

Original Research Article

Awareness of the patterns of delivery in urban slums of Ahmedabad city

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ABSTRACT

Background: The field of medicine has changed over the years owing to the constant scientific advances and research. From a time when spontaneous vaginal delivery used to be the norm, to now, where the rates of Caesarean deliveries seemed to be increasing, obstetric care has evolved considerably. Several healthcare initiatives and schemes have been framed for the betterment of the female reproductive health in recent times. It is important to understand both medical as well as socio-cultural factors that have caused this increase in the caesarean births. This study was conducted keeping in mind this trend and to find out the level of awareness regarding patterns of deliveries that factors into this trend.

Methods: Cross – sectional study was done in women residing in an urban slum of Ahmedabad in February 2014. 68 consenting females were randomly selected for the study from the slum of 'Madi no Kuvo'.

Results: Majority of females (69%) were from age group 20-30 years. With a total number of 123 deliveries counted within the 68 females interviewed 67% were normal vaginal deliveries. 63% of surveyed women had deliveries at government hospital as civil hospital is nearby localities surveyed and cost incurrence was there in about half of deliveries while 27% deliveries occurred at private hospitals.

Conclusions: Majority of women would prefer to have normal delivery whenever it is possible. Majority of people were unaware about different government schemes to help females during pregnancy.

Keywords: Awareness, Type of delivery, Government schemes, Preferences

INTRODUCTION

Child delivery is a multi-dimensional process with physical, emotional, social, physiological, cultural, and psychological dimensions. Attitudes towards labour pain are associated with physical, psychological, environmental, and supporting factors, which greatly affect the decision about mode of delivery. Culture has a significant impact on people's perceptions and attitudes towards labour pain, definition of labour pain, coping mechanisms against pain, and related behaviours. One of

the main goals of every medical team, dealing with childbirth, is performing a safe delivery.¹

Spontaneous vaginal delivery (SDV) is the most common type of childbirth and is the natural birth process. The foetus passes through the birth canal and is delivered through the vagina with or without medical assistance. Some unfavourable conditions such as cephalo-pelvic disproportion, foetal distress and abnormal presentations may prevent the natural birth process and thus require medical interventions. Usually, the presence of such

conditions will require the use of procedures such as caesarean section, vacuum extraction and forceps delivery.

Scientific advances, social and cultural changes, and medico-legal considerations seem to be the main reasons for the increased acceptability of caesarean sections. Caesarean section is, however, associated with increased risks to both mother and child. It should only be performed when it is clearly advantageous. In fact, the consensus around the indications for caesarean section has changed in many countries, now including psychosocial factors such as anxiety about the delivery, or even the mother's wish to have a caesarean section in the absence of any medical indication. Nevertheless, the reasons for increasingly liberal attitudes toward caesarean section are diverse and not always easily discernible.²

A number of Government Schemes and Policies were framed for making healthcare accessible to all sections of the society. A lot of these healthcare programs focus on providing healthcare benefits to women and children.

National rural health mission (NRHM)

The national rural health mission (NRHM) is an initiative undertaken by the government of India to address the health needs of underserved rural areas. Founded in 2005 by the Indian Prime Minister, the NRHM was initially tasked with addressing the health needs of 18 states that had been identified having weak public health indicators. The thrust of the mission is on establishing a fully functional, community owned, decentralized health delivery system with inter-sectored convergence at all levels, to ensure simultaneous action on a wide range of determinants of health such as water, sanitation, education, nutrition, social and gender equality, institutional integration within the fragmented health sector was expected to provide a focus on outcomes, measured against Indian public health standards for all health facilities.

Janani suraksha yojana (JSY)

It is a safe motherhood intervention under the national rural health mission (NRHM) being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. Janani Suraksha Yojana was launched in April 2005 by modifying the National Maternity Benefit Scheme (NMBS) and is being implemented in all states and Union territories with special focus on low performing states.

Janani shishu suraksha karyakaram (JSSK)

Government of India has launched Janani Shishu Suraksha Karyakaram (JSSK) in 2011. The scheme is estimated to benefit more than 12 million pregnant women who access Government health facilities for their delivery. Moreover it will motivate those who still choose

to deliver at their homes to opt for institutional deliveries. It is an initiative with a hope that states would come forward and ensure that benefits under JSSK would reach every needy pregnant woman coming to government institutional facility. All the States and UTs have initiated implementation of the scheme.³

Chiranjeevi yojana

The Government of Gujarat aims to stabilize its population growth by reducing the Fertility rate, lowering Infant mortality rate and maternal mortality ratio. For reduction of maternal mortality Govt. of Gujarat launched scheme called Chiranjeevi Yojana (CY) in December 2005. Chiranjeevi Yojana scheme proved as an exemplary scheme in the area of Public Health which has contributed significantly in improving the access to Institutional deliveries for marginalized section of the society by reducing the maternal deaths. Under the scheme, the government would enter into a contract with the private provider to cater to institutional services for both normal and complicated delivery including C-Sections operation and blood transfusion to targeted group.⁴

