

An Investigation into Engagement Processes between Antenatal Providers and Users in Lundazi District – Zambia

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Abstract

Background: Strategies to engage pregnant women in their prenatal care, educating them and encourage hospital deliveries are important elements to consider in efforts aimed to improve quality Antenatal Care (ANC).

Methods: A facility based cross-sectional study employing both qualitative and quantitative methods was conducted in Lundazi District, Zambia. Engagement processes between ANC providers and pregnant mothers during the provision of antenatal care were explored. Data was collected from sixty pregnant women who attended ANC clinic in five public health facilities. It was also collected from seventy-five ANC providers. Data were collected through focus group discussion with ANC users, observation during consultation and self-administered questionnaire from ANC providers.

Results: This study observed that one to one individualized health education was not reinforced despite the health and gestational age of clients. Only thirty-seven percent of ANC providers explained their findings to the clients during physical examination. Clients were not counselled on blurred vision, severe headache, convulsions, fever and difficulties in breathing. This study further found that ANC providers could not explain the reason for referral submitting that Antenatal mothers would still not understand even if staff took the entire year explaining. However, eighty percent of the ANC users were encouraged to deliver from the health facility.

Conclusion: Lack of engagement with ANC users indicates missed opportunities for delivering quality ANC Care. Reinforcement of this component would improve the quality of care and improve maternal and fetal wellbeing.

Key words: Antenatal care providers, Antenatal care Users, engagement processes.

Introduction

Antenatal care (ANC) plays a central role in the continuum of quality care, a critical framework for understanding the continuity between maternal, newborn and child health (Mc Nellan et al., (2019). ANC is an opportunity for skilled professionals to educate and engage with women about signs of danger signs in pregnancy, when to seek health care, nutrition in pregnancy, reasons for referral, procedures in ANC, importance of ANC visits and availability of modern family planning (AbouZahr and Wardlaw, 2004). Patient engagement is emerging as a significant component of efforts to improve health outcomes (Barello et al., 2012; Graffigna et al., 2014). Patient engagement includes involving patients and their families in their care by educating them about the risks and benefits of

treatments and empowering them to make informed decisions in partnership with their providers (AbouZahr and Wardlaw, 2004 Barello et al., 2012; Graffigna et al., 2014). The cardinal rationale for engaging patients has its roots in the ethical principles of respecting the patient's autonomy and promoting self-determination (Mohamad et al., 2017). Studies have highlighted that pregnant women want to be involved in their care and more specifically in making decisions about their care (Vlemmix et al., 2013). This study aimed at investigating the engagement processes between antenatal providers and users in Lundazi district – Zambia.

Materials and Methods

A facility based cross-sectional study employing both qualitative and quantitative methods was conducted between October 2019

and June 2020 in Lundazi District, Zambia. Engagement processes and procedures between ANC providers and pregnant mothers during the provision of antenatal care were explored. Six (6) study sites were purposively selected (These were health facilities which had recorded high numbers of referred clients, who ended up dying during pregnancy, labour or delivery or who recorded a maternal death in the year “2019”).

75 individual study subjects who happen to be ANC providers at each health facility were selected using purposive sampling method (A provider who has been working in Antenatal clinic and gained experience for not less than six (6) months).

For Antenatal care observations made during ANC consultations, simple random sampling method was used to draw the sample of 60 ANC Users. Furthermore, 60 ANC users were selected using purposive sampling method to participate in the focus group discussion.

A self-administered questionnaire was used to collect data from the ANC providers, Maternal and new born Quality of Care Survey Antenatal Care Observation Checklist was used to collect data during the provision of ANC care and a focus group discussion guide.

Quantitative data was entered and analyzed with use of the statistical package for social sciences program software (SPSS Version 23). For qualitative data, identified themes and subthemes were reviewed by the Researcher and similar themes were grouped together. Qualitative data was then triangulated with quantitative data to give an in-depth understanding of the quality of antenatal care provided to pregnant women.

Results

This study found that one to one individualized health education was not reinforced despite the health and gestational age of clients. Only thirty-seven percent of ANC providers explained their findings to the clients during physical examination. Clients were not counselled on blurred vision, severe headache, convulsions, fever and difficulties in breathing. This study further found that ANC providers could not explain the reason for referral submitting that Antenatal mothers would still not understand even if staff took the entire year explaining.

Focus group participants shared their views concerning referrals to the hospital. Participant 3 from facility ‘B’ said,

If ANC providers find a problem when palpating our abdomen, they tell us to go to the hospital (Lundazi District Hospital). They don't tell t us why we are being referred. (Participant 3, 23years old).

