Accounts of pregnant women accessing antenatal care at St Mary's Antenatal Clinic, Kokopo district of East New Britain Province

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Abstract

Despite the recommendation made by the World Health Organization (WHO) that all pregnant women should have their first antenatal bookings within the first trimester of pregnancy and having at least four or more antenatal care visits (ANC) before delivery, the ANC greatly varies across low- and middle- income countries. In Papua New Guinea (PNG), 79% of pregnant women received ANC services from skilled health personnel with 55% having the recommended four or more antenatal visits. This paper reports on qualitative research seeking to answer the question; what are the factors that influence pregnant women's use of antenatal care services. The qualitative phenomenological approach allowed participants to provide narratives of their lived experiences regarding the ANC services. Eight in-depth interviews and two focus group discussions were conducted which further lead to triangulation of collected data for the purpose of better understanding of the experiences, challenges and behaviours of women regarding access to ANC services. The participants were purposively selected from diverse perspectives and backgrounds with the aim of enriching the emerging conceptualization. The study findings revealed that pregnant women are often faced with economic, sociocultural as well as health provision factors that influence them from accessing ANC services. Moreover, the findings provide a picture of how gendered power relations influenced pregnant women's utilization of antenatal services regarding economic, sociocultural and health provision issues encountered by individual woman. A more innovative approach is needed in considering gender into designing, implementing and evaluating maternal health interventions. Furthermore, effective mobile antenatal clinics need to be rolled out in order to capture the disadvantaged women who are not able to travel to the antenatal clinic due to several underlying issues preventing them from accessing antenatal services.

Key Words: Antenatal care, economic, sociocultural factors, gender, expert theory, lay theory, PNG

Introduction

Antenatal care (ANC) is considered as a critical component of the continuum of care for women during pregnancy with the potential to contribute to the survival and thriving of women and newborns (Siddique et al., 2018). ANC decreases maternal and perinatal morbidity both directly through early detection and treatment of complications related to pregnancy and indirectly through identification of women who are at risk of developing complications during childbirth, thus ensuring referral to a suitable level of care (WHO, 2016).

The new ANC model replaced the previous four- visit focused ANC (FANC) model. This new recommendation aims at reducing perinatal mortality and improving women's experience of care.

ANC attendance varies greatly across low and middle – income countries (Kinney et al., 2010) and nearly 50% of pregnant women do not receive adequate antenatal care (Finlayson & Downe, 2013). In PNG, 79% of pregnant women received ANC services from skilled health personal. Out of these 79% of pregnant women, only 55% have at least four or more antenatal visits (Kantha, 2010; Mueller et al., 2008).

There are several factors that continue to influence pregnant women's utilization of ANC services both in developed and developing countries. These factors include: education levels of the husband and wife, marital status, availability of transport and ANC services, household income, women's occupations and the long distances from the clinic to the pregnant woman's home village (Ochako et al., 2011; Simkhada et al., 2008; Downe et al., 2009; Rowe & Garcia, 2003). In addition, long distances between the pregnant women's home as well as women who have high parity, discourages women from utilizing ANC services (WHO & UNICEF, 2003). These influential factors have been categorized into three

categories: economic influences, health service related factors and diverse array of socio-cultural beliefs and practices (Ochako et al., 2011).

In PNG, studies showed that factors such as accessibility in terms of transportation, financial difficulties as well as cultural issues regarding beliefs and customs influenced pregnant women from utilizing ANC services (Andrew et al., 2014; Larsen et al., 2004; Maraga et al., 2011). In addition, health workers' attitudes, long waiting times, shortage of health workers and unavailability of medical supplies play a major role for women utilizing the ANC services (Andrew et al., 2014).

This study was designed to identify factors that affect pregnant women in the urban, peri- urban and rural communities accessing antenatal care services at St Mary's antenatal clinic in the Kokopo District of East New Britain Province.

