Peer supervision experiences of drug sellers in a rural district in East-Central Uganda: a qualitative study

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Abstract

Background

Support supervision improves performance outcomes among health workers. However, the national professional guidelines for new licenses and renewal for class C drug shops in Uganda prescribe self-supervision of licensed private drug sellers.As such, inappropriate treatment of malaria, pneumonia and diarrhoea among children under five years of age continues unabated. This study assessed experiences of drug sellers and peer supervisors at the end of a peer supervision intervention in Luuka district in East Central Uganda.

Methods

Eightin-depth interviews (IDIs) were held with peer supervisors while five focus group discussions (FGDs) were conducted among registered drug sellersat the end of the peer supervision intervention. The study assessed experiences and challenges of peer supervisors and drug sellers regarding peer supervision.Transcripts were imported into Atlas ti 7 qualitative data management software (ATLAS.ti GmbH, Berlin) where they were analysedusing thematic content analysis.

Results

Initially, peer supervisors were disliked and regarded as another extension of drug inspectors by drug sellers. However, with time a good relationship was established between drug sellers and peer supervisors leading to regular, predictable and supportive peer supervision. This increased confidence of drug sellers in using respiratory timers and rapid diagnostic tests in diagnosing pneumonia symptoms and uncomplicated malaria respectively among children under five years. There was also an improvement in completing the sick child register which was used for self-assessment by drug sellers. The drug shop association was mentioned as a place where peer supervision should be anchored since it was a one-stop center for sharing experiences and continuous professional development. Drug sellers proposed including community health workers in monthly drug shop association meetings so that they mayalso gain from the associated benefits. Untimely completion of the sick child registers by drug sellers and inadequate financial resources were the main peer supervision challenges mentioned.

Conclusion

Drug sellers benefitted from peer supervision by developing a good relationship with peer supervisors.This relationship guaranteed reliable and predictable supervision ultimately leading to improved treatment practices.There is need to explore the minimum resources needed for peer supervision of drug sellers to further inform practice and policy.

Introduction

Supervision of private drug sellers is important in assuring quality of treatment since they play an importantservice delivery role in low income countries such as Uganda [1, 2]. This role encompasses the treatment of children less than five years with uncomplicated malaria,pneumonia symptoms and non-bloody diarrhoea through strategies such as the integrated community case management(iCCM) of childhood illnesses [3, 4].However, regulatory supervision among private drug sellers is weak since self-supervision is prescribed by policy guidelines necessitating significant investment[5, 6]. The investment would go a long way in curtailing childhood morbidities and mortalities due to malaria, pneumonia and diarrhoea which are still rampant in low and middle income countries[7–9].Such investments would include but not be limited to use of peer supervison.

Peer-supervision is a type of supervision where people of similar hierarchical status or who perceive themselves as equal encourage and enhance learning and development [10].Peer supervision has been shown to enhance community health worker motivation,performance and quality of care when combined with supportive supervision[11, 12].However, much of this evidence has been generated from public health settings with less data coming from private and infomal health providers who play a significant role in health provision in low and middle income countries[13]. Research shows that in some contexts, about 59% of children in rural settings seek the first form of care from private health providers comprised mainly of drug shops[14, 15]. In these rural settings, access to timely and quality public health care remains a challenge[16]. As such, most deaths due to malaria,pneumonia and diarrhoea in Sub-Saharan Africa where children make up 70–90% of the population occur in rural settings [17, 18].

In Uganda,drug shops are licensed according to the national professional guidelines for licensing and renewal for class C drug shops by the National Drug Authority (NDA)[19]. Licensing of drug shops is done after potential drug sellers fulfill conditions related to location of the drug shop and qualifications of the person intending to operate the drug shop. Qualified personnel to operate drug shops include: enrolled nurses, comprehensive nurses, nurses and pharmacy technicians. The qualified personnel are expected to engage in self-supervision after they have been licensed. Self-supervision is largely informal, unsystematic and unprofessional because it is difficult to tell at which stage the supervisee may need help. Moreover, the hallmark of self-supervision is a lack of consulting any person which impedes learning-the heart of supervision[20]. This exposes a dynamic sector such as that of drug sellers whose main aim is to maximise profit to errant behavior. On the other hand, peer supervision is premised on consulting and helps new comers settle within a new environment ultimately executing their duties in an appropriate way in the shortest time possible [21, 22].

