

Utilization of Health Care Facilities by Pregnant Women Approaching Government Hospitals in Nainital District Uttarakhand

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ABSTRACT The present study was conducted on 120 pregnant women attending the OPD of two government hospitals in Nainital with the objective to analyze the utilization of medical facilities by pregnant women. Questionnaire cum interview method was used for data collection. Results of the study showed that both government hospitals needed to be strengthened in terms of medical staff, infrastructure and equipments and techniques. It was observed that at GBPH there was only one doctor to take care of the women. The same hospital did not have adequate stock of medicines and lagged behind technologically. Results indicate towards a lower utilization of health care facilities such as 108 ambulance facility and *aganwadi* services among women respondents. Almost half the respondents were not aware of the benefits of *Janani Suraksha Yojana*. The study suggests need to increase awareness on reproductive health issues of women and popularization of government schemes.

INTRODUCTION

The lives of women in Uttarakhand are challenged by several factors including availability of resources, societal attitude, Health care facilities and tough geographical terrain. Women in Uttarakhand are known for their immense contribution towards family, farm and society. The work they accomplish is remains largely unpaid and unrecognized. The health issues of women in Uttarakhand have never been a cause of vital concern in comparison to male counterparts. Women too tend to have a careless attitude and pay less attention towards their own health. Many a times in traditional conservative household women hesitate in disclosing their problems related to reproductive health. Such women often either do not avail any medical advice or approach a doctor when it is too late.

In the life span of a woman pregnancy is one stage which demands additional health and medical care. Reproductive health is affected by a variety of socio-cultural and biological factors

on one hand and the quality of delivery system and its responsiveness to women's need on the other (Jejeebhoy 1995). In Uttarakhand trained qualified medical professionals do not show interest in working in the remote areas especially in the far flung hilly districts. According to a survey by William et al 2012-13 over 58 percent of the total approved post for medical officers are vacant in Uttarakhand. It was also observed that with the exception of district hospitals, pregnancy related diagnostics such as ultra sound and blood test were referred to private diagnostic centers. Since hospitals in the hilly regions of Uttarakhand have limitations in terms of equipments and staff, medical emergencies approaching these hospitals are often referred to other well equipped government/ private hospitals. Often base hospitals are situated in the cities and towns of low-lying regions of the plains in Uttarakhand. Approaching these hospitals is time consuming, tedious and expensive for the patients and his family. The prevailing state of affairs directly affects the health status of all the people including women residing in the hills. Women in rural India have little access to health care resources. Lack of educational resources, distance, cost of transportation, cultural, religious and family influences all have an impact on women utilizing health care services (Bredesen 2013).

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According to NFHS-2 report in the state of Uttaranchal only 21 percent of the births were delivered in a medical facility and majorities (59%) of the births were delivered at home assisted by a traditional birth attendant. The survey further reports that in Uttaranchal the utilization of health services during pregnancy, during delivery and after child birth remain very low. Women belonging to remote rural areas of Uttarakhand are the worst sufferers. They often give birth in isolated unhygienic environments with the assistance of village *dias*. The maternal mortality rates (MMR) for Uttarakhand have decreased slightly from 292 in 2010-12 to 285 in 2011-13. However, MMR for the state are quite high (285) as compared to national average of 167 (RGI SRS 2011-13). According to NFHS 4 Fact sheets (2015-16) the percentage of women had at least four antenatal care visits was 30.9 percent. A review of existing literature suggests an improvement in utilization of health care services by pregnant women from the past scenario in Uttarakhand there is still immense room for improvement and achieving the desired targets. Sound reproductive health is integral to the vision that every child is wanted, every birth is safe, every young person is free from HIV, and every girl and women is treated with dignity (UNFPA 2015). Adequate utilization of antenatal care services is associated with improved maternal and neonatal health outcomes (Sharma 2013).

