

Use of photovoice to explore the potential role of youth in contributing to maternal health in rural Wakiso district, Uganda

David Musoke ^a, Rawlance Ndejjo,^b Grace Biyinzika Lubega,^c Elizabeth Ekirapa-Kiracho ^d

a Lecturer, Department of Disease Control and Environmental Health, School of Public Health, College of Health Sciences, Makerere University, Kampala, Uganda. *Correspondence:* dmusoke@musph.ac.ug

b Research Associate, Department of Disease Control and Environmental Health, School of Public Health, College of Health Sciences, Makerere University, Kampala, Uganda

c Research Assistant, Department of Disease Control and Environmental Health, School of Public Health, College of Health Sciences, Makerere University, Kampala, Uganda

d Senior Lecturer, Department of Health Policy, Planning and Management, School of Public Health, College of Health Sciences, Makerere University, Kampala, Uganda

Abstract: *Despite youth constituting a large portion of the population in Uganda, their involvement in improving maternal health in their communities has been minimal. This paper explores the potential role of youth in contributing to maternal health in rural communities in Wakiso district, Uganda using photovoice. Photovoice was used as a community-based participatory research method among 10 youth (5 males and 5 females) over a period of 5 months. The photos taken by the youth were discussed in monthly meetings, and emerging data was analysed using thematic content analysis. Four themes emerged regarding how youth can contribute to improving maternal health in their communities. These themes were: community health education; advocacy for health improvement; community voluntary work; and being exemplary. The fifth and final theme provides the avenues, including drama and sports, that the youth suggested they could use for conveying messages to the community concerning maternal and general health. Health education on topics such as the importance of delivering at health facilities was emphasised. Regarding advocacy, the youth said they can be involved in reaching out to various stakeholders to raise concerns affecting maternal health. Voluntary work such as construction of energy stoves for pregnant women emerged. The youth also highlighted that they could be exemplary for instance by males accompanying their spouses during antenatal visits. With the need to continuously engage community actors in health initiatives, youth should be considered and supported as important stakeholders so they may engage in activities to improve health within their communities. DOI: 10.1080/26410397.2020.1854152*

Keywords: community-based participatory research, maternal health, photovoice, rural communities, youth, Uganda

Introduction

Uganda reduced its maternal mortality rate (MMR) by 35% between 2000 and 2017,¹ enabled by the collective efforts of various stakeholders including the Ministry of Health, implementing partners and other institutions including health facility and community-based initiatives.^{2,3} Stakeholders have undertaken interventions including but not limited to: strengthening capacity and motivation of health workers in maternal health management; quality improvement mechanisms;

focusing on the delays in seeking, reaching and receiving care; implementation of evidence-based policies using a multisectoral approach; and increasing the availability of medicines, supplies and equipment at maternity departments.^{2,4,5} Despite the progress made, Uganda still has one of the highest maternal mortality ratios (MMR) in the world, at 336 deaths per 100,000 live births.⁶ Currently, 28% of the annual maternal deaths in the country occur among adolescents aged 10–19 years⁷ which is twice as many

as those of older women.⁶ The high MMR among the youth could be attributed to early sexual debut, as young as 15 years,⁸ and early marriages, with over 40% of women married before they are 18 years.⁷

In rural communities in Uganda, where 80% of the youth live, there are still several challenges affecting maternal health (MH),⁹ including: long distances to health facilities and inadequate transport; long waiting times at health facilities; low male involvement; and limited access to sexual and reproductive health (SRH) services.^{10–13} In addition, youth in rural areas are more prone to teenage pregnancy, early marriages, and gender-based violence, which all have a significant impact on Uganda's MH indicators.⁹ Furthermore, due to stigma as well as cultural and societal beliefs, youth in rural communities have inadequate access to comprehensive sexuality education as well as affordable and appropriate contraceptives.^{11,14} The Government of Uganda has put in place measures to reduce child marriages and increase access to SRH services such as modern contraceptives.^{7,9} These measures have been instrumental in improving reproductive health including MH among youth and the general population.

Young people are often a neglected stakeholder in health initiatives including community-based participatory research in MH.^{15–17} However, they are a potential resource that could contribute to improving health promotion.^{18–20} Health initiatives that have engaged youth in understanding their own health status have empowered them as change agents who have shown great potential in combating public health challenges in their communities.^{15,19–21} For example, the involvement of youth in adolescent-friendly clinics at government health facilities in Uganda has been seen to yield a positive impact in utilisation of health services.⁹ There has also been an increase in use and acceptability of SRH services such as safe male circumcision, safe sexual practices, and menstrual hygiene management due to the influence of peer educators.^{19,22} Youth therefore have a role in supporting health interventions, including maternal health, in their communities.