Another participant from the same facility added saying,

Health workers tell us that even if they took a full year explaining the reason for referral, we would still not understand. They tell us to just go.

This study further found that clients were given the same day for review regardless of their gestational age. The study identified serious gaps from the physical environment where antenatal mothers were screened and counselled from. The facilities did not provide privacy and had no specific ANC consultation room. However, eighty percent of the ANC users were encouraged to deliver from the health facility.

Discussion

This research work which is an extract from the main study ‘assessing the quality of Antenatal care provided to pregnant women in Lundazi district health facilities, Zambia’ aimed at assessing the Engagement processes and procedures between ANC providers and pregnant mothers during the provision of antenatal care.

According to WHO (2018); Sheffel et al., (2019), effective communication between maternity care staff and women during Antenatal Care, labour and childbirth should include informing the client of findings, attending to clients in a timely manner, allocating sufficient time to each client, encouraging the woman to express her needs and preferences, regularly updating her and her family about what is happening, and asking if they have any questions.

This study revealed that only 37% of the ANC users were informed of the findings after being examined. ANC providers in all the five (5) health facilities reported that time limitation did not allow them to provide sufficient feedback to pregnant women during physical examination, because other clients were waiting outside. Some providers reported that they felt uncomfortable to take considerable amount of time with individual pregnant women in either counselling or individualized health education session for fear

that clients waiting outside would raise suspicions that perhaps the health worker could be having carnal knowledge with a pregnant woman. So, it was entering, expose the abdomen, staff palpate and then leave quickly before the anxious community begins to gossip. As such clients were not asked if they had questions during consultations (table 1).

These findings tally with Phommachanh et al., (2019) who reported that Staff in ANC facilities did not share the physical examination findings with the clients. The same scholars reported that some providers did not ask the women about their needs, because they were afraid of not being able to fulfil the needs, which would be unacceptable for them. This study attributed this antiquated practice to lack of clinical drills and refresher courses in Antenatal care as it was reflected in the findings of this study where 60% of ANC providers from the five health facilities never had a chance of being trained or having any clinical drills on Obstetric emergencies (table 3) except for technical support.

It was also observed that the next ANC return visit date was communicated to the clients after consultation. However, antenatal mothers had the same appointment dates for subsequent visits regardless of the current gestational age or complaints. Health workers could not take consideration of grouping pregnant mothers according to gestational age for customized antenatal care. This study's findings are similar to the study findings by Miltenburg et al., (2016) in Tanzania which revealed that return date was usually standardly documented to be next month, independent of number of visits and that sometimes clients could be given a return date after the estimated date of birth.

Provision of ANC requires many different actions and skills; next to routine services it requires provision of adequate decision making, risk identification, clinical reasoning and proper client counselling (WHO, 2016; Miltenburg et al., 2016). Coverage of routine services alone is insufficient if information is not used or acted upon (Miltenburg et al., 2016). In this study, pregnant women with abnormal findings, maternal problems/complications in all the health facilities reported that they would be referred to the first referral level hospital. However, through Focus Group Discussions participants reported that ANC providers could not explain the reason for referral submitting that antenatal mothers

would still not understand even if staff took the entire year explaining. This would make the clients either to take days before seeking care from the referred facility or not go at all. On the other hand, Miltenburg et al., (2016) in Tanzania argues that abnormal findings were rarely a reason for referral.

Prospects for a healthy outcome for both mother and baby improve when all women and families have adequate knowledge (Lincetto et al., 2016). Health education during antenatal is given to provide advice, education, reassurance and support (Mohammed and Amal, 2015). This implies that it should be given to ANC users from registration, during history taking, physical examination, investigations and dispersing of ANC medications). This study found that all the five health facilities pursued group health education of ANC clients with 12% of ANC providers using visual Aids during the sessions (table1).

In addition to group health education for antenatal mothers, it is important for health workers to provide individualized health education because 'individual health behaviours are embedded in cultural pattern exchanges and are usually transmitted from generation to generation (Kaewsarn et al., 2003). Oshinyemi et al., (2018) affirms that teachings on different topics make individual clients aware of danger signs and when to seek medical care. This study found that ANC users were not counselled to seek immediate medical care when they experience; blurred vision, severe headache, convulsions, fever and difficulties in breathing (table 1). Furthermore, the study observed that one to one individualized health education was not reinforced despite the gestational age of clients.