Mukhyamantri amrutam yojana

To address the key health related vulnerabilities faced by the below poverty line (BPL) population in the Gujarat, Mukhyamantri Amrutam "MA" Yojana was launched in 2012 by the Government of Gujarat. All beneficiaries can avail cashless quality medical and surgical treatment for catastrophic illnesses related to: cardiovascular diseases, renal diseases, neurological diseases, burns, poly-trauma, cancer (malignancies), neo-natal (newborn) diseases, knee and hip replacement & kidney, liver and kidney + pancreas transplantation which cover 698 defined procedures along with their follow ups.⁵

The determinants of patterns of delivery are very complex and include not only clinical indications, but also economic and organizational factors, the physicians' attitudes toward birth management, and the social and cultural attitudes of women. Most clinical indications are not absolute and many are very subjective and culture-bound, so there is significant variability among hospitals and countries with respect to Caesarean delivery rates for particular medical indications. Knowledge of caesarean delivery determinants is a first step in the effort to reduce unnecessary Caesarean deliveries.⁶

The study was conducted keeping this in mind and with the broader objective to evaluate the level of awareness and education regarding the types of childbirth in an urban slum of Ahmedabad city. Specific Objectives include:

1. To find out the number of caesarean section and normal vaginal deliveries.
2. To find out the place of delivery and the cost incurred.

3. To determine the awareness regarding government schemes and its role in influencing elective caesarean section.

METHODS

Research design and population study

This data was obtained by a cross-sectional study of the women residing in the urban slum area of Ahmedabad city. The area surveyed was a locality called 'Madi no Kuvo' which was chosen because of its proximity to the Civil Hospital, Ahmedabad and our convenience. The study was done during February 2014 as a part of the Community Medicine posting in the B.J Medical College, Ahmedabad.

Informed verbal consent was taken from all the women who have participated in this study. Of the 132 women approached during the given time period, 68 women chose to participate in the survey.

Data collection and analysis

The data for this study was derived from a predesigned semi-structured questionnaire. The questionnaire was designed in a locally understandable language and included demographical information. The questionnaire accounted for economical, cultural and social factors that were considered as determinants in their decision making process of the choice of delivery. Various healthcare schemes and initiatives were included in the questionnaire to check for the level of awareness within the study population.

Data entry and analysis were done using Microsoft Excel version 2007. The study participants were categorized based on their age, literacy level and economic status.

RESULTS

The study group consists of 68 consenting females selected from the urban slum area of Ahmedabad.

Table 1: Basic profile of the study group (n=68).

Sr no.	Variables	Number of females (%)
1.	Age (in years)	
	<20	4 (6)
	20-30	47 (69)
	>30	17 (25)
2.	Education	
	Illiterates	9 (13)
	<8 th standard	30 (44)
	>8 th standard	29 (43)
3.	BPL card	
	Number of BPL card holders	17 (25)
	Number of non BPL card holders	51 (75)

Table 1 shows that majority of females (69%) were from age group 20-30 years. Very few females (13%) were illiterates. Majority of females (75%) were non BPL card holders.

Table 2: Past delivery details.

Sr. no.	Types of previous delivery	Number (%)
1.	Normal vaginal delivery	82 (67)
	Caesarean section	41 (33)
	Total number of previous deliveries	123
2.	Place of delivery	
	Government hospitals	78 (63)
	Private hospitals	33 (27)
	Non institutional deliveries	12 (10)
3.	Whether cost was incurred in previous deliveries	
	yes	64 (52)
	No	59 (48)
	Total number of previous deliveries	123

Table 2 signifies that past delivery type of females is in 2:1 ratio of normal: vaginal delivery. Majority of deliveries (63%) were in government hospitals, 27% in private hospitals while 10% deliveries were non institutional. 52% females incurred cost in their previous delivery type.

Table 3: How many females believed severe blood loss can occur in a particular type of delivery?

Type of delivery	No. of females believing there is a risk for severe blood loss (%)
Vaginal	15 (22)
Caesarean	21 (31)

Table 3 shows that 53% women considered blood loss during delivery as a significant factor impacting their choice of delivery, 31% of which believed that chances of blood loss were greater in a Caesarean Section.

Table 4: Do females consider cosmetic factors while selecting type of delivery?

Answer	No. of females (%)
Yes	6 (9)
No	62 (91)

Table 4 shows that 91% females don't consider cosmetic factors like scar formation while choosing a type of delivery.

Table 5: How many females consider astrological reason when it comes to selecting a type of delivery?

Answer	No. of females (%)
Yes	7 (10)
No	61 (90)

Table 5 shows that majority of females (90%) do not consider astrological reasons while selecting type of delivery.

