

Ante Natal Care (ANC) seeking behavior among women living in an urban squatter settlement: results from an ethnographic study

Sabeena Jalal¹, Nasreen Aslam Shah²

¹Harvard School of Public Health, Harvard University, USA; ²Centre of Excellence for Women's Studies, University of Karachi, Pakistan

Correspondence to: Sabeena Jalal, Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115, USA. Email: sjalalkhan@yahoo.com, sjkhan@hsph.harvard.edu

Abstract

Background: Pakistan's population is estimated to be 160,943,000. It ranks third among the ten high burden countries and accounts for up to 7% of worldwide neonatal deaths. According to the Pakistan's World Health Organization (WHO 2010) health profile, only 28% of Pakistani women have used ante natal care services (4 plus visits), whilst 39% of reported births in Pakistan had used skilled birth attendant services, whereas 59% fell within the WHO's regional average. There is also a significant disparity, reported by the WHO, in terms of inequity between the poor and the rich in the use of skilled birth attendant services: 16% and 77% respectively.

Objective: This ethnographic study explores the perceptions about the need for antenatal care (ANC) in a disadvantaged population in Pakistan.

Method: This is an Ethnographic study which makes use of standard methods such as non-participant observation, semi structured interviews, and documentary review. Data was collected over 14 months and was analyzed thematically. Key informants assisted in understanding the community norms. Open ended answer options were used in the questionnaire.

Setting: The community in this case was an urban squatter settlement by the name of Ghazi Goth, which is the neighborhood of the poor people.

Results: We found that 41% of the women did not receive ANC because of lack of financial support. 33% said that family did not support the decision. In 43% of the cases, the husband was the decision maker regarding where the delivery of the baby should take place. 31% of the respondents also reported that their mother-in-laws were the decision makers for the baby's delivery. Only 3% reported a self decision.

Conclusions: This a qualitative study which helps explore perceptions and attitudes of women towards ANC, through contextual data. The study shows that denied access to ANC services is a result of lack of resources, limited mobility and cultural factors.

Key words: ante natal care, urban squatter settlement, Pakistan, ethnographic study

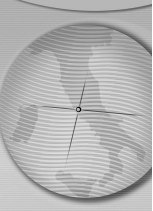
Introduction

Globally, about four million infants die in the first 28 days of life annually. More than one quarter of these neonatal deaths occur in the first 24 hours after birth and about three quarters occur in the first week of life [1,2]. The projected 3.2 million still births per year worldwide are not part of this mortality [3]. Almost the entire figure of neonatal deaths is observed in developing countries and typically in babies who are born within homes [4]. The highest neonatal mortality rates are seen in sub Saharan Africa. Even though in Asia the average neonatal mortality rates are lower than Saharan Africa, this region still accounts for over 60% of the expected worldwide sum, mainly because of the high fertility rate and

large population [5-7]. Hence, ante natal care is a service that could prove to be of high utility in such places.

Understanding Pakistan:

Pakistan ranks third among the ten high burden countries, and accounts for 7% of worldwide neonatal deaths [8]. Pakistan is one of the most populous countries with a population of an estimated 160,943,000 (WHO 2006) [9]. According to the World health organization (2010) only 28 percent of Pakistani women have utilized ante natal care services (4 plus visits) in Pakistan and this is much lower when compared with the WHO's regional average of 44,39% of births reported took place using the services of a skilled birth attendant, which is much lower than



the WHO's regional average of 59 percent. There is a significant disparity, noted by the WHO, between the poor and the rich, in the pattern of utility of services of skilled birth attendants: 16% and 77 % respectively [10]. Birth asphyxia accounts for 15% of deaths and neonatal sepsis is responsible for 12% of the deaths among children under 5 years of age in 2008. [10].

Squatter settlement (Goth)

Britannica describes *Katchi Abadi* (neighborhood of the poor) as an area where, "Many urban households are unable to pay rent for the cheapest form of available housing and live in shacks in makeshift communities known collectively as *katchi abadis*. Water supply and sewerage systems are inadequate, and in many areas residents have to share communal water taps. Inadequate urban transport is also a major problem [1].

Rapid urbanization and inadequate capability to cope with the housing needs of people in urban areas have contributed to the development of informal settlements. Living in these settlements often poses significant health risks [2]. Sanitation, food storage facilities and drinking water quality are often poor, with the result that inhabitants are exposed to a wide range of pathogens, and houses may act as breeding grounds for insect vectors. Cooking and heating facilities are often basic, with the consequence that levels of excessive exposures to indoor pollution may occur. Access to health and other services may be limited; overcrowding can contribute to stress, violence and increased problems of drugs and other social problems. Together, these pose special risks to children both during the prenatal period and after birth.