These results are similar to the findings of Phommachanh et al., (2019); Miltenburg et al., (2017); Ritchie et al., (2016); Ajayi et al., (2013) who observed that health education was given to a group of women, culture limited the giving out of health education and that little information was communicated to individual ANC clients and their relatives.

This study further revealed that all, (100%), the five health facilities had no distinct antenatal room for ANC consultations (table 1). Provision of antenatal care services was done either from the labour room or an office. The facility where the services were provided in an office had no

door to the improvised ANC room. To gain entry, antenatal mothers brushed past a dirty looking bed sheet serving as a door. In this office-like arrangement, nurses hustled-and-busted in and out of the room at any time. The room had no screens around the bed to provide privacy. Pregnant women fumbled to expose their abdomen due to heavily compromised privacy. Inadequate antenatal room for physical examinations and counselling room affects privacy and confidentiality. Findings of this study tally with the findings by Phommachanh et al., (2019) in their study conducted Asia; Jallow et al., (2012) in Gambia and Mills et al., (2007) in Kenya, Ghana and India. The researchers found that public health facilities especially in lower- and middle-income countries did not have proper physical environment to provide adequate privacy for counselling and physical examination. A similar study conducted in Zambia by Bwalya et al., (2018) at Kanyama and Matero Clinics in Lusaka found that rooms where staff interrupted

compromised privacy and affected antenatal mothers' satisfaction with the care they received during antenatal visits.

Conclusion

This study found that there is less engagement between the ANC providers and Users. Even if ANC users attended ANC clinic as recommended by WHO (2016), interaction between the two partners of ANC was inadequate. This in turn affects the quality of Antenatal Care provision.

Efforts targeted at the provision of quality ANC care and reducing maternal mortality can only be successful if ANC providers engage the users in the care as well.

Recommendation

The study recommends that refresher courses on ANC engagement processes should be reformed and follow standard guidelines of ANC provision. This should also be emphasized by the Nursing and Midwifery training institutions.

Tables

Table 1. ANC Providers responses concerning educating clients on dangers signs

Counselling during consultation		ANC providers' responses (questionnaire) N=75	
		Yes	No
Counsel client to seek immediate medical care when she experiences;	Blurred vision	0	100%
	Severe Headache	0	100%
	Convulsions	0	100%
	Fever and weakness & Difficulty in breathing	0	100%
Counseled the client on when to return to the health facility for next visit		75 (100%), given same date for next visit	
Counseled clients on hospital delivery		60 (80%)	15(20%)

Table 1, above shows that non o the clients were counseled on blurred vision, severe headache, Convulsions, fever, difficulties in breathing. All the respondents (100%) indicated that Clients were given the same date for review the majority, 80% advised clients to deliver from a health facility.

Table 2. ANC Providers responses concerning Physical examination (N=75)

Engagement during physical examination	Yes	No
Giving individualized health education	Not done	
Used visual Aids during health education	9 (12%)	66 (88%)
Asked the client whether there are any questions	Not done	
Explained head to toe examination findings	28 (37.3%)	47 (62.7%)
Availability of Private ANC consultation room	Not available in all (5) health facilities	

Table 2, above shows that ANC clients were not given individualized health education. The lesser percentage, 37% of the ANC providers explained the physical examination findings during ANC consultation. All the five facilities did not have separate rooms for ANC consultation.

Concerning referrals to the next facility, focus group participants shared their views concerning referrals to the hospital. Participant 3 from facility 'B' said,

If ANC providers find a problem when palpating our abdomen, they tell us to go to the hospital (Lundazi District Hospital). They don't tell us why we are being referred. (Participant 3, 23years old).

Another participant from the same facility added saying, *Health workers tell us that even if they took a full year explaining the reason for referral, we would still not understand. They tell us to just go.*

Author's Contribution

PM was responsible for the study conception and design, data collection and analysis, drafting the manuscript. CM supervised the research process.

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References

[1] Abou-Zahr CL and WardlawTM (2004). *Strategies for reducing maternal complications in the tropics*. International journal of reproductive health, 8(20), 68-88 accessed from <https://www.google.com/search?sa=X&nirf=1.%09> on 9/10/2019 @ 05:32 hours

[2] Ajayi IO, Osakinle DC, Osakinle EO, Damilola C, Eunice O. *Quality assessment of the practice of focused antenatal care (FANC) in rural and urban primary health centers in Ekiti state*. Open journal of Obstetrics and Gynecology (2013) 3:319-26. Doi:10.4236/ojog.2013.33059 accessed from <http://www.scirp.org/journal/ojog/> on 11/11/2019 @ 16:30 hours

[3] Barello.S, Graffigna. G, Vegni. E (2012), *Patient Engagement as an Emerging Challenge for Healthcare Services: Mapping the Literature* retrieved from

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3504449/>; doi:10.1155/2012/905934.