The focus of government schemes has always been to increase institutional deliveries among the poor. The latest government intervention scheme to ensure safe motherhood is Janani Suraksha Yojana. Under this scheme Uttarakhand has been ranked as a low performing state (Ministry of Health and Family Welfare 2006). Since availability of medical facilities directly affects the health status of a population it is important to evaluate the availability and quality of these services. The responsiveness of hospitals in delivering health care services to pregnant women also needs to be studied. Few studies have attempted to study the utilization of health care facilities by pregnant women approaching government hospitals of Nainital.

Objectives of the Study

In view of the above stated scenario the present study was undertaken with the major objective of the study was to analyze the utilization of medical facilities by pregnant women

approaching two government hospitals in Nainital district of Uttarakhand.

MATERIAL AND METHODS

Locale of Study

The present study was conducted in two government hospitals in Nainital district of Uttarakhand. The two government hospitals selected for the study were B.D. Pandey Female Hospital, (BDPFH) Mallital, Nainital and G.B.Pant Hospital (GBPH), Tallital, Nainital. A random sample selected for the study comprised of 60 women attending OPD of B.D. Pandey Female Hospital Mallital, Nainital and 60 women attending OPD of G.B.Pant Hospital, Tallital, Nainital.. The total sample size comprised of 120 pregnant female respondents. The survey was carried out for a period of six months that is, from January to June 2013.

Co-operation of the hospital administration was sought for pursuing the study. Through questionnaire information pertaining to female hospital was also collected. They were questioned about the number of doctors (gynecologist) working in the hospital and on availability of infrastructure such as delivery rooms and ultra sound facility. Hospital staff were also questioned on their ability to treat emergency cases was collected. Information on deliveries which took place in the selected hospitals during the past three months, affiliated ASHA workers and average number of pregnant women admitted per day in the selected hospitals was also collected.

A questionnaire cum interview schedule was developed to evaluate the socio-economic status of respondents. This questionnaire comprised of three sections. Through the first section of the questionnaire General information of the subjects was collected on parameters such as age, age at marriage, educational level, caste, religion and employment status and family income.

Of the total selected women (120 respondents) eighty women were facing their second pregnancy. These eighty women were further questioned about their previous experiences at the time of first delivery and facilities utilized by them at that time. This aspect was accessed through second section of the questionnaire.

Through the third section of the questionnaire the all respondents were interviewed on

questions pertaining to current pregnancy status and the utilization of medical and other facilities available to them. Hemoglobin level was assessed on the basis of respondents blood test reports. The respondents were also asked whether they were aware about the benefits of the *Janani Suraksha Yojana* Scheme.

Data thus collected were analyzed statistically and mean and percentages were computed.

RESULTS AND DISCUSSION

For the present study 120 pregnant females approaching the two major government hospitals in Nainital were selected. Information pertaining to the existing delivery facilities in the two hospitals that is, B.D. Pandey Female Hospital (BDPFH), Mallital, Nainital and G.B. Pant Hospital (GBPH), Tallital, Nainital, Uttarakhand was collected (Table 1). Results showed that in B.D. Pandey female hospital six doctors (one permanent doctor, one attached, four on contract basis) attended to the female patients. Whereas, at G.B. Pant Hospital only one doctor attended to the female patients. According to Health and Population Policy of Uttaranchal (2002) improving the quality of health care services is a daunting task because of large number of vacancies in public institutions, especially for medical officers, supervisors and technicians, and the poor infrastructure including lack of equipment and inadequate facilities. In Uttarakhand there is an acute shortage of trained medical personnel, especially allopathic doctors (both graduate medical officers and specialist) and this remains the biggest obstacle in the operationalization of higher level services and to provide 24×7 curative care outside bigger cities (Bajpai 2014). One delivery room for pregnant women was available in both the hospitals. Medical techniques and facilities such as free blood and urine tests (Pathological lab), the ability to cater to emergency delivery cases and ultrasound machinery were not available at GBPH Nainital. However, these facilities were available at BDPFH. As a result respondents either approached BDPFH or a private pathological laboratory.