Through repeated networking with fellow supervisees, peer supervision is seen as one of the best ways of accessing the wisdom of others in a cooperative and mutual way providing an opportunity to refine professional skills through immediate feedback [23].Therefore, to strengthen supervision among drug sellers, it was envisaged that since peer supervision had been effective in other settings such as mental health care delivery [24], there was a likelihood that similar results would be achieved among drug sellers in rural settings in Uganda. The piloting of peer supervision among rural private drug sellers in Luuka district was premised on the fact that that despite being licensed, receiving iCCM training and being

inspected by district drug inspectors (DDIs), inappropriate treatment of children under five years continues unabated [25]. In addition, there was hardly any existing literature on peer supervision among drug sellers in Uganda. The study therefore assessed experiences of peer supervison among drug sellers and peer supervisors in the private sector at the end of a peer supervision intervention in Luuka district in East Central Uganda.

Methods

Study area and setting

The study was conducted in Luuka district which is one of the 10 districts making up the Busoga sub-region in East Central Uganda.The east central region where Luuka district is located has an under five mortality ranging between 73 to 90 per 1000 live births[26]. The district is made up of 7 sub-counties(Ikumbya,Bukooma,Bulongo,Irongo,Nawampiti,Waibuga and Bukanga) and 1 town council(Luuka town council) as shown in Figure 1.

Presently, the districthas no hospital, has 1 Health Centre(HC) IV, 6 HC IIIs and 16 HC IIs. Only 61 out of the 340 villages (18%) have community health workers (CHWs) locally known as village health teams (VHTs). Up to 49% of the total population do not live within the recommended 5 km of a health facility[26]. However, all villages have drug shops where preliminary self-treatment can be sought before ahealth worker is seen. In Luuka district,drug shops are under a drug shop association which has a committee headed by a chairman. Drug sellers meet every month under the auspices of the drug shop association to deliberate on matters concerning licences and working conditions affecting their daily operations.

The Intervention

Lived experienceson peer supervision were captured from peer supervisors and drug sellers after the peer supervision model was tested for effectiveness on appropriate treatment among drug sellers in Luuka district. In Luuka district, the peer supervisors were chosen by registered drug sellersthrough a democratic process by show of handsusing a criteria based on age, experience and academic qualifications.Among the registered drug sellers in every sub-county,a peer supervisor was chosen. In total, eight peer supervisors were selected and instructed to report to the District Drug Inspector (DDI)who derives the inspection mandate from the District Health Officer (DHO). The DDI continued the traditional inspection role as per statutory mandate during the course of the intervention.

The peer supervisors underwent a three day training where emphasis on adhering to standard treatment guidelines was stressed[27]. Other topics handled during the training sessions included: adhering to ethical standards of supervision; reporting drug sellers who do not adhere to treatment guidelines to the DDI or DHO;and mediating disputes such as those that may arise between drug sellers, peer supervisors and district or central government inspectors. Peer supervisors were given an allowance of 80,000

Uganda shillings equivalent to twenty two united states dollars ($ 22) at the end of each month for a period of one year to cater for lunch, transport and other incidentals during the intervention period. The assumption was that each peer supervisor would visit all drug sellers within their designated sub-county once every month, and that supervision visits would not exceed one day.

Peer supervisors were equiped with supervision checklistswhose purpose was to make monthly summaries of appropriate treatment of children under five years from drug shop sick child registers.Peer supervisors also checked whether sick child registers were being filled by drug sellers. This way, they were able to assess whether drug sellers were adhering to the standard treatment guidelines. The peer supervisors were instructed to adhere to the highest form of privacy, professionalism, integrity, continuous learning and empathy. In the peer supervision model, we worked with an active district drug shop association where many drug sellers met every month particularly to attend continuous medical education-related seminars.The peer supervision model therefore strengthened self-supervision that is currently prescribed by policy guidelines.