Photovoice is a community-based participatory research methodology that is being used increasingly in public health studies.^{23,24} The methodology uses photography as a means to capture concerns and situations in the environment that affect communities. Photovoice has been shown

to empower participants, usually community members whose voices are often neglected, such as women, children, patients and other minority groups.²³ Indeed, photovoice participants take the lead in the data collection process, shaping the research by deciding which photos are taken, and usually take part in participatory analysis of the emerging data. Photovoice research is engaging and gives participants opportunities to advance their social identities and personal abilities such as self-confidence, respect for others, and a sense of community belonging.^{25,26} Photovoice has also been acknowledged as a means to develop leadership, teamwork and communication skills among youth, as well as being fun.^{21,27} This study therefore used photovoice to explore the potential role of youth in contributing to improving maternal health in rural communities in Wakiso district, Uganda.

Methods

Study design, context and participants

The study used photovoice, a community-based participatory research method, to collect qualitative data for a period of five months. Bulwanyi parish, located in a rural area in Wakiso district (central Uganda), was the study site. This parish was purposively selected for the study as it experienced many MH challenges. The researchers had an interest in Wakiso district due to earlier projects they had implemented there, mainly on strengthening the community health system. Agriculture is the main economic activity in the area, with some inhabitants involved in bricklaying and small-scale trade. The parish has no public health facility in the area, with residents primarily using a health centre III in the nearby parish, including for MH services. (In the Ugandan context, a health centre III is a health facility at sub-county level that offers outpatient, inpatient, simple diagnostic, as well as maternal and child health services.) A few private health facilities also exist in the parish, offering services at a cost. In addition, community health workers (CHWs), who are volunteers and the first contact of the community with the health system, are available in the area. These CHWs provide health education, including MH, to the population and refer patients to health facilities. A total of 10 youth (5 males and 5 females) ages 19–29 were involved in the study. The youth were selected by local leaders, ensuring diversity in terms of age, occupation, village and

Table 1. Participant demographics

| Participant code | Village | Sex | Age | Highest education level attained | Occupation | Marital status |
|------------------|------------|-----|-----|----------------------------------|---------------|---------------------|
| 1. | Lukose | F | 20 | S.2 ^a | Hairdresser | Single, 1 child |
| 2. | Lukose | M | 25 | S.4 | Farmer | Single, no child |
| 3. | Bulwanyani | F | 23 | S.4 | Teacher | Single, 1 child |
| 4. | Bulwanyani | M | 24 | S.6 | Student | Single, no child |
| 5. | Kaama II | M | 26 | S.6 | Business | Married, 1 child |
| 6. | Kaama II | F | 25 | S.4 | Farmer | Married, 4 children |
| 7. | Kaama I | F | 24 | S.3 | Farmer | Married, 4 children |
| 8. | Kaama I | M | 19 | S.4 | Mechanic | Single, no child |
| 9. | Bumpenje | M | 29 | S.2 | Self-employed | Married, 4 children |
| 10 | Bumpenje | F | 20 | S.4 | Hairdresser | Single, no child |

^aS – Secondary.

marital status (Table 1) as per guidelines provided by the researchers. Among the participants, two were CHWs who were purposively selected to have their perspectives in the study. Two mobilisers in the study area supported the local leaders in the process of selecting participants, particularly regarding diversity.

Data collection

A one-day training workshop was held to orient and prepare the participants for the research. This training, held at a local school in the study area, had several sessions facilitated by the researchers. The sessions included: introduction to the research including key MH concerns such as antenatal care (ANC), delivery at health facilities, and postpartum care; use and taking care of cameras; and ethics in research involving photography. After the training, participants were provided with digital cameras and assigned to take photos for the five months of the study on situations within their settings particularly related to how youth can contribute to improving MH in their communities. Every participant was also provided with a notebook to be used to record any scenarios concerning the study topic that may not have been captured on camera. An example of such a scenario was when a community

member did not provide consent for their photo to be taken. The research team made a visit to the participants two weeks into the photography assignment to ensure the activity was progressing as planned. The participants received a modest transport refund whenever they met for purposes of the study, for example during the training workshop and monthly meetings. By the end of the fifth month, no photographs with new themes were emerging, a sign of having reached data saturation. On completion of the study, the cameras were returned to the researchers as had been stipulated in the agreement signed during the training workshop. More details on the data collection process can be found in our earlier publication.²⁰