The number of women delivering in the previous three months was much higher in BDPFH in comparison to GBPH. Data also showed that of the total births in the two hospitals in the previous three months 73(57.48%) were boy children and 54 (42.51%) were girl children. The past records of the hospital also indicate towards a declining sex ratio. The results of the study are

Table 1: Available delivery facilities in the two selected govt. hospital

<i>Parameters</i>	<i>B.D. Pandey Female Hospital, Nainital</i>	<i>G.B. Pant Hospital, Nainital</i>
No. of doctors	06	01
No. of rooms for delivery	01	01
Ability to treat emergency cases	Yes	No
Availability of ultra sound facility	Yes	No
Normal deliveries in the previous 03 months	89	07
C-section deliveries in the previous 03 months	30	01
No. of male child birth in the previous 03 months	66	07
No. of female child birth in the previous 03 months	53	01
No. of ASHA workers affiliated to the Hospital	44	-
Average no. of females admitted per day	4-5	-

in tune with the findings of Census 2011. According to census 2011 the child sex ratio (0-6 years) is 886 which is far below the national average of 914. The state lags behind the states of Uttar Pradesh and Himachal Pradesh in context of Child Sex Ratio.

Records of the previous deliveries in the past three months showed that 75.59 percent of the deliveries were normal while 24.40 percent were through C-section. The results indicate towards a rise in C-section deliveries. Ghosh 2010 in her study has pointed an increase in caesarean deliveries in many states in India.

The hospital staff at GBPH also reported that they did not have ample stock of medicines that could be distributed free of cost to the poor. Though Janani Suraksha Yojana scheme was implemented in both the hospitals ASHA workers (44) were associated only with BDPFH. An ASHA worker is the first health worker to respond to the needs of the deprived sections especially women and children. She also counsels women on several on several pregnancy related aspects. A non-affiliation ASHA worker with GBPH raises several questions and is matter of concern. Iron, folic acid and calcium tablets were provided free of cost to the patients at both the hospitals. However, the vaccine of Tetanus Toxoid was available to the pregnant ladies only at BDPFH. It was also observed that despite a time period of four years the construction of private female ward building is yet in its initial phase at BDPFH.

Results on prevailing medical facilities showed that at GBPH there was only one doctor to take care of the female patients. The same hospital did not have adequate stock of medicines and lagged behind technologically. ASHA workers were not affiliated with GBPH. Many emergency delivery cases approaching the hospital were referred to Sushila Tiwari Hospital, Haldwani. In many developing countries the lack of emergency obstetrics services is also of particular concern (Brown 2004). It is essential that all pregnant women have access to high quality obstetric care throughout their pregnancies (Mahajan and Sharma 2014). Respondents also believed that under emergency medical situations, private nursing homes were a better option. Despite the status of a district hospital GBPH lagged behind in terms of availability of doctor and other medical and infrastructure facilities. According to a study in Uttarakhand by Joe et al. (2012), out of eighteen district hospitals only eleven district hospitals have C-section and first and second trimester abortion facility. The study reflects towards need to improve on human and technical resources of the hospitals especially of G.B.Pant Hospital.

Socio-economic Status of Respondents

The socio-economic status of the pregnant women respondents was assessed the results of which have been presented in Table 2. The age of respondents taken for the study ranged from 15 to 35 years. Data showed that most of the women (47.50) respondents were in the age group of 21-25 years followed by women in the age group of 26-30 years (37.50%). Ten percent women were in the age group of 31-35 years. Only five per cent women were in the age group of 15-20 years. Data showed that majority (51.66%) of the female respondents got married in the age group of 19-22 years. It was seen that 11.66 percent women got married in the age group of 15-18 years. According to health and population policy of Uttarakhand 2002 the median age of women in Uttarakhand is 18 years and women in rural areas tend to marry at an earlier age compared to their urban counterparts.

Majority of the respondents were educated and almost 65.83 percent respondents had an educational level of intermediate and above. Only 5 percent of the respondents were found to be illiterate. According to NFHS -2 survey in Uttarakhand 61 per cent females age six and above

are literate. Study revealed that most of the women did receive some kind of formal education.