The study sought to answer the main research question: "What are the factors that influence pregnant women's use of antenatal care services at St Mary's antenatal clinic? The specific questions asked was: "what are the economic, sociocultural and health provision factors that influence pregnant women's use of antenatal care services?"

Study context

PNG has the highest maternal mortality rate (MMR) of 230/100,000 live births and infant mortality (IMR) rate of 41.949 deaths per 1000 live births in the Asia Pacific region (Williams, 2014; Dennis, 2018). The leading causes of maternal deaths are obstetric hemorrhage (30%), sepsis (5%), embolism (15%), eclampsia (14%) and abortion (7%) (UNESCAP, ADB &UNDP, 2015).

Many factors affect this poor health outcome, including low status of women within societies, limited autonomy of women, gender-based violence and poverty. Lower education and literacy of women exist, as well as a high fertility rate of 3.7 per woman (Robber, et al., 2019).

Gender inequality is a significant issue in PNG; women and girls have significantly less access to healthcare services. Inequitable decision making in the home contributes to poor maternal health outcomes (WHO, UN, AA, NDoH & ADB, 2012). Women's lack of decision- making power and the lack of male partner support have been highlighted as important barriers to women's use of health care services during pregnancy and childbirth (Vallely et al., 2013).

East New Britain (ENB) is a province in Papua New Guinea, on the northeastern part of the island of New Britain including the Duke of York Islands. There are about 33 health facilities within ENB province that provide ANC services. St Mary's Rural Hospital (SMRH) is one of the 33 health facilities in East New Britain Province. The hospital is in the Kokopo district of East New Britain Province. The facility has a total bed count of 250 beds.

The antenatal clinic has eight health professionals comprising two midwives, one maternal child health nurse, and five community health workers. Apart from the normal daily ANC clinic, the ANC department also carries out the maternal child health mobile/outreach clinics and well-baby clinic. Approximately, 30 pregnant women attend ANC every day and around 110 pregnant women attend in a week.

The St. Mary's Hospital quarterly report 2018-2019 showed the total number of first ANC visits increased between 2018 and 2019 from 1,438 to 1,750 whilst the number of fourth visits decreased from 756 to 703.

Study design and methods

The epistemological perspective of this study is formed by critical theory and a phenomenological methodology (Creswell & Creswell, 2018; Crotty, 1998). Phenomenology concentrates on the subjective experiences of the participants, while critical inquiry allows the articulation of power relations within the family and society (Crotty, 1998). This design was chosen to critically explore the experiences, perspectives and behaviors of the participants towards accessing ANC services from their

economic, socio-cultural views as well as how they view healthcare services (Creswell & Creswell, 2018).

The study's population in this research were the pregnant women attending antenatal care at St Mary's antenatal clinic. Eight semi-structured in-depth interviews and two focus group discussions (FGD) were used to gather information. Participants were purposively selected to discover and understand the meanings and interpretations that the pregnant women had given based on their experiences (Hennink, Hutter & Bailey, 2020).

Two focus group discussions with six participants in each group, aged from 24 to 30 years were conducted to obtain information with the aim of gaining a broader range of views on the research topic.

Question guides for the in-depth interviews and FDGs were developed with open-ended questions and probes. Initially, the outlining of the questions in the discussion guide were identified during the design cycle of the study which reflected the underlying theories, concepts or issues from the scientific literature and the research questions. Although the initial discussion guide was developed with deductive reasoning, it was typically refined inductively during the collection of data (Hennink, Hutter & Bailey, 2020).

Table 1: In- depth interview: participants' characteristics

Pseudonym	Age	Number of pregnancy	Number of ANC visits	Gestational age	Area of residence
Sarah	30years	2	7 th	37 weeks	Urban
Ruth	30years	3	2 nd	35 weeks	Semi-urban
Anna	29years	5	3 rd	36 weeks	Rural
Rose	24years	4	3 rd	39 weeks	Rural
Rita	27years	6	3 rd	39 weeks	Semi-urban
Marie	24years	3	2 nd	36 weeks	Semi-urban
Nina	32years	5	2 nd	38 weeks	Rural
Ruby	26years	4	5 th	36 weeks	Urban

The interviews and the FGDs were conducted in the conference room of St Mary's School of Nursing where there were no distractors such as noise and confidentiality could be ensured. The interviews and FDGs lasted between 30 and 90 minutes and were conducted between June and July 2020.

