

## Socio demographic profile of antenatal mothers in rural field practice area of VIMS Ballari

<sup>1</sup>Dr. Chetana Singode, <sup>2</sup>Dr. Ramesh K and <sup>3</sup>Dr. Gangadhara Goud T

<sup>1</sup>Post Graduate Student, Department of Community Medicine, VIMS, Ballari, Karnataka, India

<sup>2</sup>Associate Professor, Department of Community Medicine, VIMS, Ballari, Karnataka, India

<sup>3</sup>Professor and HOD, Department of Community Medicine, VIMS, Ballari, Karnataka, India

### Corresponding Author:

Dr. Ramesh K

### Abstract

The majority of maternal deaths are preventable: About three quarters of all maternal deaths are caused by postpartum hemorrhage, hypertensive disorders such as pre-eclampsia/eclampsia, infections, unsafe abortion and other delivery-related complications. In theory, all of the major causes of maternal death can be treated with effective and timely clinical interventions. In practice, however, even if a woman manages to access prenatal care and deliver in a health facility with a skilled birth attendant, poor quality of care can be life-threatening. A study to assess the pregnancy outcome was conducted in the rural field practice area, PHC Kudathini of VIMS Ballari, Karnataka, India. This study period was of one and half year, wherein interpersonal interview was conducted with the help of predesigned and pre tested questionnaire. All those pregnant women who registered themselves in the PHC during the first trimester were interviewed during the first visit. It includes various variables like socio demographic, obstetric, various health service utilization. Educational status among the Antenatal Mothers it is found that 22.3% of pregnant mothers and 4.8% of their husbands are illiterate. Total literates among the antenatal mothers and their husbands are 77.5% and 94.9% respectively. Among those who are literate, maximum attended till secondary schooling i.e., 41.9% among antenatal mothers and 41.2% among their husbands followed by primary schooling which was 23.4% and 25.1% among the antenatal mothers and their husbands respectively. Socio economic status of the Antenatal Mothers it was found out that maximum i.e., 40.5% belonged to class III, followed by 34.1% in class II and then 16.4%, 8.1% and 0.1% belonged to class I, class IV and class V.

**Keywords:** Antenatal care, pregnancy, socio economic factors

### Introduction

By 2030, countries should reduce their MMRs by at least two-thirds from their 2010 baseline; countries with the highest maternal mortality burdens will need to achieve even greater reduction. And, by 2030, no country should have an MMR greater than 140 maternal deaths per 100,000 live births, a number twice the global target <sup>[1]</sup>.

The majority of maternal deaths are preventable: About three quarters of all maternal deaths are caused by postpartum hemorrhage, hypertensive disorders such as pre-eclampsia/eclampsia, infections, unsafe abortion and other delivery-related complications. In

theory, all of the major causes of maternal death can be treated with effective and timely clinical interventions. In practice, however, even if a woman manages to access prenatal care and deliver in a health facility with a skilled birth attendant, poor quality of care can be life-threatening. Non-communicable diseases also play an important and growing role, contributing underlying causes to deaths that occur during pregnancy, delivery and the postpartum period [2, 3].

While they represent a challenge yet to be adequately addressed, the immediate causes of maternal death only paint part of the picture; many risk factors for maternal death begin long before delivery. Social determinants such as place of residence, socioeconomic status and race/ethnicity as well as institutional factors such as national resource allocation, health system infrastructure and political accountability for evidence-based programming influence a woman's likelihood of dying from childbirth-related complications. Particular attention to family planning is warranted given that approximately 29% of maternal deaths could be averted through met need for contraceptives and another 13% through access to safe abortion [4].

During the MDG period, the global health community saw several academic progresses as well as field trial successes in Maternal and Child Health (MCH). MCH is a method of delivering health care to special group in the population which is especially vulnerable to disease, disability or death. Reduction in the morbidity and mortality rates of mother and children and promotion of reproductive health are among the specific objectives of MCH services [5, 6].