Majority (75.83%) of the respondents were the residents of Nainital city. However, 24.16 percent approached the two hospitals from nearby rural areas. Approaching the two district hospitals for health checkups from distant rural areas was a tedious task for the pregnant women respondents. Often they completed the journey both by walking and the use of public transport services. Categorization of the women on the basis of caste showed that 42.50 percent women belonged to general category followed by women belonging to SC (34.16%), OBC (18.33%) and ST (5%) categories. It was seen that majority (85.83%) of the women respondents were Hindu while the remaining 14.16 percent were Muslims. Majority of the women (85%) were not gainfully employed and depended on their husbands for financial assistance. Only fifteen per cent women were gainfully employed. Family income of 64.16 percent respondents was below Rs. 10,000 per month and majority of the respondents belonged to low and middle class families.

Results of the study on socio-economic status of the respondents showed that majority of the women respondents got married in the age group of 19-22 years. However, 11.66 percent women got married in the age group of 15-18 years. Majority of the respondents were literate and received some kind of formal education however, very few of them were gainfully employed. Pregnant women respondents of Nainital city and nearby rural areas approached the selected hospitals. Respondents mainly belonged to low and middle income groups.

Facilities Available to Women Respondents at the Time of First Delivery

Of the total sample of 120 pregnant female respondents 80 women were facing their second pregnancy. These women were questioned on their previous experiences of the First delivery. Results showed that of the previous first deliveries 71.25 percent were institutional deliveries whereas 28.75 percent women delivered their first child at home. Data clearly shows that even among women who approached the hospitals for medical advice and resided in or nearby a town area such as Nainital where medical facilities exist, many women still prefer to give birth to babies at home. The percentage of institu-

Table 2: Socio-economic status of female respondents approaching government hospitals in Nainital

Parameters	B.D. Pandey Female Govt. Hospital, Nainital		G.B. Pant Govt. Hospital, Nainital		Total	
	No. of pregnant females	Percentage	No. of pregnant females	Percentage	No. of pregnant females	Percentage
<i>Age of Respondents</i>						
15-20	5	8.33	1	1.67	6	5.00
21-25	29	48.33	28	46.67	57	47.50
26-30	16	26.67	29	48.33	54	37.50
31-35	10	16.67	2	3.33	12	10.00
<i>Age at the Time of Marriage</i>						
15-18	5	8.33	9	15.00	14	11.66
19-22	31	51.67	31	51.67	62	51.66
23-26	16	26.67	16	26.67	32	26.66
27-30	8	6.67	4	6.67	12	10.00
<i>Educational Level</i>						
Illiterate	1	1.67	5	8.33	6	5.00
Primary	1	1.67	4	6.67	5	4.16
Middle school	10	16.67	9	15.00	19	15.83
High school	7	11.67	4	6.67	11	9.16
Intermediate	12	20	16	26.67	28	23.33
Graduation	14	23.33	10	16.67	24	20.00
Post Graduate	15	25.00	12	20	27	22.50
<i>Residing Area</i>						
Nainital City	47	78.33	44	73.33	91	75.83
Near by rural area	13	21.67	16	26.67	29	24.16
<i>Caste</i>						
General	22	36.67	29	48.33	51	42.50
SC	24	40.00	17	28.33	41	34.16
ST	1	1.67	5	8.33	6	5.00
OBC	13	21.67	9	15.00	22	18.33
<i>Religion</i>						
Hindu	47	78.33	56	93.33	103	85.83
Muslim	13	21.67	4	6.67	17	14.16
Others	-	-	-	-	-	-
<i>Employment Status of Respondents</i>						
Gainfully employed	5	8.33	13	21.67	18	15.00
Unemployed	55	91.67	47	78.33	102	85.00
<i>Family Income</i>						
1000-5000	14	23.33	19	31.67	33	27.50
5000-10000	29	48.33	15	25.00	44	36.66
10,000-15,000	8	13.33	11	18.33	19	15.83
15,000-20,000	6	10.00	8	13.33	14	11.66
20,000-25,000	-	-	5	8.33	5	4.16
More than 25,000	3	5.00	2	3.34	5	4.16

tional deliveries in urban areas of Uttarakhand is only 42 percent and more than half 56 percent births take place at home. It was seen that 77.50 percent of the first deliveries were normal and 22.50 percent births were caesarian deliveries. Majority of the respondents (56.14%) received cash at the time of birth of the first child. However, 43.85 percent women did not receive any kind of cash. The reasons for this could be birth of first child at home or at any private nursing home.