Participation was voluntary and confidentiality was maintained throughout the data collection and analysis process. A consent form was signed by all participants as an agreement to their participation.

Interviews and FDGs were conducted in Tok Pidgin. All data was transcribed verbatim and translated into English by the principle investigator.

The data were analyzed manually. Content analysis involved the revision of codes, development and revision of categories for the discovery of themes. Categories and themes were redefined, and a coding framework was developed (Elo et al., 2014).

Ethical clearance for this research was obtained from the Faculty of Medicine and Health Sciences Research Committee (FRC/MHS/07-20) at Divine Word University. In addition, local approval was obtained from the Diocesan Health Research and Ethical Committee of Catholic Archdiocese of Rabaul, East New Britain Province.

Results

Economic factors

Transportation to ANC

The cost of transportation influenced pregnant women from accessing ANC services. The transportation costs depend on the distance they travelled to get to the clinic. Participants from the urban areas and

semi urban areas paid a maximum amount of K2.00 for transport. In contrast, participants from the rural areas paid more depending on the distance they travelled from their homes to the health facility.

I pay for K5.00 bus fare from home to the main market in town. Then from town to Vunapope ANC, I pay K1.00 bus fare. So, both ways it costs me about K12 for transport alone (FGD 1).

Transportation to the ANC clinic is a barrier to women accessing ANC services. Women living in the rural areas explained that the availability of public transport is a problem for them. Some participants must walk some long distances from their homes to the main road to catch public transportation to get to town, and then catch another public transport (PMV) to reach to the hospital. Moreover, participants explained that the PMVs drive only once to town in the morning and return in the afternoon. They will have to get up very early in order to catch the PMVs not to miss their antenatal visit. One focus group participant explained her efforts in travelling to reach the clinic in time as follows.

The PMVs leave the village very early and then come back home leaving town late afternoon. If I don't catch up with the PMV truck in the morning for its trip to town then I don't have another choice but to stay home and miss my ANC visit (FGD 1).

Economic situation of the family

Economic situations of families influenced pregnant women in accessing ANC services. Participants who are employed or had a family member employed utilize ANC services more effectively than women from low income families. There are families living in semi- urban areas where both spouses are employed but still struggle to meet their needs. Ruby explained that both she and her husband are employed but the money earned is not sufficient to meet all the basic needs of the family including: children's needs, school fees, food and other needed items and on top costs for the ANC services.

The money that both of us earned from our fortnight salary is not enough to pay for food and other basic necessities, children's needs, school fee and even my ANC fees. We often borrow money from friends and then later repay (Ruby).

However, there are participants who are not employed but earn their incomes from selling their garden products at the market. Several mothers mentioned that the amount they earned from marketing often is not enough to meet all the basic needs of the family including the pregnant woman's ANC expenses. One participant explained her struggles and said, "despite working very hard, the amount of money earned is most often not enough" (FDG 2).

Family support and gender- based power relation

Societies within Papua New Guinea have close kinship systems, which can be seen as a strength in assisting pregnant women to receive assistance and support from their families. Some participants perceived family support and are encouraged to attend ANC.

Five participants described the full support they received from their husbands. This included taking care of the other children, cooking food in the absence of wives, encouraging wives to attend ANC and checking that prescribed medications were taken.

My husband is very supportive, he doesn't drink. He is a very understanding person. He supports me in terms of finance, he helps to look after our first- born child and also he does household chores like laundering and cooking at times when I am tired and just want to sleep. He encourages me to attend ANC and is always interested in knowing if the baby is doing fine or not (FGD 2).