Study design,participants and sampling procedures

We conducted a qualitative study based on in-depth interviews(IDIs) and focus group discussions(FGDs).Participants were selected based on: 1) being a statutorily licensed drug seller; and 2) being a democratically elected peer supervisor involved in the supervision process. IDIs were conducted with peer supervisors while FGDs were conducted with drug sellers.Each FGD was composed of nine nursing assistants and either a nurse or midwife.This is because the number of nurses and midwives was too small to make a group of 8 to 12people which is desirable for a FGD[28].As such, the five members (nurses and midwives) were placed in each of the five focus groups with nursing assistants which was aimed at creating homogeneity across groups.The IDIs and FGDs were conducted from the sub-county headquarters in the seven sub-counties. Interviews held within the town council were conducted from the town council main hall. All places were devoid of noise.Registered drug sellers and peer supervisors who were involved in the peer supervision exercise were purposively sampled and mobilised through the DDI. The DDI got official communication concerning the interviews from the DHO who was informed in writing by the lead researcher (AB).

Data collection

We developed an interview guide for IDIs and FGDs with the aim of capturing experiencess of peer supervisors and drug sellers on the peer supervision intervention. Included in the interview guides were key questions aimed at understanding how drug sellers felt about being supervised by peers and how peers felt supervising colleagues.The interview guide for IDIs explored how peer supervisors felt supervising fellow drug sellers, what they wanted improved in peer supervision ,how best peer supervision and the drug shop association could be merged and which community members can be added to and benefit from peer supervision. The interview guide for FGDs assessed how drug sellers interacted with

peer supervisors, to what extent the drug shop association amalgamated with peer supervision and what drug sellers wanted added to peer supervision to improve its smooth running.During indepth interviews, at individual level, peer supervisors were probed until the team lead(AB) felt that additional data collected was redundant of data already collected[29].At group level, in both the IDIs and FGDs, saturation was achieved when additional interviews yielded no new information[30]. Saturation occurred with the sixth IDI and fourth FGD. However, two additional IDIs and one additional FGD were done to ensure that all information was captured and no new information was left out.Whereas the interview guide was in English, during interviews, moderators experienced in conducting IDIs and FGDs conversant with English and Lusoga-the most widely spoken language in Luuka district were used as interviewers. Interview questions were asked and recorded in the local dialect(*Lusoga*).Total time taken for each IDI ranged between 45 to 55 minutes, while time taken for each FGD ranged between 50 to 70 minutes. A note taker assisted the moderator in taking notes and digital audio recording conversations.All peer supervisors and registered drug sellers present at the time interviews were held participated.

Data management and analysis

All audio recorded interviews and group discussions were translated from Lusoga to English as they were transcribed verbatim into Microsoft word documents. All transcripts were verified to be a true reflection of what transpired in the IDIs and FGDs before analysis.The translated scripts were then uploaded into Atlas ti.7 qualitative data management software (ATLAS.ti GmbH, Berlin) for analysis. After four IDIs and two FGDs were independently coded by two researchers(AB and MM),a discussion with intention to agree on how to resolve differences as well as improve validity and reliability of developed codes ensued until consensus was reached. The agreed upon codes were then used to code the rest of the transcripts. A similar procedure of agreeing upon sub-categories,categories and themes was followedto address issues of rigour. In both instances,we made sure that we achieved inductive thematic saturation, that is to say,new codes and themes were redundant of codes and themes already constructed. Graneheim and Lundman's framework for capturing both latent and manifest content in transcripts was used for this content thematic analysis approach[31].During analysis, sub-categories were derived from codes. Codes were derived from unifying meaning units abstracted from condensed meaning units.Abstract level categories were then formed out of sub-categories with similar meaning[31]. In the final analysis,a larger narrative of themes from condensed categorieswere developed. To address rigour and trustworthiness of the qualitative data collected, a dissemination meeting was held with participants after the interviews were done to confirm whether it was reflective of what was discussed.