Data analysis

Monthly meetings were held during the course of the study to present and discuss photos taken by the participants. With the help of a laptop and projector, each participant presented all photos they had taken during the month and talked about how each one of them related to potential youth contributions to improving MH. After a participant had presented a photo they had taken, others were given an opportunity to talk about it in relation to the focus of the study. Participants that had recorded any information in their

notebooks talked about it after they had presented all their photos. In addition to the participants, the meetings were attended by two members of the research team, one of whom chaired the meetings, while the other facilitated in taking notes. All discussions during the meetings, which were conducted in the local language (*Luganda*), were audio recorded and later transcribed verbatim. The two researchers, who are experienced in qualitative research, reviewed the transcripts to ensure that they were a true reflection of what had transpired during the meetings. The transcripts were then translated to English and crosschecked by both researchers for consistency. Preliminary data analysis was done after every monthly meeting which informed the final analysis carried out at the end of the study. Thematic content analysis, which involved generation of codes and later themes, was employed with the support of Atlas ti (version 6.0.15) as described in detail in our earlier publication.²⁰ The transcripts were reviewed several times by the two researchers, from which related words or groups of words were used to generate codes. Related codes were grouped together and used to generate themes that are presented as results in this paper. The key issues raised by the participants during the monthly discussions as being pertinent to them also informed the analysis.

Ethical considerations

Makerere University School of Public Health Higher Degrees, Research and Ethics Committee approved the study. In addition, the study was registered at the Uganda National Council for Science and Technology. All participants provided written informed consent before participation in the study. The participants were advised to seek consent from community members before taking their photos. Consent was obtained from all individuals appearing in any photos before they were used for dissemination including in this (and other) publications.

Results

A total of 903 photos relevant to the study were taken over five months, from which two other articles have been published.^{12,20} From the data analysis related to this paper, four themes emerged regarding how youth can contribute to improving MH in their communities. These themes were: community health education;

advocacy for health improvement; community voluntary work; and being exemplary. The fifth and final theme presented in the results provides the avenues suggested by the youth that they could use for conveying messages to the community concerning maternal and general health.

Community health education

The study established that youth can be involved in educating the community on various MH issues. Issues discussed included: the importance of attending ANC such as being provided a package with necessities for delivery including surgical gloves, razor blade, and cotton wool (mama kits) and mosquito nets; delivery at health facilities; men supporting their spouses while pregnant; proper nutrition during pregnancy, particularly having a balanced diet (*Photo 1*); and family planning. It also emerged that youth can be involved in sensitising the community on the importance of women having income generating activities to support their MH needs. This concern emerged particularly due to some men not adequately supporting their spouses while pregnant.

“These women said they got pregnant without wanting because they had earlier abandoned the family planning methods they were using. As



Photo 1. A pregnant woman holds cassava while from the garden. The youth emphasised the need to educate the population on the importance of pregnant women having a diet made up of various food nutrients including carbohydrates such as from cassava.

youth, we can advise such women on other available family planning options as well as tell them to go to the nearby health centre for advice. At the health facilities, the women will be able to get further information on contraceptives, as well as access related services when needed.” (Participant 1, female)

“As you may know, the government provides these mama kits to hospitals to help mothers during child delivery since many times mothers fail to buy essential materials required. These mama kits contain a plastic sheeting, razor blades, cotton wool, soap, gloves and other supplies all provided free of charge. As a youth, I would encourage those going to give birth to go to government health centres because they have such services that will be helpful for them during that critical time.” (Participant 6, female)

Advocacy for health improvement

It emerged from the study that youth can play a key role in advocacy to improve MH services in their communities. Indeed, the youth said they could be involved in reaching out to various stakeholders to raise concerns affecting MH to facilitate taking appropriate action. The youth added that such advocacy could be done individually or in a group aimed at addressing the major challenges faced in their communities. Issues that could be targeted for advocacy included taking MH services closer to the community (Photo 2), as well as improving transportation, particularly to easily reach health facilities when in need. The authorities that the youth identified as being key in addressing MH concerns in the community were health practitioners, the district health office, and political leaders such as local council I, II and III chairpersons.

“I met this woman at the health centre and she told me she would want a health facility to be nearer to her village as she had walked a long distance to seek health services. As youth, we can mobilise ourselves and speak to concerned people such as political leaders about these challenges faced by expectant mothers to advocate for improvement in the situation.” (Participant 2, male)

“This lady told me she was waiting for the health worker to come to the outreach site, and she had waited for a very long time. I therefore decided to call the health worker concerned and she told me that she didn’t have transport to travel to the site.



Photo 2. A pregnant woman at a health facility after travelling a long distance from her home to reach there. The youth said they could be involved in advocating for taking services nearer to the communities for example through establishing more health centres.