[4] Bwalya. C, Sitali. D, Baboo. S. K and Zulu. J (2018), *Experiences of Antenatal Care among pregnant adolescents at kanyama and Matero clinics in Lusaka, Zambia* accessed from <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-018-0565-9#Sec3> on 13/7/2020 @ 15:11 hours.

[5] Graffigna. G, Barello. S, Libreri. C and Bosio. C (2014), *How to engage type-2 Diabetic Patients in Their Own Health Management: Implications for Clinical Practice* retrieved from <https://pubmed.ncbi.nlm.nih.gov/24966036/>; Doi: 10.1186/1471-2458-14-648.

[6] Jallow et al., (2012), *women's perception of antenatal care services in public and private clinics in Gambia*, International journal for quality in Health Care, Vol 24, issue 6 , accessed from <https://doi.org/10.1093/intqhc/mzs033> on 13/7/2020 @ 15:22 hours.

[7] Kaewsarn, P., Mayle.W., Creedy. D., (2003), *Traditional postpartum practices among Thai women*. J Adv Nurs' 41(4): 358-366 <https://www.ncbi.nlm.nih.gov/pubmed/https://www.google/scholar>.

[8] Lincetto et al., (2016), *Antenatal Care – World Health Organisation* accessed from https://www.who.int/pmnch/media/publications/aonsectionIII_2.pdf accessed on 14/7/2020 @ 01:01 AM.

[9] Nellan et al., (2019) *Antenatal care as a means to increase participation in the continuum of maternal and child healthcare: an analysis of the poorest regions of four Mesoamerican countries* accessed from <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-019-2207-9> on 13/7/2020 @ 05:20 hours.

[10] Mills. S, Bos. E, Lule. E, Ramana, G. N. V, and Bulatao.R (2007), *“Obstetric care in poor settings in Ghana, India, and Kenya,”* HNP Discussion Paper Series, retrieved from

[11] https://www.researchgate.net/publication/228872866_Obstetric_Care_in_Poor_Settings_in_Ghana_India_and_Kenya on 28/6/2020 at 10:27 hours.

[12] Milltenburg. A. S, Van der Eem. L, Nyanza. E. C, Pelt.S, Ndaki.P e tal., (2017), *Antenatal care and opportunities for quality improvement of service provision in resource limited settings: A mixed methods study* accessed on 16/11/19 at 06:57 hours

- from
<https://journals.plos.org/plosone/article/file?type=printable&id=10.1371/journal.pone.0188279>.
- [13] Mohamad et al., (2017), *Patient experiences of engagement with care plans and healthcare professionals' perceptions of that engagement* accessed from <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2806-y> on 13/7/2020 @ 16:47 hours.
- [14] Mohammed. A and Amal. A (2015), *Health education during antenatal care: the need for more*; International Journal of Women's health accessed from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4340373/#b21-ijwh-7-239> on 21/6/2020 @ 05:24 hours.
- [15] Oshinyemi. E, Aluko. O and Oluwatosin.O (2018), *Focused antenatal care: Re-appraisal of current practices*; International Journal of Nursing and Midwifery accessed from <http://www.academicjournals.org/IJNM>; DOI: 10.5897/IJNM2018.0312 retrieved on 13/7/2020 @ 15:42 hours.
- [16] Phommachanh e tal., (2019), *Improvement of Quality of Antenatal Care (ANC) Service Provision at the Public Health Facilities in Lao PDR: Perspective and Experiences of Supply and Demand Sides* Accessed from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6647136/> on 13/6/2020 at 23:53 hours.
- [17] Sheffel et al., (2019), *Understanding client and provider perspectives of antenatal care service quality: a qualitative multi-method study* from Tanzania accessed from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6596286/> on 21/6/2020 @ 06:23 hours.
- [18] Vlemmix et al., (2013), *Decision aids to improve informed decision-making in pregnancy care: a systematic review* accessed from <https://obgyn.onlinelibrary.wiley.com/doi/10.1111/1471-0528.12060> on 13/7/2020 @ 06:31 hours.
- [19] WHO (2018), *Recommendations on effective communication between maternity care providers and women in labour* accessed from <https://extranet.who.int/rhl/topics/preconception-pregnancy-childbirth-and-postpartum-care/care-during-childbirth/who-recommendation-effective-communication-between-maternity-care-providers-and-women-labour> on 21/6/2020 @ 08:10 hours.