International Journal of Gynecology and Obstetrics 127 (2014) 41–46

Contents lists available at ScienceDirect

International Journal of Gynecology and Obstetrics

journal homepage: www.elsevier.com/locate/ijgo

CLINICAL ARTICLE

Changing the role of the traditional birth attendant in Somaliland

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ARTICLE INFO

Article history:
Received 6 November 2013
Received in revised form 10 April 2014
Accepted 28 May 2014

Keywords:
Birth companion
Health promoter
Skilled birth attendance
Somaliland
Traditional birth attendant
Training role change

ABSTRACT

Objective: To explore the feasibility of changing the role of the traditional birth attendant (TBA) to act as birth companion and promoter of skilled birth attendance. *Methods:* Between 2008 and 2012, 75 TBAs received 3 days of training and were paid US $5 for each patient brought to any of five healthcare facilities in Maroodi Jeex, Somaliland. Health facilities were upgraded (infrastructure, drugs and equipment, staff training, and incentivization). Eight key informant interviews (KIIs) and 10 focus group discussions (FGDs) involving 32 TBAs and 32 mothers were conducted. A framework approach was used for analysis. *Results:* TBAs adopted their new role easily; instead of conducting home births and referring women to a facility only at onset of complications, they accompanied or referred mothers to a nearby facility for delivery, prenatal care, or postnatal care. Both TBAs and mothers accepted this new role, resulting in increased deliveries at health facilities. Facilitating factors included the creation of an enabling environment at the health facility, acceptance of the TBA by health facility staff, and monetary incentivization. *Conclusion:* Changing the role of the TBA to support facility-based delivery is feasible and acceptable. Further research is needed to see whether this is replicable and can be scaled-up.

1. Introduction

Access to a skilled birth attendant (SBA) is critical for improving maternal and newborn health [1]. In low-resources settings and rural areas, professionally trained staff are often in short supply and there is a tendency for women to rely on traditional birth attendants (TBAs) for delivery [2]. Studies have shown that, although a modest reduction in newborn deaths can be achieved when TBAs are trained and supported, a reduction in maternal deaths does not occur [3–5]. Discussion continues around, first, the role of the TBA; second, the best way to include these experienced women, who are respected and trusted by the community in the provision of the continuum of care; and third, if they are to continue to act as community-based providers or promoters of maternity care, how to ensure that they are linked with the existing health system [6].

A TBA is defined as a person who assists a mother during childbirth and has acquired her skills by delivering babies herself or through apprenticeship to other TBAs [7]. TBAs provide care during pregnancy, childbirth, and the postpartum period; and are well established, living in close proximity to the women who require maternity care in the community. They have detailed knowledge of community norms and are paid "in kind." These characteristics are increasingly considered as strengths that the formal health sector has sought to leverage [2].

Many women living in low-resource and rural settings continue to seek the care of a TBA, despite the knowledge that a health facility delivery is often safer [8,9]. Until recently, the scope of TBA training was designed to prepare them to recognize "at risk" mothers and newborns, to conduct a safe home birth for low-risk women, and to refer women considered to be at risk or to have recognized obstetric complications to a health facility [6,10]. WHO's new guidelines for the practice of TBAs suggest that providing companionship and support during pregnancy and birth, in addition to health promotion are the roles best suited to the TBA skills [11].

Somaliland, which has comparatively poor health indicators (Table 1), relies heavily on TBA-assisted maternity care owing to a shortage of all cadres of skilled healthcare providers including SBAs [12]. In 2008, a program to improve the reproductive and sexual health of internally displaced people (IDP) was implemented in the Maroodi Jeex region of Somaliland. In this program, TBAs received training and orientation in order to practice as health promoters and birth companions, instead of their traditional role of conducting deliveries at home and referring women to a healthcare facility only when complications arose.