Thereafter, I called the in charge of the health facility who then provided transport that brought the health worker to offer health services in the community.” (Participant 9, male)

Community voluntary work

It was established that youth can be involved in carrying out voluntary work to improve maternal (and general) health in their communities. The youth emphasised that being energetic and usually available in their villages were advantages for them to be engaged in activities that would benefit the health of their communities. Examples of activities the youth mentioned they could participate in included: construction of energy stoves and drying racks (Photo 3) for those most at need, such as pregnant women; clearing unnecessary bushes in the community and removal of mosquito breeding sites to prevent malaria, which is a key health concern during pregnancy; and unblocking drainage channels at public water sources particularly springs to prevent stagnation of water which could affect the quality of water used by the community.

“This is a firewood saving stove. As a youth and with colleagues, we can make some of these stoves so



Photo 3. A youth demonstrates to women how to make a drying rack that can be used at households for placing utensils as part of voluntary work in the community.

others may learn from us to be able to make some on their own for their families. Such a firewood saving stove is very good for a pregnant woman as she may not always have the energy to look for a lot of firewood for use in preparing food at her home.” (Participant 2, male)

“This environment shows where people are living. The environment is bushy which can facilitate presence of mosquitoes which transmit malaria. We as youth can participate in voluntary clean up exercises in the community for example removing such bushes and also getting rid of any mosquito breeding sites that could result in malaria among pregnant women and children.” (Participant 5, male)

Being exemplary

The youth noted that being exemplary in their communities was another way in which they could promote MH. It emerged from the study that since youth had their own MH needs, they could be seen as role models by fellow youth and other members of the community if they were involved in practices that promote good health. The youth highlighted that they could be involved in practices such as: going for ANC and delivering at health facilities when they were pregnant; male youth accompanying their spouses during ANC visits; donating blood (Photo 4); and male youth supporting their spouses during

pregnancy particularly with domestic chores such as fetching water, washing clothes, and carrying food from the garden.

“This photo (Photo 4) shows me donating blood. Pregnant women sometimes lose a lot of blood when giving birth so they may require blood transfusion just like any other person. Blood helps in times of emergency that any of us and pregnant women should have access to. I encourage all youth to give blood for this good cause because any of them could need it at a given time.” (Participant 2, male)

“We as husbands in our youthful age need to appreciate the importance of accompanying our wives to health facilities for antenatal visits. Through this practice, other members of the community can learn that a couple can be educated together, and that they can both contribute to the wellbeing of their unborn baby. We need to be seen doing this as a means of educating fellow youth and others about the role they can play to promote maternal health.” (Participant 4, male)

Avenues for health communication

During the study, the youth identified ways in which they could convey health information to the community and health authorities. Use of drama (Photo 5) was identified as being a good method for youth during community sensitisation on health issues. It was noted that drama attracted large numbers of people due to the



Photo 4. A youth donating blood during a community blood donation campaign.



Photo 5. A drama group performing in the community. The youth identified drama as an avenue they could use to carry out education on maternal and other health issues affecting their communities.

entertainment it provides in addition to health education, hence an ideal avenue for health promotion. Community gatherings such as village meetings and those for savings groups were also identified as potential ones for use by youth to pass on health messages. The youth noted that sports such as football could be used as a means of reaching out to the community, especially to peers, on issues concerning health. Holding meetings with authorities was also highlighted as a means of youth conveying health concerns affecting the population. In the event that physical meetings were not possible, the youth said they could instead convey their messages through writing letters to certain health authorities.

“This is a drama group (Photo 5) that had come to perform for the community. Their plays are well attended and very interesting, and usually derived from the poor community practices hence aimed at educating community members to change their behaviours. We learnt a lot from this play, and if we as youth can also organise ourselves, we can ably use drama to sensitise our communities to change their behaviours.” (Participant 3, female)

“This is what I termed as ‘sports for information.’ As youth, we can use sports as an avenue to share information with our communities. We could organise a cycling competition which we could name ‘Race against abortion campaign,’ and other sports events like football or athletics which do not require a lot of*

money can be good too for creating awareness on health issues.” (Participant 5, male)

Discussion

This study used photovoice to explore the potential role of youth in contributing to MH in rural communities in Wakiso district, Uganda. From the study, youth indicated that they can contribute to MH through four ways: community health education, advocacy for health improvement, community voluntary work, and being exemplary. These findings indicate that youth can play an important role in improving MH, particularly in rural areas that have minimal access to health care. Indeed, if community initiatives aimed at improving MH by various stakeholders including the Ministry of Health and partners involved youth, better health indicators and outcomes could be realised. These indicators and outcomes include improved health-seeking behaviour such as ANC and delivery at health facilities, as well as a reduction in maternal mortality.