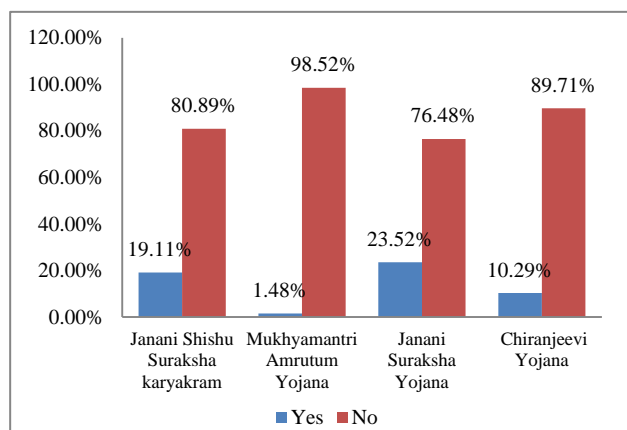
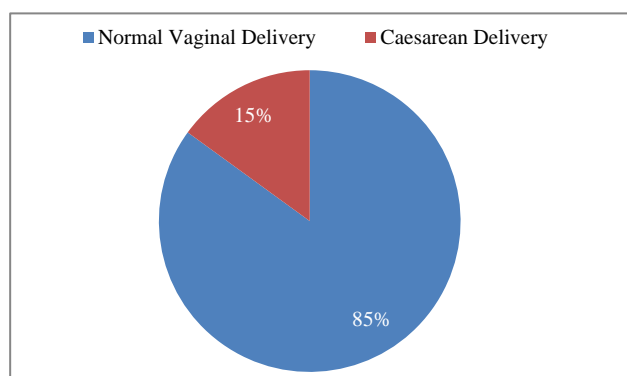
**Figure 1: Awareness regarding different government schemes.****Figure 2: Preference of type of delivery.**

Figure 1 indicated that the general awareness regarding Government schemes was low where only 24% were aware about the Janani Suraksha Yojana and 19% being aware of Janani Shishu Suraksha Karyakram.

Figure 2 signifies that 85% women would prefer to have a normal vaginal delivery if not medically contraindicated.

DISCUSSION

Obstetric care in the recent times has seen a considerable change, especially in the methods of childbirth. According to WHO published guidelines in 1985 which were revised in 1994, the proportion of caesarean births

should range between five and fifteen percent.⁷ In our study, out of a total of 123 deliveries, 33% deliveries were caesarean sections. This included both elective and medically indicated caesarean sections. The proportion of private and charitable facility births delivered by caesarean section which were 73% in Bangladesh, 30% in rural Nepal, 18% in urban India and 5% in rural India as published by Neuman et al.⁸ These comparisons shows the wide variation in the caesarean delivery rates and the fact that there are multiple factors that affect this obstetric trend.

The healthcare system has become more accessible over time, and in the current scenario, majority of the childbirths happen in the hospitals, with the help of a skilled physician. Our study showed that 90% of these deliveries were Institutional as compared to the study by Neuman et al which stated that Institutional delivery rates varied widely between settings, from 21% in rural India to 90% in urban India.⁸ the measure of the institutional deliveries is also a measure of the success of healthcare policies and their implementation.

Keeping in mind the economical situation of the rural and underprivileged population, a lot of innovative schemes and healthcare benefit programs were introduced in the past few decades. A lot of these aimed at improving the health of women and children, especially reproductive health. Janani Suraksha Yojana and Janani Shishu Suraksha Karyakram are both government sponsored programs that provide cash assistance for the medical care focusing on women during child delivery and infants born in government health institutions. The level of awareness regarding Janani Shishu Suraksha Karyakram was found to be 19% in comparison to 59% awareness found in Aditi Chandrakar et al study.⁹ The awareness regarding Janani Suraksha yojana in the urban slums found in our study was 24% in comparison to 79% in rural areas and 59% in urban areas as per the Sharma Parul et al study.¹⁰ Efforts should be made to increase the awareness in the community in order for them to avail the healthcare benefits and to ultimately improve reproductive health.

Interactions with the women who participated in the survey provided an insight into their understanding of the types of childbirth. The Preference of type of delivery in our study was found to be 85% for normal vaginal delivery in comparison to 85% and 12% preferred spontaneous vaginal delivery (SVD) and SVD with epidural anaesthesia respectively in Williams Walana et al study.¹¹ Taking into consideration both economical, social and cultural factors, it was seen that majority of the women preferred to have spontaneous vaginal deliveries if not medically contraindicated.

CONCLUSION

Majority of the women interviewed were within the age group 20-30 years educated upto 8th Standard. The

proportion of deliveries were seen in the ratio 2:1 normal vaginal to caesarean section. Majority of the deliveries were Institutional despite low levels of awareness regarding Government schemes and policies benefiting them.

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