The primary aim of the present study was to examine the acceptability and feasibility of reorienting the TBA role by documenting the experiences of both TBAs in their new role and mothers who had received care from a TBA, in addition to the perceptions of key health system stakeholders. Documentation of experiences and lessons learnt will

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http://dx.doi.org/10.1016/j.ijgo.2014.04.009
0020-7292/

Table 1
Maternal and child health indicators for Somalia and Somaliland.[a]

Indicator	Value
Somalia	
Average life expectancy at birth	50 yr
Maternal mortality ratio (MMR)	1000 per 100 000 live births
Risk of a woman dying during child birth	1 in 16
Mortality rate: under 5 yr	180 per 1000 live births
Mortality rate: infant	43 per1000 live births
Somaliland	
Prenatal clinic attendance (at least one visit)	32%
Skilled birth attendance	44%
Home birth	75%
Overall fertility rate	5.9%

[a] Data from References [12–14].

inform international practice and help to decide whether this model can be replicated in other low-resource settings.

2. Materials and methods

The program "Improving the Reproductive and Sexual Health of IDP, Maroodi Jeex, Somaliland," was implemented from January 1, 2008, to December 31, 2012, by Health Poverty Action (HPA) in partnership with the Liverpool School of Tropical Medicine (LSTM) and the Somaliland Ministry of Health (MOH). The study was conducted among IDP and returnee communities encamped close to five Maternal and Child Health Care Facilities (MCHCFs): Saxaardid, Iftin, Abdi Eden, Mohammed Moge, and Sheikh Noor in Hargeisa, the capital of the self-declared independent state of Somaliland. The study received ethical approval from the Somaliland Health Research Ethical Clearance Committee and the LSTM Research Ethics Committee, and all participants provided written consent.

The study included TBAs practicing in the area and known to the healthcare providers at five MCHCFs surrounding Hargeisa, mothers from the community who had received care from the TBA, healthcare providers at the MCHCF, and key stakeholders from the government (Fig. 1).

During the program, TBAs were trained as "health promoters" and "birth companions" (Fig. 2), and linked to an identified MCHCF. Training included an emphasis on the need for prenatal care, understanding the dangers of a home birth, the benefits of facility delivery and a professional trained SBA, the need for prompt referral of all pregnant women to an MCHCF for care, the importance of companionship, and how to help women who were afraid of a facility-based birth or of complications. In addition, the TBAs visited the MCHCF, were oriented in the services provided at the facility level, and were introduced to the staff working there as SBAs. Refresher training was provided 1 year after the initial training.

The TBAs were paid US $5 for each patient referred or escorted to any of the five designated MCHCFs and were informed that the payment was temporary and would cease at the end of the implementation program. Fourteen months after the program had ceased and payments had been discontinued, TBAs were interviewed. Records of the women either accompanied or referred to an MCHCF were kept and compiled monthly by the program team.

All five MCHCFs and one referral hospital in Hargeisa were supported with infrastructure rehabilitation, supply of medical equipment, drugs and consumables, running costs, and competency-based training for healthcare providers in skilled birth attendance and emergency obstetric and newborn care [15]. In addition, the hospital's ambulance was provided for referral from the MCHCF to the hospital if indicated.

A qualitative approach based on focus group discussions (FGDs) and key informant interviews (KIIs) was used. The authors developed FGD and KII guides, participant information sheets, consent forms, and translator agreements. Local research assistants were trained on how to use the guides and conduct FGDs and KIIs before field work commenced. All FGDs and KIIs were conducted in a quiet, comfortable venue with adequate space.