From our study, youth can contribute to MH through health education on various aspects mainly to increase utilisation of services offered at health facilities such as ANC and family planning. In addition, they can contribute to women empowerment initiatives such as encouraging establishment of various sources of income. Previous studies have demonstrated the potential of youth in health education such as promotion of healthy behaviours among their peers to prevent obesity,²⁸ and increased utilisation of adolescent- and youth-friendly health amenities⁹ and other sexual and reproductive health services such as safe male circumcision and safe sexual practices.^{19,22} The wide spectrum of health education activities among communities that can involve youth shows that they can be targeted for several initiatives beyond MH. However, increasing their knowledge – for example, through regular training – would enhance young people’s capacity for engagement in health education and promotion in their communities.

One of the key benefits of youth involvement in community change is their role in holding decision makers accountable through youth advocacy.^{17,29} Indeed, youth in our study mentioned

*To increase awareness on the dangers and effects of unsafe abortion.

that they can contribute to MH through advocacy for health improvement within their communities. By being a mouthpiece of the community, the youth felt that they could bring MH issues that affected their communities, such as inadequacies in access and delivery of services, to the attention of authorities, for example through holding meetings with them or writing letters to demand improvements. When youth are involved in community decision-making with a sense of responsibility and leadership, and their input is taken into account, they are more likely to feel accomplished,^{30,31} and their self-esteem³² and credibility in their society are uplifted while improving public services.³³ Given the energy and zeal among many youth, they are likely to engage actively in this advocacy role to contribute to the Sustainable Development Goals (SDGs) including those on health.³⁴ Therefore, advocacy for health improvement by youth is likely to lead to change in communities hence better health outcomes.

Through our photovoice study, youth noted several situations that affect MH where they felt they could voluntarily offer a helping hand. Indeed, the youth were keen on supporting pregnant women to construct energy saving stoves, clear mosquito breeding sites around their homes or carry out improvement works at public water sources. Evidence suggests that youth volunteering can also have lifelong-term benefits including adult volunteering.³⁵ The altruism that the youth were willing to exercise is a key step in community engagement and empowerment to confront collective challenges and devise sustainable solutions from within the community.³⁶ However, it should be noted that any contribution of youth to improving community health, particularly in such a voluntary role, cannot be taken as a mainstay intervention. Indeed, support offered by youth in their communities should complement or be embedded with existing national and local initiatives by the Ministry of Health and other government ministries and stakeholders for improving MH in rural communities. For example, more youth could be considered to become CHWs, using an existing structure within the health system.

Youth also mentioned that by being exemplary such as by escorting their spouses for ANC at health facilities, or supporting their pregnant spouses with domestic chores, they can contribute to MH. The sense of togetherness created when

youth engage in social issues encourages them to care about their community and monitor their individual actions, and avoid negative behaviours not only concerning MH but also other health concerns such as alcohol and drug use.^{32,37} Indeed, youth in our study acknowledged that there was a need for role models within the community. Having fellow youth as people others can look up to can lead to emulation of their practices that promote MH in the community. Role modelling is an impactful health promotion approach, usually encouraging uptake of positive health behaviours among youth^{38,39} and improving practices among other members of the community.

Youth in our study indicated that they can utilise several avenues to educate the community including drama, village meetings, savings groups and sports. The importance of these avenues in MH education and promotion have been acknowledged in previous studies^{40–42} and create great possibilities for youth engagement in communities. Use of drama for health promotion has been found to have the advantage of being entertaining as well as conveying health messages⁴³ and could be explored further in community health initiatives. In addition to drama, it is important for youth to utilise other existing avenues that bring many people together to communicate health messages. It was therefore pleasing for the youth involved in our study to highlight village meetings and saving groups as potential avenues for health education. Although such gatherings may not be primarily organised for health activities, their use by youth to health educate those in attendance can contribute to increased awareness in the community. The use of sports in health promotion has not been fully explored in low- and middle-income countries⁴⁴ including Uganda. However, there is increasing evidence on the use of sports as a strategy for health promotion⁴⁵ which can be embraced by public health officials in Uganda and beyond.

By using photovoice to explore the potential role of youth in contributing to MH, this study provides insights into their perspectives which, if harnessed, can contribute to improved MH outcomes. Through participation in the study, the youth were able to increase their awareness of challenges affecting MH¹² as well as improve their self-confidence, communication and leadership abilities and dialogue with policy makers.²⁰ In

our study, the equal involvement of both male and female youth ensured that both their perspectives were captured and is a strength of the study. However, we did not explore how gender influenced perceptions of potential roles of youth in contributing to MH and this could be investigated in future studies. Research gaps also remain regarding effective models of youth engagement as stakeholders in community health improvement projects.⁴⁶ In addition, the existence of structures to support youth involvement in health promotion at community level needs to be further explored. Given that two participants were CHWs, the photographs they took (as well as the ensuing discussion during meetings) could have been influenced by that role. However, it was ensured during the study that the involvement of the two CHWs did not affect the other participants during photography as well as monthly meetings. For example, during the meetings, all participants were given a chance to make their contributions regarding the photos and other issues being discussed. Our study confirms that photovoice can be used to establish how different categories of people (our case study being youth) can contribute to health of the population and can be explored by other researchers.