Karachi's *katchi abadi* population was estimated to be 7,070,000 in 2000 [11]. According to estimates published in a local newspaper in 2007, 7.5 million people in Karachi live in what are called *katchi abadis* [12], sprawling squatter settlements without sewers, drains or many other public services.

Ghazi Goth

It is located in the city of Karachi, alongside a main road. The location makes Ghazi goth attractive for settlers as mobility leads to better access to incomes. During the course of the study, the population investigated were taken from an area comprising 604 shacks. Out of this number, 118 belonged to Hindu families. The population demographics showed a rapid turnover. People here were mostly from the rural areas who had migrated to Karachi and settled here, as this settlement was close to

the city's periphery, and then moved to other locations in search of employment. The Muslim population comprised of various ethnicities: *Sindhis*, *Punjabis* and also a different race, that is, the *Afghanis*. They formed smaller clusters within the community. Our data showed that lifestyles and beliefs varied among various ethnicities. Our data showed that *punjabis* were the most well to do among all, and were more likely to send their children to school. *Afghanis* mostly worked as scavengers. *Sindhi* and *afghan* women were less likely to seek antenatal care due to financial and social reasons.

Housing: shacks are made out of any material that can be found, such as old wooden panels, scrap metal (like corrugated iron) and discarded building materials. They normally consist of only one or two small rooms in which an entire family can live, eat and sleep. This poor housing is tightly packed together and separated by narrow streets. Otherwise, people are forced to sleep in the open.

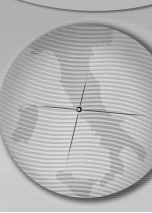
Services: the provision of basic services is scarce and almost non-existent. Houses lack electricity, clean water and sewage disposal. There is a lack of schools and hospitals.

Sanitation and Health: There is one water tap to serve the whole Goth and there are no proper toilets. Sewage often flows down the middle of the unpaved street. Rubbish is dumped on the unpaved streets because there is no collection service. Such conditions are a breeding ground for diseases and health problems like cholera, typhoid and dysentery.

Employment: the chances of finding employment in squatter settlements are quite slim. People try to work from home (this may involve selling food, wood, clothes or other homemade items) or doing informal jobs, such as cleaning people's shoes, doing daily wage labor jobs in construction, or scavenging. The average monthly income of the Ghazi Goth respondent sample showed that 56% earn between 10,000 (USD \$ 117.64 cents) to 15,000 Rupees (USD \$ 176.4). Only 11% earn above Rs 15,000 to Rs 20,000 (USD \$ 235.29). What was so surprising was that 6% said they earned less than Rs 5000 (USD \$ 58). (The USD conversion is using the current rates).

Objective

This community based study aims [1] to determine the antenatal care utilization and [2] identify the factors affecting the utilization of ante natal care services by the married women of the reproductive age group, residing in the urban squatter settlement of Karachi, called Ghazi Goth.



Methods

Study method

This is an Ethnographic study, a qualitative research. This non participatory method of study relies on observation and taking notes using semi structured questionnaires, in depth interviews, focused group discussions and documentary review. Unlike quantitative methods of research, ethnography relies on longer responses rather than simple “yes” or “no” answers of study participants.

Two questionnaires were designed. One was for the key informants and the other was for the sample of women, which comprised of open ended answer options regarding antenatal care service utilization. Key Informant Interviewing: Key informant questionnaires were unstructured, narrative interviews in which the respondent talked at length and in detail. The key informants described the demographics of the community. They introduced us to women and explained to them the purpose of this research. This helped build trust between the interviewer and the respondent, which is imperative for ethnographic data collection.

Sample

A randomly selected sample of 100 married women, residing in Ghazi Goth, participated in the quantitative survey. Informed consent was obtained from the women, to be a part of this study.

The main inclusion criterion for the in-depth interviews was age (should have reached menarche) and marital status (married women).

Widows, unmarried women and those who did not give consent, were excluded from the study.

Study period

The study period was 14 months. Some women dropped out of the study and some moved away during the study and were lost in follow up sessions.

Method of data collection

Data was collected after seeking permission from the leader of the Ghazi Goth to carry out this study at the field site. Data was collected through pre tested questionnaires. The questionnaire was developed after working in Ghazi Goth for two weeks and identifying two key informants. Key informants were women living within Ghazi Goth for at least two years, who therefore knew the local people and had information about the demographics of the place. The role of key informants was to help the interviewer to participate in daily data collection within the

local population. Key informants accompanied the interviewer during the first visit of every shack, and introduced her to the residents. An initial survey of the Goth took two weeks. Then a sample of 100 women was selected randomly. During the study period, 12 women left the study as they moved away and 2 dropped out. However, we recruited 14 more and maintained the sample of a 100. We picked a married woman of reproductive age group, from every third shack, who gave consent to be a part of the study.