## Methodology

This survey was carried out in the Kudathini Village, which is the rural field practice area situated 16 kms from VIMS Ballari. Ballari is a district in the southern part of Karnataka. Kudathini primary health center caters a population of 52,000. Kudathini has a population of around 18,125 of which 9661 are males and 8554 are females as per population censuses 2011. The area of this is divided as Kudathini A and Kudathini B. There are total of 6 sub-centers under this PHC.

The daily number of out patients is around 150-200. It has an inpatient ward with 10 beds. It serves as rural health training Centre (RHTC) and field practice area for paramedicals, nursing, undergraduates, interns and post graduates.

## Inclusion criteria

- All the Antenatal mothers residing at Kudathini Village during the study period.
- All the Antenatal mothers who had registered at PHC during 1st trimester.

## Exclusion criteria

1. Who were not willing to participate.
2. Pregnant mothers who could not be traced even after repeated visits.

A study to assess the pregnancy outcome was conducted in the rural field practice area, PHC Kudathini of VIMS Ballari, Karnataka, India. This study period was of one and half year, wherein interpersonal interview was conducted with the help of predesigned and pre tested questionnaire. All those pregnant women who registered themselves in the PHC during the first trimester were interviewed during the first visit. It includes various variables like socio demographic, obstetric, various health service utilization. The clinical examination of the study subjects was carried out like regular monitoring of the weight gain, blood pressure of

the women, measuring the abdominal girth, fetal height, fetal heart rate, fetal movements and PV bleed or leak.

## Results

**Table 1:** Distribution of Antenatal Mothers according to their age

Age groups	Frequency	Percent
≤ 20 years	60	20.9
21-25 years	165	57.6
26-30 years	54	18.8
>30 years	7	2.4
Total	286	100.0

Table shows 57.6% belonged to the age group of 21-25 years, followed by 20.9% who fell in the age group of < 20 years. 18.8% belonged to 26-30 years and remaining 2.4% were aged more than 30 years.

**Table 2:** Distribution of Antenatal Mothers based on Religion

Religion	Frequency	Percent
Hindu	236	82.6
Muslim	13	4.5
Christian	37	12.9
Total	286	100.0

Studied Antenatal Mothers majority i.e. 82.6% were Hindu, followed by 12.9% Christian and remaining 4.5% Muslims.

**Table 3:** Distribution of Antenatal Mothers and their husbands on educational Status

Educational status	Antenatal mothers		Husbands	
	Frequency	Percent	Frequency	Percent
Illiterate	64	22.3	14	4.8
Primary	67	23.4	72	25.1
Secondary	120	41.9	118	41.2
College & above	35	12.2	82	28.6
Total	286	100.0	286	100.0

Educational status among the Antenatal Mothers it is found that 22.3% of pregnant mothers and 4.8% of their husbands are illiterate. Total literates among the antenatal mothers and their husbands are 77.5% and 94.9% respectively. Among those who are literate, maximum attended till secondary schooling i.e., 41.9% among antenatal mothers and 41.2% among their husbands followed by primary schooling which was 23.4% and 25.1% among the antenatal mothers and their husbands respectively. When observed educational level of college and above in husbands is 28.6% and in antenatal mothers it is 12.2%.

**Table 4:** Distribution of Antenatal Mothers and their husbands depending on their occupation

Type of work	Antenatal mothers		Husbands	
	Frequency	Percent	Frequency	Percent
House maker/unemployed	268	93.7	10	3.5
Unskilled	10	3.4	122	42.8
Semiskilled	1	0.3	109	38.2
Skilled	2	0.1	25	8.7

Professional& others	5	1.7	19	6.6
Total	286	100.0	286	100.0

Majority of the antenatal mothers i.e., 93.7% are house makers whereas only 3.5% of their husbands were unemployed. Among the employed husbands i.e., 96.5%, unskilled were 42.8% followed by 38.2% who were semiskilled and then 8.7% and 6.6% skilled workers and professional and other workers respectively.