Conclusion

Using photovoice, a community-based participatory research methodology, youth highlighted their potential role in contributing to MH including through community health education,

advocacy for health improvement, community voluntary work, and being exemplary. With the need to continuously engage community actors in health improvement initiatives, youth should be considered and supported as important stakeholders so they may engage in activities to improve health within their communities.

Acknowledgements

We wish to appreciate the youth participants for their involvement and contribution to the research. We also thank the local leaders of the communities for the support offered during the course of the study. Our special appreciation goes to the youth mobilisers (Henry Kajubi and Henry Bugembe) who were supportive in linking the researchers to the study community.

Disclosure statement


No potential conflict of interest was reported by the author(s)

Funding

This work was carried out as part of the research for the Future Health Systems Research Consortium, which is funded by the UK Department for International Development (DFID).

ORCID

David Musoke  <http://orcid.org/0000-0003-3262-39181>

Elizabeth Ekirapa-Kiracho  <http://orcid.org/0000-0001-6938-2068>

References

1. WHO. Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank group and the United Nations population division. Geneva: WHO; 2019.
2. WHO. WHO country cooperation strategy at a glance: Uganda. Kampala: WHO; 2018.
3. Howard-Grabman L, Miltenburg AS, Marston C, et al. Factors affecting effective community participation in maternal and newborn health programme planning, implementation and quality of care interventions. *BMC Pregnancy Childbirth*. 2017;17(1):268.
4. Serbanescu F, Clark TA, Goodwin MM, et al. Impact of the saving mothers, giving life approach on decreasing maternal and perinatal deaths in Uganda and Zambia. *Glob Health Sci Prac*. 2019;7(Suppl 1):S27–S47.
5. Ekirapa-Kiracho E, Namazzi G, Tetui M, et al. Unlocking community capabilities for improving maternal and newborn health: participatory action research to improve birth preparedness, health facility access, and newborn care in rural Uganda. *BMC Health Serv Res*. 2016;16(S7):638.
6. Uganda Bureau of Statistics (UBOS) and ICF International Inc. Uganda demographic and health survey 2016: key indicators report. Kampala: UBOS and ICF; 2017.
7. UNICEF. UNICEF Uganda annual report 2018. Kampala: UNICEF Uganda; 2019.
8. Uganda Bureau of Statistics (UBOS) and ICF International Inc. Uganda demographic and health survey 2011. Kampala: UBOS and ICF; 2012.