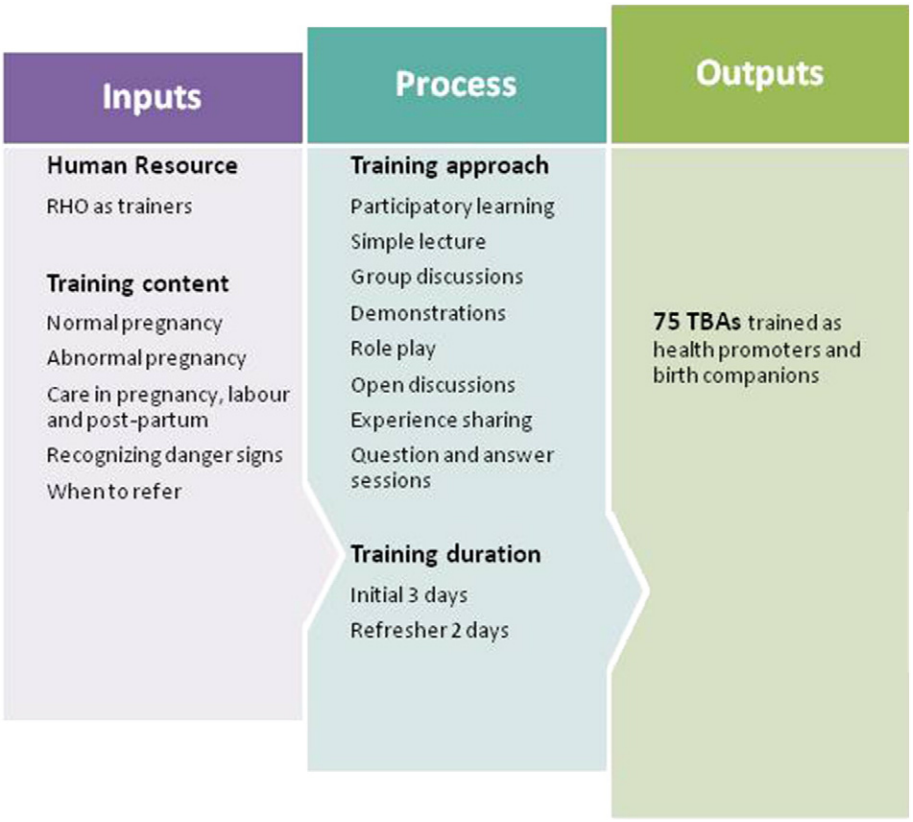

Fig. 1. Training provided to traditional birth attendants in Somaliland. Abbreviations: RHO, Regional Health Office; TBA, traditional birth attendant.

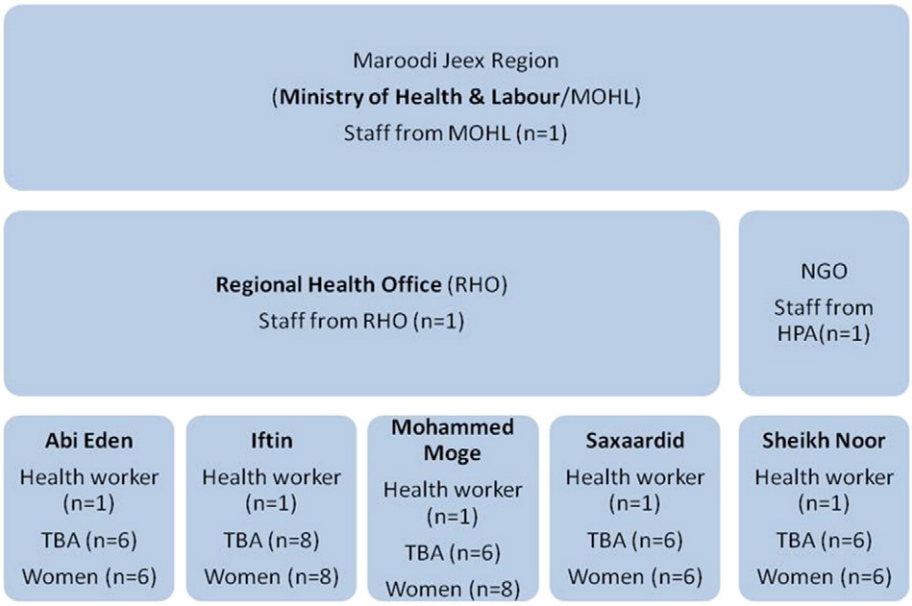

Fig. 2. Study participants and their affiliations. Abbreviations: NGO, nongovernmental organization; HPA, Health Poverty Action; TBA, traditional birth attendant.

Eight KIIs were conducted with one representative from each of the following organizations: MOH, the HPA program implementation team, the Regional Health Office, and a healthcare provider (SBA) from each of the five MCHCFs. A total of 10 FGDs involving 64 participants (32 TBAs and 32 community women) were conducted in groups of 6–8 from all five MCHCF catchment areas. One additional FGD was conducted with women who had received care from a TBA who had not been trained or given an incentive.

Participation was voluntary and written consent was obtained from each participant after the information sheet had been read by or to them by a local research assistant. The consent form was read out in the local language if the woman could not read or write, and her agreement was confirmed by a thumb print on the consent form. Participants were assured that confidentiality and anonymity would be maintained. The KII interviews were conducted in English and the FGDs in Somali. The facilitators and participants were introduced, and the participants were informed that the interviews would be recorded electronically. The FGDs conducted in Somali were later translated into English, and all recordings were transcribed verbatim for analysis.