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Discussion

Our study piloted peer supervision in response to the absence of human resources for health involved in supervision of private drug sellers in rural Uganda. Overall, four themes emanated from our study. These are: supervision practices, treatment practices, supervision structure and challenges experienced during peer supervision. The findings of our study show that peer supervision was predictable, improved the confidence of drug sellers in treating children and may be viable if anchored in a recognised supervisory structure. Our findings are therefore expected to not only inform future practice and policy but also other interventions and studies aimed at exploring peer supervision among drug sellers in Uganda and other low- and middle countries.

Results from our study revealed that after pilotingpeer supervision, both drug sellers and peer supervisors felt that peer supervision was reliable, regular and predictable. These results are similar to those from India where peer supervisors were able to reliably assess the quality of a therapy just as experts did[24].However, while an amalgamation of peer supervisors with experts was preferred in India, in our study, peer supervisors preferred an amalgamation with drug inspectorsfor quality assurance purposes. This implies that whereas peer supervision may involve lay providers who can be trained, there is need to have experienced personnel at the helm of the supervision structure to provide the much needed guidance and feedback where necessary.

Results from our study also showed that both peer supervisors and drug sellers talked highly about how peer supervision had improved confidence in diagnosis and treatment skills of drug sellers. Studies inlow income countries aimed at delivering mental health care have reached similar conclusions [32, 33]. In these studies, peers were able to detect, diagnose and treat mental disorders thus reducing the burden of taking care of patients from more experienced health workers and care givers. In our study, peer

supervised drug sellers shouldered the burden of health care that would have otherwise been experienced by public health facilities.This is commendable because public health care in Uganda experiences numerous challenges such as inadequate human resources for healththat would endanger the lives of patients if private health providers were absent [34, 35]. Relatedly, the importance of the drug shop sick child register in improving treatment was emphasized by both drug sellers and peer supervisors. In our study, peer supervisors monitored the kind of treatment given to children under five years of age. This was used as a form of assessment and quality assurance process. Elsewhere, records have been used in health care settings for assessment and quality assurance just like this study [36].

Evidence from our study showed that both drug sellers and peer supervisors used monthly drug shop association meetings to share experiences. These meetings were also used as a form of continuous professional development. Hence, anchoring the peer supervision intervention in a district structure uniting all cadres involved in the sale of drugs can be beneficial if experiences are shared. This finding collaborates with evidence from systematic reviews on training of health workers in evidence based practice[37]. The systematic reviews note that for health workers to deliver services reliably, programmes must incorporate training, supervision and mentorship. The aim of incorporating these three attributes in any programme is to ensure health workers remain abreast with topical solutions to prevailing challenges. Such is the intersection shared with the drug shop association in our study.

In addition, drug sellers said it would be beneficial if Community Health Workers (also referred to as VHTs), who are the first level of government health care, were part of drug shop trainings. This is because both cadres receive parallel training yet treat the same ailments as part of their responsibilities. Moreover, VHTs do not have an association at district level which puts them at a great disadvantage. Thus, if the trainings included VHTs, this would improve health care in the district. Studies have showed that initial trainings given to health workers are good but will not build confidence and competence if not sustained[32]. In our study, the drug shop association is a structure that can be explored to ensure sustainability This is because the drug shop association is managed by elected members from amongst the drug sellers who strive to ensure that the association thrives and helps members to combat any arising challenge. Therefore, the drug shop association is worth exploring for delivery of more sustainable interventions including supporting community health workers in their role of iCCM at village level.

A major concern from the study on experiences of peer supervision was complacency of drug sellers resulting in untimely data completion. Peer supervisors noted that because drug sellers had become used to the supervision process, some were not keen enough to complete drug shop sick child registers immediately after treating children with febrile illnesses. More so, other drug sellers preferred to complete registers on the day peer supervisors made visits to drug shops which many times wasted time of the peer supervisors. Complacency may have arisen as a result of peer supervisors seeking to have a good relationship with drug sellers consequently leading to underperformance. Findings from our study are similar to what human relation experts have noted with supervisors who focus on nurturing bottom- line relationships[38]. Quite often, such supervisors are perceived as low quality leaders by supervisees hence supervisees mayrespond by underperforming. It is therefore advisable that supervisors have a standard

mode of operation stipulating expectations of the supervisor and supervisee as this will minimise nurturing of bottom-line relationships.