Not only the husband, but also the extended family influence pregnant women accessing ANC. Six participants described the support they received from their extended families, relatives and in laws. They reported being accompanied to the ANC, looking after the other children, cooking food as well as helping with household chores whilst the participants attended ANC.

My in-laws are good. They do support me with gardening, laundering, feeding the chickens, cooking, and looking after the children. When I come for ANC, my mother in- law looks after the children. I just make sure that I leave them with food. At home they encourage me to eat plenty so that the baby grows healthy (Rita).

However, six participants had a different experience. They received less support from their husbands, families, and in-laws. Participants expressed their concern about the burden of doing all the household tasks alone despite being pregnant. The limited family support women experienced and difficulties in obtaining childcare led to missing antenatal care appointments. Anna described her frustration of not being assisted by her husband and in- laws.

My husband and in-laws are not so helpful. I do most of the work at home. I do the laundering, cooking, and attending to the needs of the children. I don't get enough rest (Anna).

Some women preferred living with their own families, while they are pregnant rather than living with their in- laws. Participants explained that in- laws are not very helpful, and they feel shame to accept assistance from their in-laws. Some in- laws ask for money in return for helping out with household tasks. Therefore, some participants prefer living with their family since they experienced support both financially and in assisting with household chores as well as do not ask for money or anything in return for what they have done.

We live in my village with my family because I prefer to live closer to my mother when I am pregnant. I feel more relaxed when I am living with my own family than with my in-laws. My family supports me and my children very well. They help me in taking care of my children and with the household chores. They would always want to know about my ANC visit dates so that they make sure that I get to the clinic early (Ruth).

The distribution of roles and responsibilities of men and women in families are culturally driven giving rise to gender-based power relations between husbands and wives. Most of the participants are from East New Britain and come from matrilineal societies where women take control and ownership of everything, especially the land. Although these societies are matrilineal, they are not matriarchal. While women have considerable power, they do not hold exclusive power within their nuclear families. Husbands are responsible for generating income for the family and have power over financial resources and decision making within the family. Men are the bread winners of the family, while the women are seen as being responsible for reproduction and household chores. The division of labor is explained by a participant as follows:

In my husband's place, most of the household chores are the responsibility of the women. This is according to our custom. He will do gardening, hunting, building of house and other men's work. It's against our custom for women to complain to their husbands for not attending to household chores (FGD 2).

Six participants mentioned they only received financial support from their husbands. Women do all the household chores despite being pregnant. Marie mentioned that her husband is always expecting to be served by her when coming home from work. He is not assisting with household chores, but he provides financial support.

I do most of the work at home. I do laundering, cooking and attending to the needs of the children. I don't get enough rest. He always says that he is tired. He went to look for money and household tasks is my responsibility. He expects me to get his food ready when he arrives home. He just comes eats his dinner and goes to bed He does not help to look after the children as well. I do that myself (Marie).

Culture and gender

Participants revealed that culture and gender related issues contributes to decision-making to access ANC services.

Since pregnant women are in a vulnerable state, they restrict their movements due to the fear of being cursed or attacked by sorcerers. Anna expressed her fear of sorcery, which leads to restrictions in her movement. She explained that she had been warned by her family about sorcery and the risk she takes when she moves from one place to another.

Yes, there is always fear of sorcery where I live. Now that I am pregnant, I do not move around freely as I used to when I was not pregnant. My family always tell me that there are jealous

people in the village that can curse me so that I may face complications during child birth. Every time I leave home to come to town or travel somewhere else, I am putting myself at risk of danger from the people that practise sorcery (Anna).

Cultural beliefs and practices often encourage women to consult a witch doctor rather than seeking help from a medical expert. One FGD participant mentioned of being under a sorcery spell. During the first months of her pregnancy, she was very sick and her family organized a witch doctor to treat her. Since she was controlled by the family and not allowed to leave her house, she missed her ANC appointment.