Only 35.83 percent women respondents reported that they utilized 108 ambulance facilities at the time of first delivery. However, 64.16 percent women respondents did not use 108 ambulance facilities. Results indicate towards a lower utilization and unawareness of health care facilities among women respondents. Women who did utilize 108 ambulance facilities were satisfied by its services. In the survey it was also found that among the respondents 17.50 percent had suffered a miscarriage or abortion (Table 3).

Table 3: Facilities available to the respondents at the time of first delivery

Parameters	B.D. Pandey Female Govt. Hospital, Nainital		G.B. Pant Govt. Hospital, Nainital		Total	
	No. of pregnant females	Percentage	No. of pregnant females	Percentage	No. of pregnant females	Percentage
<i>Place of Birth</i>						
Hospital	23	76.67	24	68.00	57	71.25
Home	7	23.33	16	32.00	23	28.75
<i>Mode of Delivery of First Child</i>						
Normal	23	76.67	39	78.00	62	77.50
C-section	7	23.33	11	22.00	18	22.50
<i>Sex of First Child</i>						
Male	12	40.00	20	38.46	32	40.00
Female	18	60.00	30	61.53	48	60.00
<i>Cash Received After Delivery Of First Child</i>						
Yes	8	13.33	20	70.58	32	56.14
No	15	86.67	10	29.41	25	43.85
<i>Did You Use 108 Ambulance Facility</i>						
Yes	13	21.66	30	50.00	43	35.83
No	47	78.33	30	50.00	77	64.16
<i>In The Past Did You Suffer Any Miscarriage/Abortion</i>						
Yes	11	18.33	10	16.67	21	17.50
No	49	81.67	50	83.33	99	82.50

Data based on 80 respondents with first babies

Current Pregnancy Status and Facilities Being Utilized by the Respondents

The data on current pregnancy status and facilities being utilized by the respondents has been presented in Table 4. Data showed that 49.16 percent women were in their second trimester of pregnancy and 35.00 percent women were in their third trimester of pregnancy and 15.83 percent women were in their first trimester of pregnancy. Hemoglobin (Hb) level of majority (82.30%) of the women ranged from 10-13g/dl and 22.60 percent women had hemoglobin level in the range of 7-10 g/dl. According to Ministry of Health and Family Welfare (2005) hemoglobin level of 11g/dl at any time in pregnancy is considered to be anemia; a Hb level of 7-11g/dl is considered moderate anemia and less than 7g/dl is severe anemia. Results of the study showed that 22.60 percent respondents were suffering from moderate anemia. Seven respondents of the study could not produce any record of Hb level tested during pregnancy. None of the respondents showed a hemoglobin level of above 13g/dl. Whereas severe anaemia is closely related to risk of mortality, even mild anaemia carries health risk and reduces work capacity (Cohen

and Gibor 1980). Majority (97.50%) respondents did undergo an ultrasound test. The ultrasound of majority (84.16%) was conducted free of cost at BDPFH. However 22.5 per cent respondents did approach private clinics and pathologies for ultrasound.

More than half of the respondents never approached an *aganwadi* and therefore did not consume the food provided by it. Almost half (48.33%) respondents were not aware of the benefits of *Janani Suraksha Yojana* scheme. More effort and widespread popularization of the benefits provided by such schemes would substantially increase its utilization and success. From the respondents approaching the two hospitals 15.83 percent reported that they would still prefer to deliver their babies at home. If such be the attitude of a very small sample of women who had a relatively easier approach the hospitals what it is easy to imagine the state of marginalized, vulnerable women belonging to remote villages with no road connectivity.