9. UNFPA. Uganda's youthful population facts; 2018. [cited 2020 Mar 10]. Available from: https://uganda.unfpa.org/.../YoungPeople_FactSheet%20%2811%29_0.pdf
10. Edwards G. From policy to practice: the challenges facing Uganda in reducing maternal mortality. *Int J Health Gov.* 2018;23:226–232.
11. Atuhaire R, Kaberuka W. Factors contributing to maternal mortality in Uganda. *Afr J Econ Rev.* 2016;4(2):43–57.
12. Musoke D, Ekirapa-Kiracho E, Ndejjo R, et al. Using photovoice to examine community level barriers affecting maternal health in rural Wakiso district, Uganda. *Reprod Health Matters.* 2015;23(45):136–147.
13. Khan KS, Wojdyla D, Say L, et al. WHO analysis of causes of maternal death: a systematic review. *Lancet.* 2006;367(9516):1066–1074.
14. Kandole D. Access to sexual and reproductive health services by teenage mothers at Naguru teenage information and health centre. Kampala: Makerere University; 2018.
15. Esau D, Ho PT, Blair GK, et al. Engaging youth in rural Uganda in articulating health priorities through photovoice. *Glob Health Promot.* 2017;24(3):59–67.
16. Teixeira S. Beyond broken windows: youth perspectives on housing abandonment and its impact on individual and community well-being. *Child Ind Res.* 2016;9:581–607.
17. Checkoway BN, Gutierrez LM. Youth participation and community change: an introduction. *J Community Pract.* 2006;14(1-2):1–9.
18. Mayora C, Ekirapa-Kiracho E, Bishai D, et al. Incremental cost of increasing access to maternal health care services: perspectives from a demand and supply side intervention in Eastern Uganda. *Cost Eff Resour Alloc.* 2014;12:14.
19. Morton MH, Montgomery P. Youth empowerment programs for improving adolescents' self-efficacy and self-esteem: a systematic review. *Res Soc Work Pract.* 2013;23(1):22–33.
20. Musoke D, Ndejjo R, Ekirapa-Kiracho E, et al. Supporting youth and community capacity through photovoice: reflections on participatory research on maternal health in Wakiso district, Uganda. *Glob Pub Health.* 2016;11(5–6):683–698.
21. Brickle MB, Evans-Agnew R. Photovoice and youth empowerment in environmental justice research: a pilot study examining woodsmoke pollution in a Pacific Northwest community. *J Community Health Nurs.* 2017;34(2):89–101.
22. Vu L, Burnett-Zieman B, Banura C, et al. Increasing uptake of HIV, sexually transmitted infection, and family planning services, and reducing HIV-related risk behaviors among youth living with HIV in Uganda. *J Adolesc Health.* 2017;60(2S2):S22–S28.
23. Catalani C, Minkler M. Photovoice: a review of the literature in health and public health. *Health Educ Behav.* 2010;37(3):424–451.
24. Teti M, Koegler E, Conserve DF, et al. A scoping review of photovoice research among people with HIV. *J Assoc Nurses AIDS Care.* 2018;29(4):504–527.
25. Findholt NE, Michael YL, Davis MM. Photovoice engages rural youth in childhood obesity prevention. *Public Health Nurs.* 2011;28(2):186–192.
26. Wang CC. Youth participation in photovoice as a strategy for community change. *J Community Pract.* 2006;14(1–2):147–161.
27. Moletsane R, de Lange N, Mitchell C, et al. Photo-voice as a tool for analysis and activism in response to HIV and AIDS stigmatisation in a rural KwaZulu-Natal school. *J Child Adolesc Ment Health.* 2007;19(1):19–28.
28. Llauradó E, Aceves-Martins M, Tarro L, et al. A youth-led social marketing intervention to encourage healthy lifestyles, the EYTO (European youth tackling obesity) project: a cluster randomised controlled trial in Catalonia, Spain. *BMC Public Health.* 2015;15(1):607.
29. London JK, Zimmerman K, Erbstein N. Youth-led research and evaluation: tools for youth, organizational, and community development. *New Dir Eval.* 2003;98:33–45.
30. Camino L, Zeldin S. From periphery to center: pathways for youth civic engagement in the day-to-day life of communities. *Appl Dev Sci.* 2002;6(4):213–220.
31. Stoneman D. The role of youth programming in the development of civic engagement. *Appl Dev Sci.* 2002;6(4):221–226.
32. Fogel SJ. Risks and opportunities for success: perceptions of urban youths in a distressed community and lessons for adults. *Fam Soc J Contemp Soc Serv.* 2004;85(3):335–344.
33. Ott MA, Rosenberger JG, McBride KR, et al. How do adolescents view health? Implications for state health policy. *J Adolesc Health.* 2011;48(4):398–403.
34. Kaur S, Sharma A. Cognisance among youth for sustainable development goals. *Asian Man (The).* 2019;13(1):51–59.
35. Kim J, Morgül K. Long-term consequences of youth volunteering: voluntary versus involuntary service. *Soc Sci Res.* 2017;67:160–175.
36. Arnold ME, Dolenc B, Wells EE. Youth community engagement: a recipe for success. *J Community Engagem Scholarsh.* 2008;1(1):56–65.
37. Greenwald HP, Pearson D, Beery WL, et al. Youth development, community engagement, and reducing risk behavior. *J Prim Prev.* 2006;27(1):3–25.
38. Babey S, Wolstein J, Diamant A. Role models and social supports related to adolescent physical activity and overweight/obesity. *Policy Brief UCLA Cent Health Policy Res.* 2015;(PB2015-3):1–8.

