray MNH issues to be mostly for women and not men. Men are believed to take on more masculine roles as heads and providers of their family needs. Childbearing and rearing issues are left for women. So those males that show support and more involvement in their wives' pregnancy are ridiculed by their peers."*

There were also talks about the social implications of female involvement. As DHMT 2 pointed out:

*"During the MNH community meetings, many women complain about the burden of having to be sanctioned through fines established by the community leaders or kept in the long waiting queues due to special preference that favors those that attend antenatal clinic with their spouses. Some women do not have husbands, so they do not see the need to be punished as it is not their fault. Others complain that even though they wake up early to attend the clinics to save time for other important daily chores, they still end up taking too long attending ANC because of the practice."*

According to the observations raised, there are problems of limited knowledge or poor understanding of MNH issues that negatively affect people's participation in health programs. Male participation in MNH is affected by misguided societal perceptions. There is also the problem of culturally based male dominance in society that puts women in positions of lesser influence over some matters that are important to them including MNH services. The measures taken by the community leaders and the health facilities to promote

male and female participation have negative implications on other groups of women. Those without husbands feel unfairly treated and excluded from the offered benefits of MNH services, which has the potential of affecting their interest in participating in the uptake of the services. Kululanga and Sundby (2012) and Mkandawire and Hendricks(2018) observed that some women shun ANC clinics for fear of the punitive measures taken over circumstantial issues beyond their control like being single mothers due to various reasons. Existing local regulations require such women to obtain letters from the village chiefs explaining their circumstance to receive services. This observation entails an element of societal discrimination towards women in favor of their male counterparts.

## 2) Issues of community health volunteering (CHV)

The data also indicated challenges associated with CHVs. One community member (VHC 1) shared about their capacity limitations:

*"Some CHVs, despite having a willing mindset, face challenges articulating MNH issues. There is a lack of proper recognition through formal training, as much consideration is focused on formal government health workers. So sometimes the volunteers have fragmented information because they are trained based on organization objectives and not in the full MNH package, especially when working with non-governmental organizations."*

The district health managers also acknowledged some problems affecting CHVs in the same area as DHMT 3 observed:

*"There is a need to develop standard training manuals. Sometimes, volunteer training manuals are not available, and information imparted to them may be beyond their comprehension about the duration of their training. The manuals serve as day to day guides of their activities."*

DHMT 4 also noted issues to do with provisions for the volunteers:

*"There is a need for provisions of basic enablers to CHVs. This requires a change of mindset and treatment of our local volunteers to match international volunteers who get basic needs during their tenure. They can be provided with motivational or hygiene packages to promote their stance as presentable resource persons in their communities."*

CHVs extend the community's reach in health interventions. The key role that CHVs play in society requires special attention and support for effectiveness. The challenges of working with CHVs are the need for health managers and their partners to pay attention to providing the necessary support for the activities. In other words, the process requires making sure that the volunteers are properly trained, oriented, and equipped with the necessary tools for monitoring.

## 3) Issues of inadequate healthcare workers, facilities, and structures

There are critical shortages of both skilled and community health workers as well as inadequate health facilities and unestablished new community structures. DHMT 5 explained:

*"The district is faced with inadequate health care workers and facilities. The result is that lack of essential care during delivery and postpartum period results in high neonatal deaths from sepsis and prematurity. Unsafe delivery practices and unsafe abortions are causing the high maternal deaths in the district...there are a lot of avoidable delays in seeking or accessing required health care on the part of the clients due to poor service provision and monitoring both at facility and community level."*





A health center in charge (HCMC III) also lamented that:

*"Shortage of staff is leading to poor and non-comprehensive care delivery as well as engulfing the health surveillance assistants with unreasonable responsibilities. The problem also affects in overwhelming of the facilities that already have severe resource challenges, thereby compromising effectiveness in interventions."*

DHMT 3 shared another prominent issue on inadequate facilities:

*"Sometimes, there is a good response rate to health promotion campaigns aimed at promoting facility deliveries. However, we face challenges with accommodation in both maternity and labor wards as our facilities are relatively small and with no capacity to respond and adapt to growing demand."*

DHMT 4 explained about the new unestablished community structures proposed by the NCHS 2017-2022:

*"We are facing challenges in terms of funding to establish and operationalize the newly proposed CHAGs and CHTs according to the new community health set up. The process requires funds for conducting trainings and orientation of the structures."*

Health workers are a vital resource in any health system. They provide frontline care and defense against diseases and other health-related problems supported by good health facilities (Cherrington et al., 2010). The community health workers extend the health system's reach by providing health interventions right in the communities. Pronounced vacancies in community health workers mean services cannot be fully provided. Skilled health professionals offer critical support to community health workers and the health system through facility-based care and ongoing training (Cherrington et al., 2010). With the shortages of skilled health workers who, again, operate in poorly equipped facilities then it means supportive health services cannot be effective. The gaps

affect the quality and extent of the services offered.

The non-functional proposed community structures mean there are still gaps within the system in terms of community health activities as some key roles are not discharged through the structures.

## Discussion

The NCHS 2017-2022 set up new community structures to strengthen community health programs through community participation. Community health teams consisting of community health workers and volunteers were set up to coordinate activities on the ground with other supporting structures like community health action groups. The strategy also seeks to promote the involvement of both sexes in MNH activities as they are all equally responsible for observing good MNH practices. However, the study has found some challenges that are affecting promotion of community participation in MNH according to the NCHS 2017-2022 set up.

## Issues of socio-cultural differences

Most communities in Malawi are characterized by high illiteracy levels, especially in rural areas (Malawi National Statistical Office (NSO) & ICF, 2017). Education facilitates uptake and understanding of health information. Those provided with some basic education are more likely to understand and make good use of health information than those with no education (Nutbeam, 2008). Negative cultural influence is detrimental to progress regarding community participation. On male involvement in MNH, men are commonly the main decision-makers on most issues in the Malawian society including health and reproduction (Mkandawire & Hendriks, 2018). Therefore, husbands are encouraged to be fully involved in MNH activities to provide the necessary support to their women. The men are encouraged to escort their





wives for ANC attendance to benefit from the information offered on MNH issues. Some men involved in their wives' antenatal attendance acquired know-how in health and became model husbands and in turn, encourage their peers to also take an interest in MNH issues (Kululunga et al., 2012; Mkandawire & Hendriks, 2018). So, there is a need for complete engagement of the male partners in MNH activities.

Social norms, beliefs, and values affect the type and extent of support women receive from their husbands or other male family members (Davis, Luchters, & Holmes, 2012). According to customs and cultural practices in Malawi, MNH issues are treated as more of women's responsibility (Kululunga et al., 2012). As such, the required critical support from the males is lost for fear of losing face on the part of the males due to peer pressure and distorted societal perceptions and attitudes towards MNH issues. Male dominance and the MNH related by-laws enforced in communities further marginalizes female participation. Local policies need to explore better ways of encouraging good MNH practices that are not discriminatory. The lack of sound knowledge and a good understanding of health issues allows negative cultural influences to dictate poor health habits. Consequently, there is a loss of confidence and interest in health interventions resulting in poor community participation (Nutbeam, 2008). With more knowledge and understanding, communities and health managers can ably produce effective strategies that promote female and male involvement. Therefore, to improve community participation in MNH, emphasis must be put on integrated health promotion with well-composed MNH messages that capture all sections of society to deal with the socio-cultural issues.