A calendar helped keep a chart of daily activities such as meeting with key informants, scheduled interviews with the sample, pre tests, themes and focused group discussions.

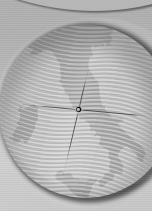
Informed consent was sought from the women included in the sample. The purpose of the research was explained and they were asked if they understood their role as participants. Confidentiality was assured to the participants and was maintained. Thematic data was collected by questionnaires. Six unstructured interviews of women on themes regarding their health, health seeking behavior, ante natal care seeking behavior and perception of the benefits and utility of Ante Natal Care (ANC) were conducted. If at any given point the woman felt uncomfortable, she was not pursued any further for the study. Respondents' habits, customs, and cultures were observed and noted. Contextual Inquiry was carried out. Semi structured questionnaires had open ended answers which were in their regional language and in sentences, rather than a ‘yes’ or a ‘no’.

Data management and storage

All the questionnaires, consent forms and notes were stored in a safe location. Initially there was a study proposal which helped develop the key informants' questionnaire. Key informant responses helped design a pilot questionnaire for the sample of women. This was pre tested and editions were made. Filed notes, hand drawn maps and illustrations, and a satellite image of the location of the Goth were stored. Data management also required topic guides which helped plan the conversations. All this was transferred to data sheets. Data was coded to maintain anonymity. Interview transcripts of focused group discussions was maintained.

Results

Following the initial survey of Ghazi Goth, the population was estimated to be 3870 inhabitants during the years between 2004 and 2006. The total number of shacks were 604. About 36% of the population was under 12 years of age,



19% between 20-30 years of age and about 14% between 12-20 years of age. *Sindhis* formed the major bulk of the population, at 47%, followed by *Afghanis* and *Punjabis*: 19% and 12% respectively.

Ghazi Goth is unique since it has diverse religious followings, residing within the same community. 2700 are Muslims, 706 are Hindus and 464 are Christians by faith. Mean family size of Muslims is 6.7; of Christians, 5.6 and of Hindus, 5.98. 54% of the families have between 6 and 10 children. 35% of the families have between 1 and 5 children and 11% have 11 or more. Ghazi Goth is located right next to the main University Road, and hence the inhabitants find it easier to take public transport. 68% of the people living in the Goth, travel by public transport. 8% walk to their work.

When evaluating perceptions towards the health seeking behavior of 100 women residing in Ghazi Goth, this study explored what kind of health services women utilized during the previous year when ill: 41% of respondents chose to go to *Dum Walay Baba* (Spiritual healer); 24% went to the hospital; 17% availed of the services of the lady health visitor; 14% went to a clinic and 4% received no treatment.

Regarding ante natal care (ANC) utilization, 41% of the women did not receive ANC because of lack of financial support. 33% said their family did not support the decision to get ANC. 13% said transportation was an issue. When asked about their preference for the delivery of their baby: 32% of the sample said they would want their baby to be delivered at a clinic, with a lady doctor or a skilled birth attendant. When asked about the knowledge of benefits of ANC: only 29% were aware of the benefits of ANC. When asked whether they received ANC during

their last pregnancy: 35%, that is, the majority of our respondents did not receive ANC. 30% of them did receive ANC and were 'aware' that they received ANC (4 plus visits). 13% went to a clinic. 11% went to a lady health visitor. When asked whether the women considered ANC to be good for their and their baby's health: 63% of the women felt that ANC would not be very beneficial. 31% however, felt that it was very beneficial for them (Table 1). When asked would the woman be willing to travel to a health care facility to receive ANC: the Majority, that is, 52% felt that receiving ANC at a health care facility is a good idea. In response to their perception about "dai" (unskilled birth attendant): 67% of the women felt that "dais" are able to handle any emergency during birth. 21% felt that 'dais' are not able to handle any emergency during the delivery process (Table 2). When asked about their husbands attitude towards ANC utilization: 41% said that their husbands were supportive in giving permission for ANC. 35% said that their husbands were against it. Interestingly, in 2% of these 35%, the mother-in-law was supportive of the woman seeking ANC and had the final say. In 43% of the cases, the husband was the decision maker about where the delivery of the baby should take place. However, 31% of the respondents also reported that their mother-in-laws were the decision makers for the baby's delivery. Only a mere 3% reported a self decision (Table 3).