Results of the study showed that moderate anaemia was prevalent among 16.66 percent women. Respondents (22.50%) did approach private clinics and pathologies. It was seen that utilization of *aganwadi* services was low among

Table 4: Current pregnancy status and facilities being utilized by the respondents

Parameters	B.D. Pandey Female Govt. Hospital, Nainital		G.B. Pant Govt. Hospital, Nainital		Total	
	No. of pregnant females	Percentage	No. of pregnant females	Percentage	No. of pregnant females	Percentage
<i>Trimester of Pregnancy</i>						
First	6	10.00	13	21.67	19	15.83
Second	36	60.00	23	38.33	59	49.16
Third	18	30.00	24	40.00	42	35.00
<i>Level of Hemoglobin</i>						
1-7	-	-	-	-	-	-
7-10	9	16.07	11	19.29	20	22.60
10-13	47	83.92	46	80.70	93	82.30
13 &>	-	-	-	-	-	-
<i>Weather Undergone an Ultrasound</i>						
Yes	59	98.33	58	96.67	117	97.50
No	01	1.67	2	3.33	03	2.50
<i>Institution Where Ultrasound Was Conducted</i>						
*GH	52	86.67	49	84.48	101	84.16
*Pvt Clin & pathologies	8	13.33	19	15.51	27	22.5
<i>Any Personal Expenses Incurred at the Time of Ultrasound</i>						
Yes	09	15.00	17	28.33	26	21.66
No	51	85.00	41	70.68	92	76.66
<i>Did You Consume Food From an Aganwadi</i>						
Yes	30	50.00	22	36.66	52	43.33
No	30	50.00	38	63.66	68	56.66
<i>Are You Aware of the Benefits of JSY Scheme</i>						
Yes	28	46.67	34	56.67	62	51.66
No	32	53.33	26	43.33	58	48.33
<i>Have You Been Assisted by an ASHA Worker</i>						
Yes	50	83.33	37	61.67	87	72.50
No	10	16.67	23	38.33	33	27.50
<i>Where Would You Like to Deliver</i>						
Hospital	57	95.00	44	73.33	101	84.16
Home	3	5.00	16	26.67	19	15.83

*GH – Govt. Hospital

*Pvt. Clin – Private Clinic

the respondents and many of them were unaware of the benefits of JSY scheme.

CONCLUSION

The results of the study showed that GBPH functioned with only one medical officer to take care of female patients. Lack of infrastructure and equipment also persisted in the same hospital. Another aspect of the situation is that few doctors in Uttarakhand show the will to serve in

hill districts. ASHA workers were not affiliated with GBPH. Many emergency delivery cases approaching the hospital were referred to other hospitals. Despite two government hospitals in the same town few respondents also approached private nursing homes and pathologies. In general respondents believed that private nursing homes were a better option under emergency situations. Hospital records of the deliveries in the previous three months showed a higher birth rate of boy children than girl children and 24.40

percent deliveries were through C-section indicating a rise in caesarean deliveries even in government hospitals.

Majority of the women respondents did not get married at an early age and were educated however, majority of them were not gainfully employed. Respondents mainly belonged to low and middle income families. Results also add to the fact that government hospitals mainly cater to low and middle income groups of the society. Moderate anaemia was present in 22.60 percent respondents. The utilization of 108 ambulance facility and *anganwadi* services was low among the respondents. And almost half the respondents were not aware of the benefits of *Janani Suraksha Yojana*. Even among women respondents approaching the two hospitals 15.83 percent reported that they would still prefer to deliver their babies at home.

RECOMMENDATIONS

There is the need to increase the awareness about the benefits of institutional deliveries and on the risks involved with deliveries at home. Functioning government programmes need to be popularized widely. Young Adolescent girls need to be educated early on issues concerning reproductive health. Above all a change in societal attitude towards women and discouraging traditional delivery practices would promote women's reproductive health.

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