### ***Issues of community health volunteering***

CHVs are individuals who willingly offer their time, skills, and knowledge to work with communities to improve their health status without expecting financial remuneration (Angwenyi et al., 2018; Cherrington et al., 2010). CVHs form an integral part of the MNH team. They influence other community members to adopt best practices in MNH services and act as a bridge between trained health workers and the community for the successful implementation of interventions (Gilmore & McAuliffe, 2013). They are economically sustainable, especially in Malawi, where most are not attached to financial incentives (Angwenyi et al., 2018). As such health policy in Malawi needs to clearly define the roles and scope of the CHVs to avoid exploitation and unreasonable over-reliance on their efforts in place of formally structured service provision channels (Angwenyi et al., 2018). Adequate support in terms of training, materials and required tools, as well as proper coordination of their activities, should be provided to ensure the effectiveness of their contributions.

### **Issues of inadequate healthcare workers, facilities, and structures**

Availability of good and well-equipped facilities determine the quality and level of services. The shortages in health workers mean that all health improvement efforts through community participation are rendered ineffective. Community health workers present a potential for disease prevention and early management, without them, it is difficult to provide necessary MNH services through community participation as they serve as bridges between communities and health facilities (Government

of Malawi, 2017a; Mgawadere et al., 2017). There is also a need to facilitate quick establishment of the newly proposed community structures for effectiveness in community health activities according to plans. The nonfunctional community structures can have serious effects on the end goals of the strategy. Therefore, critical focus should be put on the mobilization of resources from all relevant stakeholders in building more capacity of the health workforce and facilities as well as the community structures to improve service provision that adequately responds to the community needs.

## Conclusion

The study identified issues of socio-cultural differences, community health volunteering, and inadequate health care workers, facilities and community structures as the challenges faced by the Ntcheu DHMT in promoting community participation to improve MNH services according to the NCHS 2017-2022 strategy.

## Limitations of the study

The study was limited in that it focused on the views and experiences of the health managers as the main policy implementors. However, the inclusion of views from community members and other supporting structures added more understanding of the issues discussed. The nature of the study only allowed the use of variables in the Malawian context, especially the socio-cultural differences which play a key role in all social dynamics. Nevertheless, narrow observations are still largely used to approach new research ideas. Focused studies on the variables bordering around issues of religion and gender may be used to understand their relative influence on MNH issues in the wider context.

## Recommendation

The study has opened areas of interest for more research that should explore in detail some major socio-cultural issues like the influence of religion and gender towards MNH challenges. According to the study findings, policy makers should ensure effective access to health information system for the participating communities. This is where health education and health literacy become a prerequisite. The health care plan needs to fully accommodate key actors in health to provoke the awareness of the challenges and build capacity to deal with the problems. In strengthening community volunteering, a well-collaborated need-based curriculum design or manual should provide for clear roles and responsibilities. Finally, male dominance and the MNH related by-laws enforced in communities further marginalizes female participation, therefore, local policies need to explore better ways of encouraging good MNH practices that are not discriminatory.

## Conflict of Interest

The authors have no conflict of interest to disclose.

## Reference

- Alkema, L., Chou, D., Hogan, D., Zhang, S., Moller, A. B., Gemmill, A., ... & Inter, U. N. M. M. E. (2016). Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *The lancet*, 387(10017), 462-474.
- Angwenyi, V., Aantjes, C., Kondowe, K., Mutchiyeni, J. Z., Kajumi, M., Criel, B., ... & Bunders-Aelen, J. (2018). Moving to a strong (er) community health system: analysing the role of community health