**Table 5:** Distribution of Antenatal Mothers based on socioeconomic status (according to modified B G Prasad classification)

SES	Frequency	Percent
Class I	47	16.4
Class II	99	34.1
Class III	116	40.5
Class IV	23	8.1
Class V	2	0.1
Total	286	100.0

Socio economic status of the Antenatal Mothers it was found out that maximum i.e., 40.5% belonged to class III, followed by 34.1% in class II, and then 16.4%, 8.1% and 0.1% belonged to class I, class IV and class V. This SES was calculated according to modified B G Prasad classification.

## Discussion

It is observed that in the present study maximum Antenatal Mothers, i.e., 57.6% belonged to the age group of 21-25 years and very few i.e. 2.4% belonged to age group of 30 years and above.

In a similar study which was conducted in the administrative limits of primary Health Centre, Kaiwara, Chikkaballapur District, majority of the antenatal mothers i.e., 69.9% were in the age group of 20-24 years and 3.3% aged more than 30 years <sup>[7]</sup>.

A study which was conducted at tertiary care hospital of Himachal Pradesh, showed maximum number of mothers i.e. 46.7% belonged to less than 26 years of age and lowest were more than 30 years i.e. 13.3% <sup>[8]</sup>.

Another study which was conducted in in the tertiary care hospital in northern India, it showed that maximum participants belonged to the age group of 25-29 years i.e. 35.72% and lowest in more than 30 years i.e. 17.46% <sup>[9]</sup>. However the difference in age percentage of antenatal mothers may be due to different age classification used in the studies.

It is observed that in the current study Antenatal Mothers belonged to Hindu religion, i.e. 82.6% followed by Christian community 12.9% and Muslims 4.5%.

Census of 2011 has shown that Hindu's were 80.5% and Muslims 13.4% of total population <sup>[10]</sup>.

In an article which considered the birth cohort of India showed religion wise distribution as 54.3% belonged to the Muslim community whereas 42.8% were Hindu followed by 2.9% who were Christians <sup>[11]</sup>.

In a cross section study which conducted in Madhya Pradesh, India showed that 94% of the study subjects belonged to Hindu religion whereas the remaining 6% were Muslims <sup>[11]</sup>.

The results differ from the other studies due to population distribution.

Educational status among the Antenatal Mothers, 22.3% of pregnant mothers and 4.8% of their husbands are illiterate whereas the total literates among the antenatal mothers and their husbands are 77.5% and 94.9% respectively, which is higher than the National average. As

per the census report 2011, the total literacy rate in rural population of Karnataka is estimated to be 68.73% with male literacy rate being 77.61% and females being 58.32% [12].

This was done using modified B G Prasad classification with CPI of Jan 2019.

Distribution of Antenatal Mothers based on socio economic status of the was found to be maximum i.e., 40.5% in class III, followed by 34.1% in class II and then 16.4%, 8.1% and 0.1% belonged to class I, class IV and class V.

In a study conducted in the tertiary care hospital in northern India, which also used modified B G Prasad classification showed that maximum study subjects i.e.37.3% belonged to Class III, followed by 22.2% in class IV and 15.8%, 13.5% and 11.1% belonged to Class V, Class II and Class I respectively [13].

## Conclusion

Majority of the study subjects i.e. 57.6% belonged to the age group of 21-25 years, 82.6% were Hindu. The total literates among the antenatal mothers and their husbands are 77.5% and 94.9% respectively. The majority of the antenatal mother's i.e., 93.7% were house makers and majority of the husbands were unskilled workers.

Most of the study subjects i.e. 54.3% belonged to joint family.

Maximum number of antenatal mothers i.e. 40.5% belonged to class III SES (Modified B G Prasad Classification).

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