Original Research Article

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Health profile of pregnant women attending urban health centre in Hyderabad, Telangana, India

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ABSTRACT

Background: Maternal and child mortality is the outcome of multiple factors. Current maternal mortality in India is 254 per 100,000 live births. Improving the maternal and child health is an important public health goal of government of India. To prevent unwanted outcome of pregnancy, antenatal care (ANC) is most important method for early detection and prompt treatment of complications.

Methods: A cross sectional study was conducted among pregnant women attending ANC clinic at urban health centre during September 2015 to November 2015. A pre tested semi-structured questionnaire was used for data collection. Data was collected from 102 pregnant women attained ANC clinic during study period. The data was compiled and analyzed using appropriate statistical tools.

Results: In present study majority (46%) of pregnant ladies belong to 20-25 years of age group and 26% had consanguinous marriage. In our study gravida 3, gravida 4 and gravid 5 were 29%, 12% and 5% respectively. 52 % of pregnant ladies had 3 ANC visit, almost 62% of pregnant ladies had done haemoglobin examination and 57% blood grouping testing. Pregnancy outcome were live birth in 82.66 % and abortion in 16.69%. 41% were previous LSCS and 9% were home delivery. In this study we found that high risk pregnancy were 59.8% and main reason of being high risk were previous LSCS (52%), anaemia (40%).

Conclusions: High quality antenatal care as well as knowledge and practice of community regarding maternal care during pregnancy are important to unwanted outcome of pregnancy.

Keywords: Abortion, Antenatal care, High risk pregnancy, Home delivery, Lower segment caesarean section

INTRODUCTION

As maternal and child health is backbone of any nation, the well-being of societies is linked to the health of mothers and children. Healthy mothers are children's first line of defense against death, malnutrition and disease. Every minute a women, every day 1500 women die due to pregnancy related complications. Every year, approximately 8 million women suffer from pregnancy related complications and half million die. Thus maternal mortality continues to be a major public health problem. Majority of these deaths can be prevented by

effective and affordable public heath interventions. The focus on maternal death has sharpened when reduction in maternal mortality became one of the eight goals of millennium development goals (MDG 5).

The target for MDG 5 was to reduce the maternal mortality ration (MMR) by three quarters from 1990 to 2015.³ In India, several initiative were taken under National Rural Health Mission (NRHM) to reduce maternal and child mortality, still India has highest number of maternal death 136000, the largest contributor in the pool of maternal death accounting for about 1/6th of

global maternal death. 4.5 Current maternal mortality in India is 254 per 100,000 live births. 6

Maternal and child mortality is the outcome of multiple factors that includes early marriages, illiteracy, poverty, malnutrition, ignorance, lack of health care facility, underutilization of health care facilities etc. Improving the maternal and child health is an important public health goal of government of India. To prevent unwanted outcome of pregnancy, antenatal care (ANC) is most important method for early detection and prompt treatment of complications. ANC is also an opportunity to inform women about danger signals for which immediate assistance should be sought from health care provider.

Rapid urban growth has led to an increase in the number of urban poor, and pregnant women and children constitute the major high risk group, especially those living in slums. Attention to vulnerable communities in the slums is therefore needed for better pubic heath outcome. In urban area there is marked inequitable distribution of service availability and utilization between rich and poor.

Vulnerable urban communities continue to be poorly served because of under-developed network of government health services, as a result of which mothers are deprived of preventive and promotive services. Hence there is a need to carry out studies in urban population to find the magnitude of problems related to mother and child health and associated factors so that appropriate strategies can be designed to tackle the problems.

Hence, the present study was carried out to assess the health status and ANC care taken by pregnant women and identify high risk pregnancy among the pregnant women attending urban health centre.

METHODS

A cross sectional study was conducted among pregnant women attending ANC clinic at urban health centre during September 2015 to November 2015. Study was approved by ethical committee of institute. A pre tested semi-structured questionnaire was used for data collection. Those who did not give consent to participate in the study were excluded. Questions included were present and previous pregnancy, socio economic status, related complications, medical and pregnancy investigations done during pregnancy etc. Data was collected from 102 pregnant women attained ANC clinic during study period. The data was compiled and analyzed using appropriate statistical tools.

RESULTS

In present study 46% of pregnant ladies belong to 20-25 years of age group and 44% were in 25-30 years of age group while 4% of pregnant ladies were below 20 years

of age. Mean age of participants was 24.45 (SD=3.79). 24% of pregnant ladies were illiterate and 95% were house wife. 26% had consanguinous marriage, 66% stay nuclear family and 89 % belong to lower middle class as per modified BJ Prasad classification (Table 1).

Table 1: Socio economic profile (N=102).