When I had my first- born child, I got very sick at around 3-4 months pregnant. My family got a witch doctor to come and see me. After checking me, the witch doctor said that I was under some kind of spell of sorcery. He continued to come and see me for about a week. I was not allowed to leave home that week. I was supposed to attend ANC but did not (FGD 1).

Despite the practice of sorcery, especially in the rural areas, participants have expressed urgency to attend the ANC. Although Marie feared sorcery, she still attended the clinic but took precautions, especially in regard to meeting people she does not know as well as leaving food or clothes outside her house.

I don't miss ANC because of fearing sorcery. I attend ANC, but like I said, I am very careful with whom I come across on my way to town. I don't just get food or anything from strangers that I do not know. In the night, I make sure that I do not leave things outside of the house especially clothes or waste foods (Marie).

Participants discussed their expected roles in the nuclear and the extended families. At the time of a bride price ceremony or a death of a relative, it is culturally unacceptable for women to leave the village so that they cannot attend ANC. If a woman leaves the village during these times, she is seen as being disrespectful to the customs and traditions of the society often leading to family disagreements and conflicts.

When there is a bride price ceremony taking place or if a relative die, as a woman married to my husband's family, I am expected to be present at the ceremony or the funeral/ haus krai helping out. I should not leave the house or the village. If I do that, then my husband and my in- laws will disagree because I am disrespectful to the custom and their family (FGD 2).

These cultural expectations of women within the societies are often power related. Women are obliged to follow cultural practices and expectations. They do not have a say whether they have different priorities for instance attending ANC. Serah expressed her frustration of not having any decision making power of whether to attend ANC or not.

I feel offended because I do not have a say in any of this decision-making. I have no right to choose whether to attend ANC or not. Even if I know that attending ANC is my priority. I feel that this is not right (Serah).

Disagreements between husbands and wives also arise from issues regarding women's cultural expectations. Participants discussed that husbands and wives often argue over priorities between the woman's health and cultural expectations. Husbands choose the cultural expectations of their pregnant wives' health concerns. While women decide to attend ANC despite of cultural expectations, this often leads to family conflicts. As a consequence, husbands use their power and refuse to provide financial support for the women to go for the ANC check-up.

I do argue with my husband regarding these responsibility issues. At one instance, he didn't want to give me money to attend ANC, just because it is against the custom. But later, he wanted to give me money but I was already upset so I didn't get the money, so I just stayed at home and didn't attend ANC (FGD 2).

Pregnant women do not only face gender issues within their families but lack of respect in the public places. Rita expressed her frustration rushing to get on a PMV and her concern over her safety.

Oh, I felt angry and upset, at least they should understand my situation and allow me to get on the PMV safely without bumping into me. This could cause accident to me and my baby if I get trapped and fall off. Because of that, when I see people rushing, I do not rush with them but wait for other PMVs so that I can get on safely (Rita).

Women's experience at the ANC

All participants spoke highly of the positive approach of the health personnel and expressed overall satisfaction with the care they received from the nurses. Fifteen women expressed satisfaction regarding having received the services that they felt were important as well as reassurance that their pregnancies were without complications. Rita was pleased with the nurses because they talked politely and advised her on how to look after herself and the baby. They also prayed with her, which gave her peace.

Since my first visit and up until now, I have experienced that the approach of nurses is very good. All the nurses that I have come across talked to me politely, they give me advice on how to look after myself and my baby and they even ask me if I have any questions for them to answer. They always pray with us, which gives me peace (Rita).

Five participants expressed satisfaction about being allowed to ask questions during examination procedures. They were ensured that their unborn babies were safe, and that their pregnancies were progressing normally. Ruby explained that she could ask questions for clarification and was made aware of the findings from the examinations. This type of approach encouraged her to come for the next appointment.

