Quality of care: predictor for utilization of ANC services in slums of Aligarh

Saira Mehnaz, Ali Jafar Abedi, Shazia F Fazli, Zulfia Khan, Mohammed Athar Ansari

Department of Community Medicine JN Medical College, Aligarh Muslim University, Aligarh, Uttar Pradesh, India. Correspondence to: Ali Jafar Abedi, E-mail: alijafarabedi@gmail.com

Received December 16, 2015. Accepted February 13, 2016

Abstract

Background: Antenatal care (ANC) is the first necessary requisite for a healthy mother and a healthy child. But access to care is poor for women living in slums, particularly newly formed slums. Why women either do not access these services, or access them late, or suffer an avoidable adverse outcome despite timely presentation is related to the concept of quality of care. Respectful maternity care also is an integral aspect of good quality ANC.

Objectives: (1) To assess the quality of ANC received by women living in the newly formed urban slums of Aligarh (<10 years duration). (2) To document perception of respectful care as given to target population.

Materials and Methods: This cross-sectional community-based study was done in the newly formed slums of Aligarh city. A total of 347 women who had delivered within the last 1 year were identified for the study. One woman did not give consent and two women were not available during a second visit. Of them, 344 women from 63 slums who had delivered a live baby within the last 1 year formed the study population. The findings were entered on SPSS 17.

Result: Of the 344 women forming the study population, 86% were aged between 20 to 35 years, 60% were Muslims, 71.4% belonged to the other backward class (OBC) category, and 10.6% were scheduled caste. A poor quality ANC was received by only 54.9% women. Only 23.3% slum women had three or more ANC visits whereas 19.6% had single visits. Only 50% women got the required information in a satisfactory manner. Only 18.5% women said they were always treated with dignity and only 28% were respected for privacy.

Conclusion: The utilization of ANC services was low and the quality of services offered was poor. The women's perception to attitudes and behavior of health-care workers may be a major barrier for this low utilization of services. Newly formed slums may be more vulnerable among all urban slums.

KEY WORDS: Utilization, quality of ANC, perception of respectful care

Introduction

Globally, an estimated 211 million pregnancies and 136 million births occur every year.^[1] The number of live births in India is estimated to be 27 million.^[2] Antenatal care (ANC) is the first necessary requisite for a healthy mother and a

Access this article online							
Website: http://www.ijmsph.com	Quick Response Code:						
DOI: 10.5455/ijmsph.2016.16122015365							

healthy child. This is the key component for achieving Millennium Development Goals by 2015.

The rationale for providing ANC is to screen pregnant women to detect early signs of, or risk factors for, abnormal conditions or disease and to follow this detection with effective and timely intervention.^[4] Good ANC does more than just deal with the complications of pregnancy. It provides an opportunity to establish a birth plan,^[5] promotes a healthy lifestyle that improves long-term health outcomes for the woman, her unborn child and possibly her family.^[6] Good ANC also informs women and their families about the possibility of unexpected events, how to deal with them and seek help when appropriate.^[7,8] Women and their families can also learn how to improve their health, and equally importantly, how to take care of the new-born child.^[8] In that way, ANC also contributes to improving

International Journal of Medical Science and Public Health Online 2016. © 2016 Ali Jafar Abedi. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

the care and health of new-borns and children in the future. $\ensuremath{^{[9]}}$

The Guidelines for ANC given by the maternal health division of the ministry of health and family welfare are as follows:

Register every pregnancy within 12 weeks. Track every pregnancy by name for provision of quality ANC, skilled birth attendance, and postnatal services. Ensure four antenatal visits to monitor the progress of pregnancy. Give every pregnant woman tetanus toxoid (TT) injections and Iron Folic Acid (IFA) supplementation. Test the blood for hemoglobin, urine for sugar and protein at every visit. Record blood pressure and weight at every visit. Advise and encourage the woman to opt for institutional delivery. Maintain proper records for better case management and follow-up. Do not give a pregnant woman any medication during the first trimester unless advised by a physician.^[31]

Respectful maternity care is the need of the hour. A women needs to be given all the respect and dignity she deserves throughout pregnancy, at the time of childbirth and after that. It is basically the respect of her rights and choices through supportive communication, actions, and attitude.^[32] A growing body of research evidence, experience, and case reports collected in maternity care systems from the wealthiest to poorest nations worldwide paints a different and disturbing picture. In fact, disrespect and abuse of women seeking maternity care is becoming an urgent problem and creating a growing community of concern that spans the domains of health-care research, quality, and education; human rights; and civil rights advocacy.^[33]