Parameters	Group	Numbers	Percentage
Age	<20	4	3.9
	20-25	47	46.1
	25-30	45	44.1
	>30	6	5.9
Education	Illiterate	25	24.5
	Secondary	60	58.8
	Higher secondary	9	8.8
	Graduate	8	7.8
Occupation	House wife	97	95.1
	working	5	4.9
Type of	Nuclear	66	64.7
Family	Joint	36	35.3
Consanguinous marriage	Yes	27	26.5
	No	75	73.5
Socio-	3	91	89.2
economic status	4	11	10.8

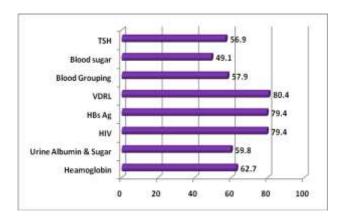


Figure 1: ANC investigation.

In present study 24% were primi gravida, gravida 2 were 28%, gravida 3 were 29%, gravida 4 were 12% and gravida 5 were 4%. Regarding ANC care 52% of pregnant ladies had 3 ANC visit and 63% had taken TT injection. 81% had taken folic acid and 73% had taken Iron tablets (Table 2).

40% of Pregnant ladies had anaemia, 8.8% had Hypothyroidism, 10% oedema feet and 1% pregnancy induced hypertension. Almost 80% of pregnant ladies had done HBs Ag, VDRL and HIV investigation, 62% haemoglobin, 57% blood grouping, 59% urine albumin sugar, 49% blood sugar and 56% TSH (Figure 1). Total previous pregnancy were 156 out of which 83% reached

to maturity, outcome were live birth in 82.66 % and abortion in 16.69% pregnancy (Table 3).

Table	2:	ANC	care	(n=102)).

ANC Care		Numbers	Percentage
No. of ANC	1	23	22.5
visits	2	26	25.5
	3	22	21.6
	4	17	16.7
	5	14	13.7
TT injection	Yes	63	61.8
	No	39	38.2
FA tablets	Yes	83	81.4
	No	19	18.6
Iron tablet	Yes	75	73.5
	No	27	26.5
Calcium tablet	Yes	75	73.5
	No	27	26.5

Table 3: Outcome of previous pregnancy (total Previous conception) (N= 156).

Outcome of previous pregnancy	Numbers	Percentage
Reached to maturity (Para)	130	83.33
Live	129	82.69
Abortion	26	16.66
Death	1	0.06

Table 4: Reasons for high risk pregnancy.*

HR pregnancy & reasons	Number	Percentage
Previous LSCS	53	52.0
Anaemia	41	40.2
Hypothyroidism	9	8.8
Gestational Diabetes	3	2.9
Pregnancy Induced	2	1.9
Hypertension		
Twin Pregnancy	1	0.9
Hypertension	1	0.9

^{*}Multiple responses

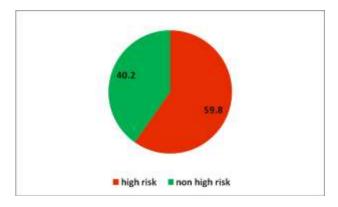


Figure 2: High risk pregnancy.

There were 130 previous deliveries, out which 59% were normal deliveries and 41% were LSCS. 66% delivered in private hospital, 25% in government hospital and 9% delivered at home. In this study we found that high risk pregnancy were 59.8% (Figure 2) and main reason of being high risk were previous LSCS (52%), anaemia (40%), hypothyroidism (9%), and gestational diabetes (3%) (Table 4). High risk Pregnancy was more among multigravida, Consanguinous marriage, and nuclear family, illiterate and above 25 years of age (Table 5).

DISCUSSION

A total of 102 pregnant women who attend urban health centre for antenatal checkup were included in the study. In present study, 46% of pregnant ladies belong to 20-25 years of age group and 44% were in 25-30 years of age group. In a study by Hasan MI 72% belongs to 20-30 years of age. In a study by Metgud 86% were between 20-29 years. In this study 24.5% women were illiterate, middle school 58.8%, intermediate 8.8%, graduate 8%.

According to study by Acharya illiterate were 20.4%, middle school 24%, intermediate 37%, graduates 17%. In current study 95.1% were house wife while 4.9% were working women. In Acharya study house wife were 90.6% working women were 10%. In this study 26% had consangious marriage. In a study by Metgud consangious marriage among Muslims were 29%. In present study 24% were primi gravid, gravida 2 were 28%, gravida 3 were 29%, gravida 4 were 12% and gravida 5 were 4%.

In a study by Metgud primigravida were 37%, gravid 2 were 34%, gravid 3 19%, gravid 4 were 5% and gravid 5 were 2%. In a study by Hasan MI 52% were primi and 14% were gravid 3-4 while 6.5% have gravid 5 or more. In a study by Mukhoadhyaye primi were 42%. In a study by Unadhkat primigravida was 39%, and gravid 3 or more were 12%. In a study done by Acharya half of Pregnant ladies were primi, 40% were gravid 2 and multi gravid 2%.