All transcripts were coded and a framework approach was used to analyze the data [16]. Emerging themes were identified, and the data were organized by theme, concept, and category. These themes formed the basis for further data synthesis and inference.

3. Results

Traditional birth attendants reported being aged between 34 and 113 years with 3–80 years of experience. All were married with 3–13 children. Women from the community who participated in the study were aged between 22 and 43 years and had 1–10 children each.

The thematic areas that emerged included a consensus opinion and recognition of the need for re-orientation of the role of the TBA; a change in opinion regarding the best choice for place of delivery; the role of incentivization of the TBA; and the importance of linking community- and facility-based care providers (Box 1).

Traditional birth attendants were trained to change the focus of their role from providing primary maternity care to becoming supporters and promoters of skilled birth attendance and to helping women avoid home births. TBAs, clients, and health managers agreed that there was a real need for training and re-orientation of the role of the TBA. The TBAs reported that they felt as if they were treated as "simply a TBA," who needed additional knowledge and skills to assist pregnant women, and pregnant women questioned the competence of TBAs. Health managers reported that TBAs in their original role as primary providers of maternity care had not contributed much to improving health indicators for mothers and babies.

After the training, both TBAs and women reported an improvement in the knowledge of the TBA, and women reported a noticeable change in the TBAs' scope of practice. TBAs reported feeling more knowledgeable and better able to recognize the danger signs of pregnancy. TBAs knew the staff and environment of the MCHCF and reported being motivated to refer women to health facilities for delivery, having recognized that the standard of care available in MCHCF was better than they could provide in the community. They also mentioned that women themselves were now more inclined to choose to deliver at an MCHCF.

Traditional birth attendants reported being better at recognizing and reacting to complications in pregnant women and women in labor, and were able to advise women about when and where to seek help. The TBAs were more conscious of the risks to themselves of conducting home births without proper protective equipment, including the risk of acquiring blood-borne infections such as HIV and hepatitis.

An increased awareness and recognition of the importance of the use of health facilities for maternity services among women was reported to have occurred after the change in practice by TBAs. Pregnant women started visiting healthcare facilities instead of the TBA. MCHCF staff reported an increased number of women seeking maternity care at the MCHCF. The increase was sustained even after monetary incentives were no longer provided to the TBAs. Most women who had accessed care at an MCHCF reported that it was a positive experience.

Before the reorientation of TBAs in 2009, 779 women per year received maternity care at the MCHCF, but this had increased to 3296 by 2012. SBAs working at the MCHCF reported that they attributed this in part to the changed role of the TBA and to links developed between the TBA and the health facility. SBAs believed that this was due to the TBA's better understanding of the risks of a home-based delivery and the need for emergency obstetric care for women presenting with complications. Pregnant women reported being more confident about accessing facility-based maternity care owing to the improved attitude of the SBAs, who were reported to be more supportive than they had been previously and to no longer request payment from women. In contrast, it was reported that women living in communities with TBAs who

Box 1
Selected quotes to illustrate emerging themes during framework analysis of transcripts of focus group discussion and key informant interviews.

Need for training and reorientation of the TBA role

"They do provide some advice and do referring if they [pregnant women] are anemic to the nearest health post, conduct deliveries when the time of delivery is due if the mother [is] not complicated, and they feel any complications they refer to the health centers. That was their primary role, but overall it was such that their role had not much helped." (MOH representative, KII).

"The TBA doesn't know more than us, she just comes and catches the baby, she only prays to Allah, she doesn't know the danger signs. Mostly, they try to do home delivery until it's very late." (Woman, FGD, Mohammed Moge)

"Before we used to be simply TBAs; now that we have training and we know the advantages of the MCH centers and the health facilities, we inform women about them." (TBA, FGD, Iftin)

"If these complications happened before the project, I would not know…but after we got this training from HPA I know. If she develops postpartum hemorrhage or hypertension I know that I cannot, I am not capable, I have no ability to manage these. She needs medication; she needs a lot of things. So the best thing to do is to ask the relatives to get transport as soon as possible to reach health facility and I refer her." (TBA, FGD, Saxaardid)