Slums are described as compact areas with a population of at least 300 (60–70 households), living in poorly built, congested dwellings in an unhygienic environment. Infrastructure, sanitary, and drinking water amenities are usually lacking. In 2003, an UN expert group recommended a provisional operational definition based on inadequate access to safe water, inadequate access to sanitation and other infrastructure, poor structural quality of housing, overcrowding, and insecure residential status.^[11]

It has been unequivocally shown that utilization of antenatal and skilled delivery services improve pregnancy outcome. It has also been documented that access to care is poor for women living in slums, particularly newly formed slums. There are several reasons for this inaccessibility of urban slums to health-care infrastructure. These include inequitable distribution of facilities and/or infrastructure for primary health care and maternal health-care services, inadequate referral services, lack of human resource, and overburdened healthcare facilities.^[12]

The presence or existence of ante-natal services does not guarantee its utilization. Neither does the use of these services always imply positive outcomes. Why women either do not access these services, or access them late, or suffer an avoidable adverse outcome despite timely presentation is related to the concept of quality of care.^[13] This study is a part of a larger study carried out over a period of 2 years. The data were analyzed with following objectives:

- 1. To access the quality of ANC received by women living in the newly formed urban slums of Aligarh (<10 years duration).
- 2. To document perception of respectful care as given to target population.

Materials and Methods

Study Area

District Aligarh, is one of 70 districts in the State of Uttar Pradesh (UP). Aligarh city is situated at a distance of 131 km (81 miles) from Delhi in the plains between the Ganges and the Yamuna rivers and has a population of 874,408. This study was carried out in Aligarh city.

According to the District Urban Development Authority (DUDA), there are 128 registered slums with a total population of 380,776 in the city and an unknown number of unregistered slums. As per EHP report, 52.42% urban population resides in slums. Over a period of time, some of the slums have developed into colonies. Additionally, many new slums have mushroomed.

Health-Care Infrastructure

Aligarh city has one tertiary care hospital (JNMC, AMU) and three large secondary care government hospitals, namely the District Hospital, Deen Dayal Hospital, and the Medical College Hospital. The city also has a network of 11 Urban Health Posts (HPD) which provide primary and in some instances secondary health care to the general population.

Private sector has a strong presence and provides services through a number of private hospitals, nursing homes, and private clinics. In addition, as per the list provided by UNICEF, there are approximately 587 non-registered private doctors catering to a large urban slum population in the city. A number of practitioners of alternate systems of medicines (namely homeopathy, ayurvedic, and unani system) also have private clinics in the city [Figure 1].

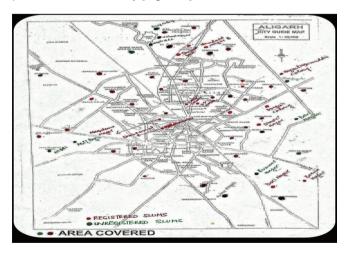


Figure 1: Map of Aligarh city

Sample

Newly formed slums were identified during the formative period of survey. Initially, help was taken from the district authorities to identify the slums. House-to-house visits were made and slums or clusters where families were living for less than 10 years were identified and listed. These newer slums were selected because unlike the older ones they still had not developed a firm foothold to the place of migration. At the same time, women who had delivered within the last 1 year were also identified and listed. Snow balling technique was used to purposively identify the newly formed slums and women who had a live birth within the last 1 year.

A total of 347 women were identified for the study. The purpose of study was explained in each case and verbal consent taken for interview. Care was taken to ensure privacy and the interview was conducted in a friendly and open manner. The findings were entered on a pretested and piloted form. One woman did not give consent and two women were not available during a second visit. Of all, 344 women from 63 slums who had delivered a live baby within the last 1 year formed the study population. The findings were entered on SPSS 17 and on Atlas Ti and analyzed.

Result

Of the 344 women forming the study population, 86% were aged between 20 and 35 years, 60% were Muslims, 71.4% belonged to the other backward class (OBC) category and 10.6% were scheduled caste.