- volunteers in the new national community health strategy in Malawi. *BMJ global health*, 3(Suppl3), e000996.
- Bath, J., & Wakerman, J. (2015). Impact of community participation in primary health care: what is the evidence? *Australian Journal of Primary Health*, 21(1), 2-8.
- Cherrington, A., Ayala, G. X., Elder, J. P., Arredondo, E. M., Fouad, M., & Scarinci, I. (2010). Recognizing the diverse roles of community health workers in the elimination of health disparities: from paid staff to volunteers. *Ethnicity & disease*, 20(2), 189.
- Davis, J., Luchters, S., & Holmes, W. (2012). *Men and maternal and newborn health: benefits, harms, challenges, and potential strategies for engaging men*. Melbourne, Australia: Compass: Women's and Children's Health Knowledge Hub.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Fullman, N., Barber, R. M., Abajobir, A. A., Abate, K. H., Abbafati, C., Abbas, K. M., ... & Dubey, M. (2017). Measuring progress and projecting attainment on the basis of past trends of the health-related Sustainable Development Goals in 188 countries: an analysis from the Global Burden of Disease Study 2016. *The Lancet*, 390(10100), 1423-1459.
- Gilmore, B., & McAuliffe, E. (2013). Effectiveness of community health workers delivering preventive interventions for maternal and child health in low-and middle-income countries: a systematic review. *BMC public health*, 13(1), 1-14.
- Government of Malawi. (2017a). Health sector strategic plan II 2017-2022. Capitol Hill Lilongwe, Malawi: Ministry of Health. Retrieved <http://extwprlegs1.fao.org/docs/pdf/MLW177248.pdf>
- Government of Malawi. (2017b). National community health strategy 2017-2022. Capitol Hill Lilongwe, Malawi: Ministry of Health. Retrieved from [https://www.healthynewbornnetwork.org/hnn-content/uploads/National\\_Community\\_Health\\_Strategy\\_2017-2022-FINAL.pdf](https://www.healthynewbornnetwork.org/hnn-content/uploads/National_Community_Health_Strategy_2017-2022-FINAL.pdf)
- Howard-Grabman, L., Miltenburg, A. S., Marston, C., & Portela, A. (2017). Factors affecting effective community participation in maternal and newborn health programme planning, implementation and quality of care interventions. *BMC pregnancy and childbirth*, 17(1), 1-18.
- Kululanga, L. I., Sundby, J., Malata, A., & Chirwa, E. (2012). Male involvement in maternity health care in Malawi. *African journal of reproductive health*, 16(1), 145-157.
- Malawi National Statistical Office (NSO), & ICF. (2017). Malawi demographic and health survey 2015-16. Retrieved from Zomba, Malawi, and Rockville, Maryland, USA:
- Marks, C., Dietsch, E., & Sidebotham, M. (2016). Maternal and neonatal health in Malawi: An integrative literature review. *African Journal of Midwifery and Women's Health*, 10(1), 42-47.
- Mgawadere, F., Unkels, R., Kazembe, A., & van den Broek, N. (2017). Factors associated with maternal mortality in Malawi: application of the three delays model. *BMC pregnancy and childbirth*, 17(1), 1-9.

- Mkandawire, E., & Hendriks, S. L. (2018). A qualitative analysis of men's involvement in maternal and child health as a policy intervention in rural Central Malawi. *BMC pregnancy and childbirth*, 18(1), 1-12.
- Assembly, U. G. (2015). Transforming our world: the 2030 agenda for sustainable development, 21 October 2015 (Vol. 16301). A/RES/70/1. Retrieved from [https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\\_RES\\_70\\_1\\_E.pdf](https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf)
- Nutbeam, D. (2008). The evolving concept of health literacy. *Social science & medicine*, 67(12), 2072-2078.
- Preston, R., Waugh, H., Larkins, S., & Taylor, J. (2010). Community participation in rural primary health care: intervention or approach? *Australian journal of primary health*, 16(1), 4-16.
- Rifkin, S. B. (2014). Examining the links between community participation and health outcomes: a review of the literature. *Health policy and planning*, 29(suppl\_2), ii98-ii106.
- Rosato, M., Laverack, G., Grabman, L. H., Tripathy, P., Nair, N., Mwansambo, C., ... & Costello, A. (2008). Community participation: lessons for maternal, newborn, and child health. *The Lancet*, 372(9642), 962-971.
- World Health Organization. (2008). Ouagadougou Declaration on primary health care and health systems in Africa: achieving better health for Africa in the new Millennium. Brazzaville: WHO Regional Office for Africa.