Privacy and confidentiality

Participants raised the issue of privacy and confidentiality at the clinic. They observed that curtains were put up around palpation beds to provide privacy. Fifteen participants stated that it was impossible to maintain privacy because the curtains were blown by the wind.

I've seen that, nurses put curtains to separate each bed. But when the wind blows the curtains or if the nurses are moving in and out, lifting the curtains, there is no more privacy, you can easily see another woman being examined on the other bed (Rita).

There were instances when the history of participants was taken in front of other women. Participants also raised concern that confidentiality was not maintained because of the palpation beds standing too close together. Rita reported that she was able to hear what the nurse was saying to the other pregnant woman on the bed next to her.

In terms of confidentiality, I can easily hear what the other nurse is saying to the other pregnant woman on the other bed next to me (Rita).

Fifteen participants revealed that being exposed to other women discourages them in a way to try and avoid being examined at the ANC. Ruby felt ashamed and a bit angry when she was seen by other women during her examination.

I felt ashamed and a bit angry. I don't want other people to look at me when I am being examined. It would be better if the clinic has separate rooms or cubicles where mothers can be checked individually (Ruby).

However, this sentiment was not shared by all participants. They did not feel ashamed since all women come to the clinic for the same reason.

I am not bothered if I accidently see another woman being examined or if I am seen by another woman during examination. Luckily, we are all women coming in with same thing as being pregnant (Marie).

Infrastructure of the ANC clinic

All participants have raised concern about the limited number of toilets at the ANC. The clinic has only one toilet for pregnant women, which is not enough to cater for the many mothers who come for ANC. Participants feel offended standing in a long line waiting for their turn.

There is only one toilet for all of us to use. We usually stand in line like standing in an ATM (Automatic Transaction Machine) line to go and use the toilet (Rita).

Furthermore, the cleanliness of the toilet and availability of toiletries was pointed out by participants. Participants told that the toilet was dirty and unpleasant for use and they had to bring their own toilet paper. This represents an additional cost for women, especially from rural areas, who struggle paying for transportation to come to the clinic.

The majority of the pregnant women come from rural areas where the idea of using a septic toilet is new since they have only the pit toilets. Marie complained about some women who do not know how to use a toilet and leave it dirty. She suggested if toiletries, mops, and detergents could be provided, women can clean their own wastes after using the toilet.

If you are the first person to use the toilet, the toilet is very clean. But then some women do not use the toilet properly so most of the time there will be waste left on the toilet seat, bowl or on the floor which is not healthy. There is no toilet paper provided in the toilet. No cleaning detergents or mops provided so that at least we can use to clean our wastes if we accidently drop it on the toilet seat, bowl or floor (Marie).

Waiting time and opening hours

Participants talked about the waiting time and the long health talks given each day. Women feel tired listening to same health talks given on family planning, which takes almost two hours. Ruby explained that the health talks take too much time whilst the actual clinic only opens from 10 am to 12 noon. She feels bored listening to the lengthy health talks, "so we have to wait that long until the actual clinic starts."

Furthermore, participants have also raised concern regarding long waiting times at the laboratory and at the Voluntary Counselling and Confidential Testing (VCCT) centre. Rita mentioned the long waiting time makes her feel tired, "have backache and hungry and the baby also starts to kick in my tummy making me want to urinate, but then, where will I go to use the toilet?"

Five participants addressed the short ANC hours from 10 am to 12 midday. Ruby pointed out that pregnant women who are employed, often want to come for a check-up during their lunch hour but the clinic closes at 12 midday. Women who come after 12 midday are sent home and advised to come back the next clinic day.

Discussion

The findings provide a picture of how gender-based power relations influence pregnant women's utilization of antenatal services regarding economic, socio-cultural and health provision issues encountered by individual woman.

This study revealed that gender-based power relations influenced the woman's ability to afford the cost of transport and the ANC services. Decision making is often mediated by the social norms of men and women within the societies where men are often regarded as the sole providers of the family. Scott et al. (2014) in a study in Sierra Leone described men's responsibilities includes working outside the home to bring income to support the family in terms of providing funds for health care.