Regarding ANC care 52 % of pregnant ladies had 3 ANC visit and 63% had taken TT injection. 81 % had taken folic acid and 73% had taken Iron tablets. In a study done by Singh 3 ANC visit is done by 35% of pregnant ladies.³ It was because Singh study was in rural area. In a study by Mumbare SS ANC check-up were 72% and IFA tablet consumption were 68%.¹¹ In a study done at Ahmadabad by Jani YK it was found that 64% pregnant women had 3 or more ANC visit, 92% had TT immunization practiced and IFA tablet were taken by 90% pregnant women.¹² In our study prevalence of hypertension was 1 % while in a study done by Mehta it was 6.9%.² In a study done by Borade prevalence of PIH was 6% while in a hospital based descriptive study done at Varanasi by Prakash J prevalence of PIH was 5%.^{13,14}

Total previous pregnancy were 156 out of which 83% reached to maturity, outcome was live birth in 82.66 %

and abortion in 16.69%. In a study by Hasan MI abortion rate was 16.4% and by Mulla S abortion rate was 7%

while in study done by Singh abortion rate was 13.5% and live birth was 80%. 3,7,15

Table 5: High risk pregnancy among different groups.

		High risk	Non high risk	Total	Significance
		pregnancy	pregnancy		
Gravida	Primi Gravida	7 (29.2%)	17 (70.8%)	24 (100%)	Chi sq=12.26
	Gravida-2	20 (69%)	9 (31%)	29 (100%)	df=3; p=0.007
	Gravida-3	21 (70%)	9 (30%)	30 (100%)	
	Gravida-4 &	13 (68.4%)	6 (31.6)	19 (100%)	
	above				
Consanguinous	Absent	40 (53.3%)	35 (46.7%)	75 (100%)	Chi sq=3.97,
Marriage	Present	21 (77.7%)	6 (22.2%)	27 (100%)	df=1; P=0.046
Education	Illiterate	20 (80%)	5 (20%)	25 (100%)	Chi sq=6.92; df=2
	Secondary	34 (56.6%)	26 (43.4%)	60 (100%)	P=0.031
	Higher secondary	7 (41.1%)	10 (50.9%)	17 (100%)	
	& graduate				
Age	Below 25 years	25 (49%)	26(51%)	51 (100%)	Chi sq=4.07; df=1
	Above 25 years	36(70.5%)	15 (29.5%)	51 (100%)	p=0.043
Type of Family	Nuclear	45 (68.2%)	21 (31.8%)	66 (100%)	Chi sq=4.51; df=1
	Joint	16 (44.5%)	17 (55.5%)	36 (100%)	p=0.033
	Total	61 (59.8%)	41 (40.2%)	102 (100%)	

In current study home deliveries were 9%, 25% were in government hospital, and 66% were in Private hospital. In a study by C Cannan 87% of deliveries were institutional and 60% were in private hospital. In Jani study 93% were institutional deliveries and home deliveries were 5%. In a study done at Nainital by Sanjay Pandey, home deliveries were 50% and in government hospital 20% and in private hospital 30%. According to another study by Singh, home deliveries were 58.3%, in govt. hospital 41.7%, in private hospital 8.3%. As Singh's study was in rural area and sample size was large, the home deliveries were more compared to present study.

There were 130 previous deliveries, out of which 59% were normal deliveries and 41% were LSCS. In a study by SK Bhasin in Delhi LSCS was 34%. 18 Such a high rate of caesarean section can be explained by obstetrician and even parents playing safe not taking any risk or there may be some commercial interest that need to be clarified by more studies. In this study most common complication was anemia which was 41 % and next was hypothyroidism which was 8.8 %. In India 2/3rd of pregnant women are anemic. In a study done by Mulla S 58% pregnant women were anemic while in a study by Agarwal 80% of pregnant ladies were anemic. This difference may be because present study is institution based study, hence does not represent entire population. Iron deficiency anemia was most common cause of anemia. 5,15 Despite of national anaemia prophylaxis programme since many years prevalence of anaemia

among pregnant women is still high and responsible for majority of maternal death. In this study 60% of pregnant women found to be at high risk. Common causes of high risk pregnancy were previous LSCS (52%), anemia (41%), Hypothyroidism (9%) and gestational diabetes (3%). In a study done by Rajita Jani 80% of pregnant coming to the hospital for deliveries were high risk because of previous LSCS.⁶

CONCLUSION

Antenatal care is an important activity for providing promotive and preventive health care services to pregnant women and hence reducing maternal mortality. As this study was carried out to assess the health status and ANC care taken by pregnant women and found that 60 % pregnancy are high risk and it is common among multigravida because of previous LSCS and anemia.

These are the common causes of pregnancy related complications and death. ANC services should be utilized adequately to detect pregnancy problem in early stage and intervene timely to prevent unwanted outcome of pregnancy. For effective implementation of programme, awareness and understanding of benefit of Antenatal care should be enhanced.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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