Peer supervisors also felt that there was need for improvement in the resources they were given for supervision. They said this because most of the peer supervisors used bicycles to manoeuver difficult terrain which was worse during rainy seasons. Those without bicycles used their monthly allowance to hire motor bikes leaving them with little money to spare. This was a pilot study aimed at understanding whether peer supervision was feasible among rural private drug sellers, and if so, how it can be conducted. It was conducted on a small number of drug sellers with intention to inform quality and efficiency during scale up. Pilot studies are faced with many challenges including estimating with certainty the amount of resources that may be adequate to ensure smooth execution of interventions [39, 40]. Similarly, it was hard to estimate the amount of financial resources to avail peer supervisors for smooth running of peer supervision in our pilot study.

The major strength of our study is that there was two-way sharing of knowledge between drug sellers and peer supervisors. In addition, there were improved treatment practices by drug sellers without any expert supervisors other than fellow drug sellers.Whereas peer supervisors lamented about financial resources availed during the piloting of peer supervision, the design and resources provided were justified. Future studies among drug sellers being supervised by peers with government support are required. However, such studies mayonly be possible when peer supervision is adapted as a formal method of supervision for private drug sellers.

Conclusion

Drug sellers benefitted from peer supervision by developing a good relationship with peer supervisors.This relationship guaranteed reliable and predictable supervision ultimately leading to improved treatment practices. More studies on peer supervision are needed to further explore the minimum resources needed for adequate peer supervision of private drug sellers. There is also need for further research on how completing drug shop sick child registers by drug sellers can be improved.

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the Higher Degrees, Research and Ethics Committee (HDREC) of the School of Public Health, College of Health Sciences, Makerere University Kampala . The study protocol was also approved by the Uganda National Council for Science and Technology (SS4703). All supervisors and drug sellers involved in the study provided written informed consent for themselves. Numbers were alloted to study participants before interviews commenced to ensure anonymity was maintained in order not to disclosethe identity of the people involved in the study.

Consent for publication

Not applicable

Availability of data and materials

Datasets used during the study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors’ contributions

HW, SP, PA, AM and AB conceived and designed the study. AB, LG, HW and MM implemented the study and validated the findings. AB, MM, LG, PA, FEK, DM and DM participated in data analysis. All authors read and approved the final manuscript.

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Authors' information

"Not applicable"

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Figures

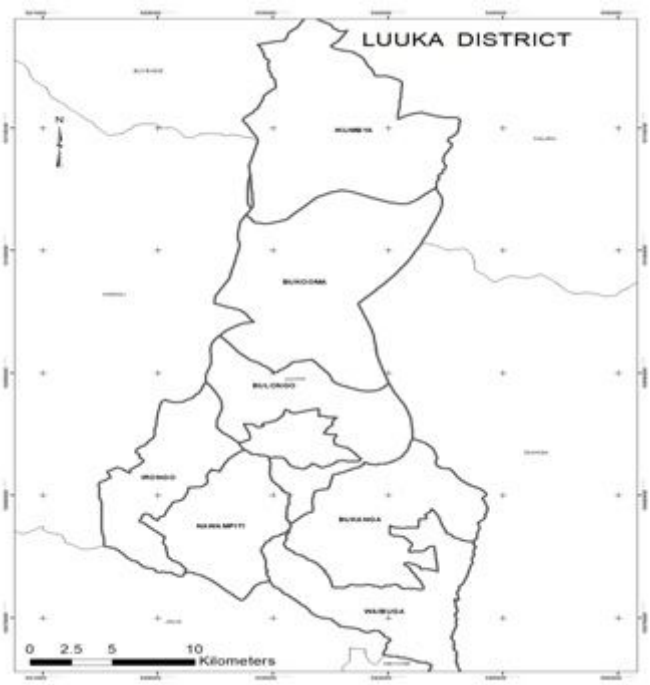

Figure 1

Map of Luuka district showing the study sub-conties