Discussion

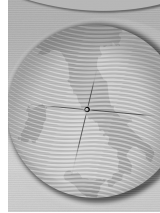
In Karachi, nearly 55% of the population lives in katchi abadis [13]. Women's underprivileged social position, which is often related to the economic value placed on familial roles, helps fuel

Table 1. Ante Natal Care status and attitude.

<i>In dept Interviews</i>	<i>Yes %</i>	<i>Answers in full sentences but negative: meaning a "No" %</i>	<i>In between a 'Yes' and 'No' %</i>
Do you think ANC is very beneficial for you?	31	63**	6
Those who received ANC in any of their pregnancy, was their husband very supportive of ANC?	41	35	24

* Note: Since it is an ethnographic study, answers were not simply 'yes' or 'no', rather they were complete sentences and explanations. Hence, their gist has been summarized here for the purpose of tabulation and summarization.

** 'Not very beneficial': women said so while describing how hard it will be for them to get the permission from their husband's and mother in law's and to arrange for transport to go to ANC center.



poor health, inadequate diet, early and frequent pregnancy, and a continued cycle of poverty. In Pakistan, where women are less educated and receive less information than men, and have less control over decision making and family resources, they are also less apt at recognizing health problems or to seek care. Investment in Women's health and nutrition promotes equity, widespread benefits for this generation and the next, and economic efficiency [14].

29% of the women were aware of the benefits of ANC utilization. 51% of the respondents had too little knowledge about ANC and were not completely aware of its benefits for themselves and for their child. 20%, however, had no knowledge at all. As only a few households within the Goth owned a television or a radio, access to knowledge would need community health workers and focused group discussions within the community.

Our representative sample of women revealed that 41 % of the participants did not receive ANC because of lack of financial support. 33% said their family did not support the decision to get ANC. 13% said transportation was an issue. Lack of financial resources and transportation pose economic barriers to a women seeking ANC. With more pressing demands like food and shelter, out of pocket ANC or a trip to the government hospital, even where the charges may be minimal,

would mean needing to take a day off from work and pay for her transportation, and this discourages her from seeking ANC even if she wants to. Also she may need to take someone with her, as she may not be allowed to go alone to the ANC center- so taking someone else, as chaperon, poses a double financial challenge. Permission from family generally implies permission from the husband and also from the mother-in-law.

35%, that is, the majority of our respondents did not receive ANC in any of their pregnancies. 30% of them did receive ANC and were 'aware' that they had received ANC (4 plus visits) during their last pregnancy. The Majority, that is, 52% felt that receiving ANC at a health care facility is beneficial for their health. 63% of the women were reluctant to utilize ANC services as it would mean convincing their family that they wanted ANC. The effort, in addition, to convincing and overcoming cultural norms, taking a day off from work and paying for transportation was an economic burden. 31% however, felt that it was very beneficial for them, and they had expressed the same opinion to their spouses.

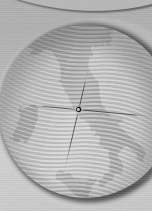
41% said that husbands were supportive in giving permission for ANC. 35% said that husbands were against it and therefore, it was immensely challenging to convince husbands of the utility of ANC. However, in 2% of these 35% of cases, the mother-in-law was in favor of ANC

Table 2. Women's preference for the place of delivery of their baby.

Prefer to deliver their baby at a hospital	51%
Prefer their baby to be delivered at a clinic, with a lady doctor or a skilled birth attendant.	32%
Prefer to deliver at home with a TBA (Traditional Birth Attendant)	12%
Women's knowledge of benefits of ANC	
awareness of the benefits of ANC	29%
Percentage of women who knew very little about ANC	51%
Percentage of women who had no knowledge	20%

Table 3. Person responsible for making the decision about the place of baby's delivery?

Husband	43
Mother in Law	31
Self	3
Other	23



utilization and had a final say. This shows that in seeking permission to access to ANC utilization, a woman needs either her husband's permission or mother-in-law's support. At times, a mother-in-law's decision can overrule a husband's decision. Most women are not economically independent and have poor communication with their spouses on matters pertaining to health seeking behavior, including ANC.

In 43% of the cases, the husband was the decision maker about where the delivery of the baby should take place. In Pakistani society, studies in 1997 showed that husbands are major decision makers in households regarding family planning [15,16]. However, 31% of the respondents also reported that their mother-in-laws were the decision makers for the baby's delivery. Only a mere 3% reported a self decision. This shows a significant role of the Pakistani mother in law in deciding a woman's choice in seeking ANC. Further studies could be done to determine whether this is the pattern in general health seeking behavior of women residing in low income neighborhoods like katchi abadis.