Changing the "norm" for place of delivery

"I saw one mother's referral […] to the MCH center and I was at the MCH center at that time. She [TBA] took one mother with three babies in her abdomen, and she delivered safely in MCH center, and if that TBA had not transferred to us maybe the mother [she] would have had some [risk] problem… and the mother and her family, they were very happy." (Health worker, KII, Sheikh Noor)

"Now, most pregnant women understand to come to the MCH center and have prenatal care. There are women who go directly to health facilities. Numbers of home deliveries are reducing in the last 5 years." (Health worker, KII, RHO)

"MCH staff welcome us, they support me and don't ask us [for] any money; they do whatever is necessary for me; they really help me continuously and welcome … family members. We [women] prefer MCH centers since it is better and good service." (Woman, FGD, Saxaardid)

"Most deliveries occur in health centers…TBAs know that home delivery is risky." (Health worker, KII, Iftin)

Supporting TBAs with incentives

"It was only $5 dollars and you know that $5 wouldn't do anything for you." (TBA, FGD, Abdi Eden)

"… The TBAs say that the incentive that is given to them is not matching the standard they expected or the living conditions… but still without the incentive, it (the project) would have been as successful as it is today." (MOH representative, KII)

"After the incentives stopped, we didn't stop working with the MCH center, still we work with the MCH center and we don't want to stop. The program will not stay with us forever, we know that but they teach us how to work with the community and they teach us very good system which save us ourselves and save the mother." (TBA, FGD, Saxaardid)

Linking TBAs and SBAs

"No-one can reach to a community if there's no TBA." (Health worker, KII, Iftin)

"Mostly the women listen to TBAs." (Health worker, KII, Mohammed Moge)

Abbreviations: FGD, focus group discussion; KII, key informant interview; MCH, maternal and child health; MOH, Ministry of Health; SBA, skilled birth attendant; TBA, traditional birth attendant.

had not been reoriented continued to deliver with an untrained TBA at home.

Concurrent with the change in the TBA role, health facility birth became the new norm and the community regarded this as the behavior of "health literate" people. The increased demand and uptake of health facility-based services was observed by pregnant women themselves, TBAs, and other stakeholders. Women also reported possessing the necessary information for them to locate and visit their nearby MCHCF for labor or pregnancy-related complications without being accompanied by a TBA.

There were various opinions regarding the incentives temporarily given to TBAs and the subsequent cessation toward the end of the program. Most TBAs reported feeling that the US $5 paid for each woman accompanied to an MCHCF was not enough compensation for their work. They were not happy about the cessation of the incentive and the loss of income, and all other stakeholders were aware of this. Nevertheless, it was noted that during the 14-month follow-up period, TBAs continued to refer and accompany women to the MCHCF even after the monetary incentives had ceased. Both the program implementers and the community reported that they were satisfied by this result.

All stakeholders were aware that the TBAs, being community-based, know the women on a personal level, as well as the situation in each household and home. Because TBAs are part of the community and share the same cultural values as women in the community, they are trusted members of the community. Linking TBAs to SBAs strategically enhances access to an SBA for the women. SBAs recognized the trusted position that TBAs have in their communities and reported recognizing the value in working with them.

Similarly, TBAs reported developing new relationships with MCHCF-based SBAs, being able to accompany and refer women without this resulting in conflict. Some TBAs were even invited to help to provide some aspects of care and companionship at the MCHCF. Furthermore, TBAs reported that they now received feedback from SBAs regarding the outcome for some of the women whom they had referred or escorted to the health facility. Only a few TBAs reported that they felt unwelcome at the MCHCF or had not received any updates pertaining to the women whom they accompanied or felt responsible for. However, this lack of communication did not result in any major conflicts. Overall, TBAs reported that, when working in their new role after reorientation, they had developed a good relationship with the SBAs based at the MCHCF.

4. Discussion

Previously, TBA training focused largely on the ability to conduct a safe delivery, recognition of "at risk" women, and referral in cases of obstetric complications. The effectiveness of TBA training has been the subject of numerous systematic reviews with mixed findings [3]. In contrast, the present study explored the feasibility and acceptability of training TBAs to ensure reorientation to a new community-based role—that of birth companion and promoter of facility-based maternity care including delivery.