39. Rissel C, McLellan L, Bauman A. Factors associated with delayed tobacco uptake among Vietnamese/Asian and Arabic youth in Sydney, NSW. *Aust N Z J Public Health.* 2000;24(1):22–28.
40. Mutebi A, Muhumuza Kananura R, Ekirapa-Kiracho E, et al. Characteristics of community savings groups in rural Eastern Uganda: opportunities for improving access to maternal health services. *Glob Health Action.* 2017;10(sup4):1347363.
41. Mbachaga DJ. Using drama to promote sustainable health among rural folk in Benue State: Ikyaan and Amua workshops. *Ekpoma J Theatre Media Arts.* 2017;6(1–2):262–289.
42. Solnes Miltenburg A, van Pelt S, de Bruin W, et al. Mobilizing community action to improve maternal health in a rural district in Tanzania: lessons learned from two years of community group activities. *Glob Health Action.* 2019;12(1):1621590.
43. Lim R, Tripura R, Peto TJ, et al. Drama as a community engagement strategy for malaria in rural Cambodia. *Wellcome Open Res.* 2017;2:95.
44. Schulenkorf N, Schlenker K. Leveraging sport events to maximize community benefits in low- and middle-income countries. *Event Management.* 2017;21(2):217–231.
45. Geidne S, Kokko S, Lane A, et al. Health promotion interventions in sports clubs: can we talk about a setting-based approach? A systematic mapping review. *Health Educ Behav.* 2019;46(4):592–601.
46. Aceves-Martins M, Aleman-Diaz AY, Giralt M, et al. Involving young people in health promotion, research and policy-making: practical recommendations. *Int J Qual Health Care.* 2019;31(2):147–153.

Résumé

Même si les jeunes représentent une large part de la population ougandaise, leur participation à l'amélioration de la santé maternelle dans leur communauté a été minime. Cet article examine la contribution potentielle de la jeunesse à la santé maternelle dans les communautés rurales du district de Wasiko, Ouganda, à l'aide de Photo-voice. La méthode Photovoice a été utilisée pour une recherche participative à assise communautaire portant sur dix jeunes (cinq garçons et cinq filles) sur une période de cinq mois. Les photographies prises par les jeunes faisaient l'objet d'une discussion lors de réunions mensuelles et les données produites étaient étudiées par analyse thématique de leur contenu. Quatre thèmes sont apparus concernant la manière dont les jeunes peuvent contribuer à améliorer la santé maternelle dans leur communauté. Ces thèmes étaient les suivants: éducation sanitaire communautaire; plaidoyer pour l'amélioration de la santé; travail bénévole communautaire; et exemplarité. Le cinquième et dernier thème donne les moyens, notamment le théâtre et les sports, que les jeunes ont suggéré d'utiliser pour transmettre à la communauté les messages sur la santé maternelle et générale. L'éducation sanitaire a été soulignée sur des sujets aussi importants que la prestation des services dans les centres de santé. Concernant le plaidoyer, les jeunes ont affirmé qu'ils pourraient prendre contact avec plusieurs parties prenantes afin de sensibiliser aux problèmes relatifs à la santé maternelle. Le bénévolat, comme la construction de foyers améliorés pour les femmes

Resumen

A pesar de que la juventud constituye gran parte de la población de Uganda, su participación en mejorar la salud materna en sus comunidades ha sido mínima. Este artículo examina el papel que podría desempeñar la juventud para contribuir a la salud materna en comunidades rurales del distrito de Wakiso, en Uganda, utilizando Fotovoz. Fotovoz fue utilizada como método de investigación participativa comunitaria con 10 jóvenes (5 hombres y 5 mujeres) durante un período de 5 meses. Las fotos tomadas por esas personas jóvenes fueron discutidas en reuniones mensuales y los datos emergentes fueron analizados utilizando análisis de contenido temático. Surgieron cuatro temas sobre cómo la juventud puede contribuir a mejorar la salud materna en sus comunidades: educación sobre salud comunitaria, promoción y defensa del mejoramiento de la salud, trabajo voluntario comunitario y ser ejemplar. El quinto y último tema ofrece las avenidas, tales como teatro y deportes, que las personas jóvenes sugirieron que podrían utilizar para transmitir mensajes a la comunidad sobre la salud materna y la salud en general. Se hizo hincapié en la educación sanitaria sobre temas como la importancia de dar a luz en un establecimiento de salud. Con respecto a la promoción y defensa, las personas jóvenes dijeron que pueden participar en comunicarse con diversas partes interesadas para plantear preocupaciones que afectan la salud materna. Mencionaron trabajo voluntario, como la construcción de estufas eficientes para mujeres embarazadas. Además, señalaron que

enceintes, a été cité. Les jeunes ont aussi souligné qu'ils pourraient servir de modèles, par exemple avec des hommes qui accompagnent leur épouse pendant les visites prénatales. Puisqu'il est nécessaire de compter en permanence sur les acteurs communautaires dans les initiatives de santé, les jeunes devraient être pris en compte et soutenus à titre d'acteurs de premier plan afin qu'ils participent aux activités d'amélioration de la santé dans leur communauté.

podrían ser ejemplares: por ejemplo, cuando el hombre acompaña a su esposa durante sus consultas de atención prenatal. Con la necesidad de incluir continuamente a actores comunitarios en iniciativas sanitarias, se debe considerar y apoyar a las personas jóvenes como importantes partes interesadas, de manera que puedan participar en actividades para mejorar la salud en sus comunidades.