Antenatal Care

Antenatal Checkup in Slum Clusters

At least one antenatal visit was made by only 54.9% pregnant women. Ministry of Health and Family Welfare recommends at least four antenatal visits during pregnancy. Four or more visits were made by 14.9% women. Majority of women had two visits (15.5%), or only one visit by 37 (10.5%) [Tables 1 and 2].

Looking at the quality of care for any antenatal visit, as per the guidelines of Ministry of Health and Family Welfare,

Table 2: Quality of antenatal care taken (N = 189)

it was found that height and weight were measured only for 11.6% and 44.4% women, whereas more than 30% did not undergo any BP measurement, hemoglobin estimation, or urine examination. However, 89.9% women had received TT injections in their pregnancy period, of them only 69.3% got two doses of tetvac. Of the total women who availed ANC services only 55% received IFA tablets. Of these, 44.4% received 100 tablets and 24.3% received 30 tablets whereas others received IFA tablets in variable amounts.

Respectful Care

Respectful care is said to be present if women (clients) are given the appropriate heath education and other information in a respectful manner, and their dignity and privacy is respected at all times. The clients would then have a subjective perception of having been given good and respectful care.

In Figure 2, we can very well see that only 50% women got the required information and health education in a satisfactory manner, whereas 15.3% of them did not receive any information at all [Table 3].

Only 18.5% women were always treated with dignity by the concerned care giver during treatment, whereas 32.7% of them were sometimes or never treated with dignity. The caregiver always respected the privacy of the females in only 28% of the study population; on the other hand 32.3% females complained that their privacy was not respected by the concerned person.

Table 1: Frequency of ANC visits (*N* = 344)

Number of visits	Frequency	Percentage		
1 visit	37	10.8		
2 visits	53	15.5		
3 visits	44	12.7		
4 visits	24	6.9		
>4 visits	31	9.0		
No ANC	155	45.1		
Total	344	100		

	Y	es	No		Total	
	No.	%	No.	%	No.	%
Height Measured	22	11.6	167	88.4	189	100
Weight Measured	84	44.4	105	55.6	189	100
BP Measured	124	65.6	65	34.4	189	100
Haemoglobin Measured	127	67.2	62	32.8	189	100
Urine Examined	124	65.6	219	34.4	189	100
Abdominal Examination done	156	82.5	33	17.5	189	100

International Journal of Medical Science and Public Health | 2016 | Vol 5 | Issue 09 1871

	Perception of women									
	Always		Usually		Sometimes		Never		Total	
	No	(%)	No	(%)	No	(%)	No	(%)	No	(%)
Respect of dignity	35	18.5	92	48.6	33	17.4	29	15.3	189	(100)
Respect of privacy	53	28	75	39.7	23	12.2	38	20.1	189	(100)

Table 3: Perception of women regarding the respect of their dignity and privacy.

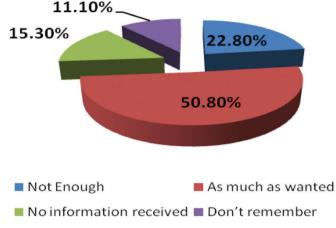


Figure 2: Perception of pregnant women on information provided them on self-care

Discussion

The antenatal coverage in this newly formed urban slum is very poor. It is poorer than the NFHS-III data for UP which is reported to be 66%.^[14] Other studies from UP and from Delhi have a range of coverage from 61.7% to 80%. In the study by Anjali Jain et al. on quality of antenatal services in district Agra report 61.7% women living in urban slums received antenatal services.^[17] In the urban slums of south Delhi, the utilization of ANC services was found to be more than 80%.^[18] 76% respondents received ANC in another slum of Delhi as reported by Agarwal et al., Awasthi et al., Nandan and Misra.^[15, 16, 19] It is hypothesized that newly formed slums (<10 year duration) are more disadvantaged than other settled and notified slums and thus have a poorer coverage for antenatal and other health services.

Comparing the quality of care in this study with a similar study in an urban slum of Dhaka city, we can see that although the quality of care was still poor, it is better than this study. Thus, 64.3% women received ANC, 57.2% had their weight taken, height was measured in 35.8%, blood pressure was taken in 56.3% women and urine was tested in 36.6% women during the last pregnancy.^[20]

The attitudes and behavior of health-care workers can affect patient care has long been recognized. For example, Aubel et al. found in a study aimed at improving management of diarrhea in Sudan that negative health-care worker attitudes toward mothers, traditional healers, and home interventions created communication barriers that affected care. Thompson,^[24] in her paper, 'Safe motherhood at risk?' emphasised the importance of midwives' attitudes and urged midwives to treat childbirth traditions with respect and to offer women dignity.