51% of our sample wanted to deliver their baby at a hospital. 32% said they would want their baby to be delivered at a clinic, with a lady doctor or skilled birth attendant. Only 12% preferred to give birth at home with a dai (non skilled birth attendant). This shows that most women were aware of better quality of care during labor that is provided for them at the hospital or by a trained midwife. Financial and social barriers provided hindrance in women seeking better maternity care.

67% of the women felt that "dais" were able to handle any emergency during birth. In this sample, during our conversations it became clear that it was a belief that had been promoted over years within the family. 21% felt that dais are not able to handle any emergency during birth. This was the case where women had witnessed or experienced some difficulty which had led them to being rushed to a hospital or to a clinic during the later months of pregnancy. This shows an area that needs to be worked upon in terms of awareness and utility of better health for mothers during their pregnancy.

Perinatal mortality rate in Pakistan is 59%, still birth rate is 22%, neonatal mortality rate is 57% [17]. Even after years of efforts by government and nongovernmental sectors to reduce newborn morbidity and mortality, inadequate antenatal care, home deliveries and unhealthy newborn care practices are highly prevalent. This leads us to important questions of why practices and behaviors have not changed [18,19].

Factors identified as determinants of this unmet

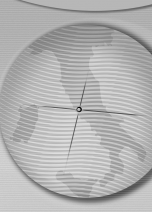
need have included access and quality of available health care services, perceived utility and benefit of ANC, social and familial opposition, especially from husbands, and a low perceived health risk when an unskilled birth attendant delivers babies. Culturally too, mother in laws appear to have a significant say in the health seeking behavior and ante natal care utilization by these women. The reason may be the lack of financial autonomy. Although, a number of these women worked, they still gave all their money to their husbands.

Limitations

One limitation was the size of the study. Qualitative study samples can result in reliable data which can be applied to broader populations [20]. However, it is also argued that even though the small sample design can yield contextually rich data, such designs are generally not appropriate when seeking statistical accuracy [21]. Due to the high turnover in population, a greater sample size was not within the scope of this research. For a true ethnographic study, there was a need to collect textual data. No micro computer based system of textual management nor text retrieval and management software programs such as ZyINDEX dtSearch, GOFER, NOTEBOOK PLUS< TEXTBASE ALPHA and ETHNOGRAPH were available. As such, notes were written and pictures taken, and hence then a pattern of observation was developed.

Conclusions

The representative sample of this study shows that in low income areas such as slums and Goths in countries like Pakistan, women are trained to be submissive to their husbands and hence have very little say in choices regarding health seeking behavior. New methods need to be devised which enable women to recognize this lack of choice so as to improve the seeking of better health care for themselves and their children, and initiate their empowerment to help them to make healthier choices. Some stages in attaining change in this behavior can be: (a) The woman does not recognize this as an issue and is not interested in change; (b) the woman sees this as an issue and considers a probable change; (c) the woman is convinced to change this status and makes a plan; (d) the woman goes through the plan; (e) the woman decides to utilize ANC services. Ante natal care service utilization benefits need to be highlighted to the women and their families. More focused group discussions should be done within the squatter settlements. It brings the community together, assists in sharing their views and learning. Medical camps could be



another way to reach out to these women. Street theatres could assist in making a woman aware of ANC benefits. Vocational training and capacity building for lady health workers and community health workers as skilled birth attendants may be helpful where community outreach is required. Community midwives can be given a permanent place in the health systems of the developing world as they have access to far reaching areas. Even TBA's (Traditional Birth Attendant Wata Satta i.e. a brother and sister married to another brother and sister. In exchange of each other) could be engaged, at least ad interim. They can be given some training and incentive to follow aseptic practices. This way, marginalized women living in slum areas, could also be included into the ANC utilizing population. Financial independence goes a long way in promoting confidence and hence rendering women capable of making better choices for themselves. This could be achieved through public and private partnerships. Raising

awareness, promoting better pre natal and post natal practices, improving accessibility and skill training generally for women to make them financially independent, all could be done through Non Governmental Organizations (NGOs) and government working together. Media involvement should be encouraged. Radio, television and news papers. It is interesting to note that some television sets were present in these shacks. TV can be used to promote and advocate behavioral change. The goth leader could convince the goth prayer area to promote and support ANC utilization by married woman. All this would assist in increasing ANC service utilization acceptance within the low income populations. This study focused on one settlement. Quantitative studies should be done with larger sample sizes, in order to form a database upon which health policy planners and government officials could rely. Without authentic data sets being made available, it is cumbersome to design any policy changes.

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