The division of roles and responsibilities within families are mediated by cultural norms where women are responsible for housework. These cultural norms are often very strong, both within the nuclear family and the extended families that even when women are pregnant or feel unwell, they are still expected to attend to the household work (Morgan et al., 2017).

The decision regarding women's ability to access antenatal services is influenced by the intersection of gender-based power relations. Men as heads of their families, limit women's ability in accessing family resources as well as restricting their ability in making decision whether to attend ANC services or not (Elmusharaf, Byirne & O'Donovan, 2015). The unequal distribution of power in regards to the decision

making process restricts the autonomy of women, which contributes to limited negotiating power with their husbands to accessing ANC services.

However, despite gender-based power relations and constraining cultural structures women demonstrated action by attending ANC services. This shows the duality of structure and agency in the way women use their agency that enabled them to act and attended ANC (Kolasi, 2020).

In PNG's pluralistic health system, choosing to seek care from traditional healer rather than from a professional trained health care provider was closely associated to combating underlying causes of illness (Lepowsky, 1990; Eves & Kelly-Hanku, 2020). In the country, health and illness is conceptualized with spirits and sorcery (Andrew et al., 2014).

In this study, cultural beliefs and practices accept that women seek help from traditional healers rather than from medical experts. This is where lay theory and medical theory explanations intersect. Popey et al. (1998) pointed to the interconnection of place and lay knowledge of everyday life experience and its explanations of health and illness. Women in this study locate themselves within the places they inhabit and time, which influences how they should act. They have their own ordinary explanations of health compared to medical experts who recommend WHO guidelines to be followed. This is similar to a study in Nigeria were women lay notions in conceptualizing care reflected the social context of woman's experience and in particular places which determined how and what action to take (Izugbara & Wekesah, 2018).

The findings suggest that women were satisfied with the way healthcare workers approached them. All participants appreciated the attitude of the healthcare workers, which contributed to ANC attendance. Andrew et al. (2014) reported different experiences of women in Madang where women have been treated disrespectfully by healthcare workers.

Infrastructure issues were not only related to the unclean and insufficient number of toilets but limited space that compromises privacy and confidentiality at the antenatal clinic. These offended women and they felt ashamed and discomfort. These experiences were components in women's conceptualization of the quality of ANC.

Long waiting time had been reported to influence the level of satisfaction of the participants. The experience of participants with long waiting times demonstrated direct and opportunity costs (household, child care, income generation) can influence the number of visits of women to ANC during pregnancy (Andrew et al., 2014; Finlayson & Downe, 2013). Long waiting hours coupled with lengthy health education sessions influences whether women attend ANC. Participants experienced fatigue, backache, and even hunger whilst waiting longer than anticipated. These experiences of women are consistent with other studies in Sub-Saharan countries (Gong et al., 2019; Iliyasu et al., 2010).

Other factors influenced access to ANC echoed findings from other studies in PNG. Women who are employed find it difficult to access ANC services since the clinic operates only in the morning (Andrew et al., 2014).

Conclusions and recommendations

This study clearly indicates that economic, socio-cultural and health provision factors influence women accessing ANC services. Gender-based power relations are strongly associated with economic and sociocultural context of pregnant women, which affects utilization of ANC services during pregnancy and their cultural expectations within societies.

The findings of this study call for attention of the importance of lay knowledge in women's narratives of their life world. By grasping the interconnection of gender-based power relations with lay knowledge in the context of women's life world and belief of health and illness to improve access to and utilization of quality ANC services.

Based on these conclusions, there is a great need to address gender dynamics affecting pregnant women accessing antenatal services. This can be achieved through integrating gender into designing, implementing and evaluation of maternal health interventions.

There is a need for further research to explore gender-based power relations and lay explanations to health and illness, which influences pregnant women accessing antenatal services in PNG.

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