Freedman et al.^[25] and Van Den Broek and Graham^[26] have called for as much attention to be given to assessing the quality of implementation as to evaluating the efficacy of maternal and newborn health interventions. Van den Broek and Graham point out that two components of care are important: the quality of the provision of care – the service and the system; and quality of care as experienced by users. They note "The use of services and maternal health outcomes are the result not only of the provision of care may be deemed of high quality against recognised standards of care but unacceptable to the woman, her family and the community".^[26,27]

There has also been a growing appreciation of the importance of improving the quality, as well as the coverage, of health care more generally in developing countries. The World Bank publication "Disease Control Priorities in Developing Countries (2006)" includes a chapter on "Improving the quality of care in developing countries".^[24] One of the Institute of Medicine's six "elements of quality" is "Patent centeredness – Is patient care being provided in a way that is respectful and responsive to a patient's preferences, needs, and values?"^[28]

Consideration of the attitudes and behavior of maternal health-care providers (MHCPs) is central to a human rightsbased approach to reproductive health.^[29, 30] The significance of respect, privacy, dignity, freedom from discrimination, and confidentiality in health-care settings as basic human rights was emphasised at the 1994 International Conference on Population and Development.

Conclusion

The utilization of ANC services was low in our study, even lower than average for the UP. Even those who availed the ANC services were not provided with good quality care where all the necessary examinations and investigations were carried out. The required four antenatal visits were completed by a small percentage of women. Overall the ANC coverage was poor and of an unsatisfactory quality.

An important factor that could be attributed to this poor performance was the vulnerability of newly formed slums which are usually non-notified and where the attitude and behavior of health givers has an impact on the quality of care given.

Although there has been significant progress in reducing preventable maternal deaths and disability, the pace is too slow to achieve the Millennium Development Goal 5 target of reducing maternal deaths by three-quarters by 2015, especially in low- or middle-income countries. There has also been a growing appreciation of the importance of improving the quality, as well as the coverage, of health care more generally in developing countries. Consideration of the attitudes and behavior of MHCPs is central to a human rights-based approach to reproductive and maternal health.

The attitudes and behavior of health-care workers can affect patient care has long been recognized and there are increasingly calls for more attention to be given to assessing and improving interpersonal skills as part of addressing the quality of care.

Acknowledgement

We thank the Indian Council of Medical Research, New Delhi.

Funding

This study was funded by the Indian Council of Medical Research, New Delhi.

References

- World Health Organization (WHO). The 2005 World Health Report, Make Every Mother and Child Count. Geneva, Switzerland: WHO, 2005.
- 2. State of the World's Children' Report 2010. UNICEF.
- WHO/UNICEF/UNFPA. Maternal mortality in 2000: estimates developed by WHO, UNICEF and UNFPA. Geneva, Switzerland; 2004.
- Lumbiganon P, Winiyakul N, Chongsomchai C, Chaisiri K. From research to practice: the example of antenatal care in Thailand. Bull World Health Organization 2004;82:746–9.
- 5. WHO. WHO antenatal care randomized trial: manual for the implementation of the new model. Geneva, Switzerland: World Health Organization, 2002.
- Glasier AF, Logan J, MaGlew TJ. Who gives advice about postpartum contraception? Contraception 1996;53:217–20.
- Whitford HM, Hillan EM. Women's perceptions or birth plans. Midwifery 1998;14:248–53.
- Pasinlioglu T. Health education for pregnant women: the role of background characteristics. Patient Education and Counseling 2004;53:101–6.
- 9. Zuniga de Nuncio ML, Nader PR, Sawyer MH, De Guire M, Prislin R, Elder JP. A prenatal intervention study to improve timeless of immunization in Latino infants. J Commun Health 2003;28:151–65.
- UN-Habitat (2007): Press Release on Its Report The Challenges of Slums: Global Report on Human Settlements, 2003.
- Khan Z, Mehnaz S, Khalique N, Ansari MA, Siddiqui AR. Poor perinatal care practices in urban slums: possible role of social mobilization networks. Indian J Commun Med 2009;34(2):102–7.
- Khan Z, Mehnaz S, Khalique N, Ansari MA, Siddiqui AR. Existing practices and barriers to avail maternal healthcare services in two slums of Aligarh. Health Popul Perspect Issues 2009;32(3),113–23.
- Hulton LA, Mathews Z, William Stones R. A framework for the evaluation of quality of care in maternity services. University of Southampton, 2000.