Every pregnant woman in the community was linked to an SBA working at a health center either through referral or by being accompanied to the health center by the TBA at the earliest opportunity. This shortened the time that pregnant women stayed in the community with the TBA (phase-one delay) and decreased the amount of time needed to reach SBA-led care [17]. Although there have been suggestions that linking TBAs more closely to facility-based care and carers in this way might increase the number of women who access and receive skilled birth attendance [18–20], the present study has specifically examined the acceptability and feasibility of a role change for TBAs in a low-resource setting.

In addition to the training and reorientation received by TBAs, strengthening the enabling environment with additional support provided to facilities and a strengthened referral system probably

contributed to the success of this program [21]. The incentivization of TBAs carried out under this program is a contentious issue but seems to have been successful in a number of settings. A recent report from Bangladesh [22] suggests that incentivization of health workers might improve maternal and newborn health outcomes. Similarly, the creation of "Accredited Social Health Activists" in India, coupled with incentivization, has led to a substantial increase in the number of women who deliver at health facility level [23].

The immediate effect of the training in Somaliland was that it "opened TBAs' minds" to think differently about working with staff based at the health facility. The TBAs embraced their new role even though it may have slightly disempowered them by reducing both their scope of work and the social, financial, and material rewards that they received as caregivers in the community. Conversely, for the most part, TBAs were respected and welcomed by healthcare providers, effectively linking the community to the health system and increasing access to and uptake of skilled birth attendance. Crucial to the success of this program was the continued cooperation of MCHCF staff and TBAs—a relationship that supported and encouraged the TBAs to adopt their new role [24]. Examination of health facility records showed a 300% increase in the number of facility-based deliveries (993 to 2872 per year) across the five MCHCF centers. Previous studies have similarly reported an increase in the utilization of healthcare at facility level for obstetric complications under the existing "recognize and refer" practice or traditional role of the TBA [25–28].

The TBAs in the present study confirmed that, prior to their reorientation, home birth with the TBA was considered the "norm" for both women in the community and the TBA, and that the healthcare facility was not considered part of the framework within which a TBA worked. By linking the TBA with the healthcare facility, this view had changed, and giving birth with a skilled attendant working at the health facility—with the TBA providing the link—had become preferable.

Despite the limitations of language barriers, a heavy reliance on local staff for participant recruitment and translation, the possibility of biased participant recruitment, and some loss of meaning during translation, the findings remain significantly intact. In addition, the study highlights other areas for future research. It was not possible to compare the effectiveness of the new role and "refer all" practice of the TBA with the traditional "recognize and refer." However, the present results suggest that supporting TBAs in a new role as the facilitators of a facility-based delivery and birth companion is feasible, acceptable, and successful. What remains to be explored is how the relationship between the community and the TBA will develop in the future, and whether this model can be replicated in similar low-resource settings and scaled up. Because the change in practice entailed a reduction in responsibility, further studies exploring the reaction of the TBAs to this reduction should be considered. After the change in practice, TBAs were no longer entitled to payment in "cash or kind"—the usual TBA remuneration system [28]. Although most TBAs continued to accompany women or to refer them to the health facility in the year after incentives paid via the program had ceased, the longer term effect of this change in role on the livelihood of the TBA and sustainability of the "refer all" practice requires further study.

The present study shows that it is possible to change the behavior and practices of TBAs in an inclusive way with the correct strategies. Birth companionship and health promotion seemed to be roles that might easily be taught to and adopted by TBAs. The training or reorientation of TBAs, however, will need to focus on building trust between existing health service staff and the TBA, as well as on furthering the understanding and respect of the new role of the TBA by the community. The TBA is a community-based provider who is trusted by the community, and linking the TBA with an existing health system with SBAs can improve access for women and result in an increased number of women receiving skilled maternity care.

Defining the role of the TBA has been a controversial, often emotional topic in the global health community. The present findings suggest that TBAs can contribute to improvements in maternal and newborn care in low-resource settings if trained and supported to fulfil a new role within an enabling environment.

Acknowledgments

The program "Improving the Reproductive and Sexual Health of Internally Displaced People, Maroodi Jeex, Somaliland," was implemented from 2008 to 2012 by Health Poverty Action in partnership with the Liverpool School of Tropical Medicine and the Somaliland Ministry of Health. The study received funding from the European Union under grant (Project Number. Sante/2007/127-496).

Conflict of interest

The authors have no conflicts of interest.

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