- NFHS-III (National Family Health Survey-II), International Institute for Population Sciences, Mumbai, India, 2005-06. pp. 191–222.
- Awasthi S, Nandan A, Mehrotra AK, Verma P. Maternal care service utilization in urban slum of district Agra. Indian J Commun Health 2008;20(1):12–7.
- Nandan D, Misra SK. Baseline Situation Analysis Survey in two blocks of District Agra, UNICEF supported community based Maternal Child Health and Nutrition Project, Agra, 2000.
- 17. Jain A, Jain A, Gupta SC, Misra SK. Quality of antenatal services in district Agra. Indian J Prev Soc Med 2011;42(1).
- Sangita, Bir T, Dhar N, Mohan U. Socio-economic dynamics and utilization of antenatal care services in urban slum of south Delhi. Ind J Sci Res Tech 2014;2(5):51–8.
- Agarwal P, Singh MM, Garg S. Maternal health-care utilization among women in an urban slum in Delhi. Indian J Commun Med 2007;32:203–5.
- Kabir R, Hafiz T, Khan A. Utilization of antenatal care among pregnant women of Urban Slums of Dhaka City, Bangladesh. IOSR J Nursing Health Sci (IOSR-JNHS) 2013;2(2):15–19.
- Mugo NS, Dibley MJ, Agho KE. Prevalence and risk factors for non-use of antenatal care visits: analysis of the 2010 South Sudan household survey. BMC Pregn Childbirth 2015;15:68. doi:10.1186/s12884-015-0491-6.
- 22. Hazarika I. Women's reproductive health in slum populations in India: evidence from NFHS-3. J Urban Health 2010;87(2):264–77.
- Aubel J, Rabei H, Mukhtar M. Health workers' attitudes can create communication barriers. World Health Forum 1991;12(4):466–71.
- 24. Thompson A. Safe motherhood at risk? Midwifery 1996;12:159–64.
- 25. Freedman LP, Graham WJ, Brazier E, Smith J, Ensor T, Fauveau V, et al. Practical lessons from global safe motherhood initiatives: time for a new focus on implementation. Lancet 2007;370:1383–91.
- Van den Broek N, Graham W. Quality of care for maternal and newborn health: the neglected agenda. BJOG 2009;116(Suppl. 1): 18–21.
- Peabody JW, Taguiwalo MM, Robalino DA, Frenk J. Improving the quality of care in developing countries. In: *Disease Control Priorities in Developing Countries*, 2nd edn, Jamison DT, Breman JG, Measham AR, et al. (Eds.). Washington, DC: World Bank, 2006.
- 28. Institute of Medicine. *Crossing the Quality Chasm*. Washington, DC: National Academy Press, 2001.
- 29. International Conference on Population and Development– Programme of Action. UNFPA, 1995. Available at: http://www. unfpa.org/public/site/global/publications/pid/1973
- UNFPA and Harvard School of Public Health. A Human Rights-Based Approach to Programming: Practical Information and Training Materials. 2010. Available at: http://www.unfpa.org/ public/publications/pid/4919.
- 31. http://www.nhp.gov.in/sites/default/files/anm_guidelines.pdf
- https://www.ghdonline.org/uploads/Respectful_Maternity_Care_ Toolkit_Postcard.pdf
- http://www.who.int/woman_child_accountability/ierg/reports/ 2012_01S_Respectful_Maternity_Care_Charter_The_Universal_ Rights_of_Childbearing_Women.pdf

How to cite this article: Mehnaz S, Abedi AJ, Fazli SF, Khan Z, Ansari MA. Quality of care: predictor for utilization of ANC services in slums of Aligarh. Int J Med Sci Public Health 2016;5:1869-1873

Source of Support: Indian Council of Medical Research, New Delhi. Conflict of Interest: None declared.