

A Study to Assess Quality of Essential Obstetric Care in a District Of West Bengal

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Abstract:

Introduction:

Under RCH Programme, special emphasis is placed on the good quality of care. Therefore it is necessary to ensure that all services, provided at the health functionaries, are of good quality and acceptable to the clients. This can be achieved by ensuring adoption of the technically correct procedure by the health personnel. Present study was conducted to assess the quality of essential obstetric care at different levels of health care delivery system of a district in state of West Bengal and to find out its relation with the acceptance of essential obstetric care services.

Materials and Methods:

A type of health service research, in connection with essential obstetric care, was conducted at the different levels of health care delivery. It was a cross sectional type of survey along with record analysis. All mothers who attended during the study period were interviewed, observed and relevant record was reviewed.

Results and Discussion:

The present study revealed that 68.67% of mothers received poor quality of essential obstetric care and only 2% received good quality of care. All the mothers were comfortable with health worker but good counseling technique was observed in only 45.33%. Early antenatal registration was found to be significantly related with quality of care score at the different level of health facility. But relation between quality of care & frequency of antenatal visits was not statistically significant at the different level of health facility.

Conclusion:

Thus it was found although infrastructural, technical qualities were good in most of the studied areas, but quality of interpersonal interaction was lagging far behind. So utilization of service by beneficiary could only be improved if overall quality of care was improved.

Key Words: Antenatal mothers, Care, Quality

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I. Introduction

India was the first country in the world to launch a National Family Planning Programme in 1952. Over the years, the programme has been expanded to reach every corner of health care delivery system. The Reproductive and Child Health (RCH) Programme^[1] was launched throughout the country on 15th October. This programme aims at achieving a status in which people will be able to go through their pregnancy and child birth safely and the outcomes of pregnancies will lead to wellbeing and survival of the mother as well as of the child. The new strategy was initiated in 2013 as RMNCH+A Approach^[2], for acceleration of progress towards Millennium Development Goal 4 and redefine the national agenda. RMNCH+A Approach also defines required intervention at various stages of life cycle with good quality, to provide “continuum of care”. But ample of literature exists that illustrate the poor quality of antenatal care, delayed registration, less number of visits and poor quality of supervision which leads to maternal and neonatal complication and death^[3]. Thus maternal mortality still remains at 130/ 1Lac live births with an interstate variation which is considered to be almost constant^[4,5]. 58.6% of antenatal mothers had early registration^[4], while 51.2% of mothers had at least 4 antenatal visits.^[6] Under RCH Programme, special emphasis is placed on the good quality of care. Therefore it is necessary to ensure that all services, provided at the health functionaries, are of good quality and acceptable to the clients. This can be achieved by ensuring adoption of the technically correct procedure by the health personnel.^[7] Improving quality of reproductive health care programs ensure that clients receive the care that they deserve and it can benefit other services as well. Furthermore providing better service attracts more clients, and increases the use of the delivery service.^[8] With this background, the present study was conducted to assess the quality of essential obstetric care at different levels of health care delivery system of a district in state of West Bengal and to find out its relation with the acceptance of essential obstetric care services.^[9]

II. Materials And Methods

Present study was a type of health service research, in connection with essential obstetric care at the different levels of health care delivery system. It was a cross sectional type of survey along with record analysis. The study was conducted in the randomly selected health care delivery unit of a district of West Bengal. For this 2 Primary health centers at a block, one Rural hospital (designated as First referral unit) which was the referral center of these PHCs, a District Hospital, which was also a referral center for that Rural Hospital were chosen. It was conducted within one year. Randomly 100 mothers selected at each level of health facility, were included as the study population. All the mothers were introduced & explained the purpose of the study. Informed verbal consent was taken from the beneficiaries after ensuring their confidentiality. Ethical clearance was taken. Mothers were interviewed about the personal characteristics, pregnancy related variables and quality of prenatal care (ie art of care, technical quality, physical environment, access, availability & efficacy). Quality assessment was done by the Questionnaire, prepared by consulting 'Indian Public Health Standard' – draft in NRHM^[10], 'Essential Service Package for Basic Health Care in West Bengal'^[11], and New Perspectives on Quality Care: Population Council and Population Reference Bureau^[12,13] and it was validated by consulting the experts. The parameters used were general information like age, educational Status, socioeconomic status, marital status, age of marriage etc. and other parameters like antenatal registration <12 weeks, frequency of at least 3 antenatal visits etc. Quality of care was assessed by several parameters, like quality of environment in that particular health unit, quality of services provided to the mothers and the quality of interpersonal interaction between mother and health care delivery provider. Scoring for quality of essential obstetric care was calculated by giving +1 to every positive response and total Quality of Care score of each beneficiary calculated. After data collection analysis was done with the help of Epi Info version 3.5.1. Relation between the quality of essential obstetric care and the services availed by the antenatal mothers were assessed by statistical analysis.

III. Results

In this current study, the beneficiaries (i.e. mothers) had following sociodemographic characteristics as stated below. Around 52.33% of the mothers belong to the age group of 20-24 years. Teenage pregnancy was more common among the mothers attending both primary health center and district hospital. Most of the mothers i.e. 87% of the mothers were from Hindu community and 80.67% of the mothers were from the joint family. Around 10% of the mothers were illiterate. A good proportion of mothers (49.66%) were educated up to middle & secondary level of education. 94.33% of the mothers were homemakers. Most of the mothers from primary health center belonged to lower social class. However the mothers from the Rural Hospital and District hospital were mostly from middle class. It was observed from the present study that minimum age of marriage was 12 years & maximum age of marriage was 32 years. 33.67% of the mothers were married before the legal age of marriage ie 18 years of age. 54% of the mothers were primigravida. Regarding antenatal registration, the current study showed that, 26.66% of the mothers got registered <12 weeks. Mean time of registration was also appreciable at the different level of health facility.

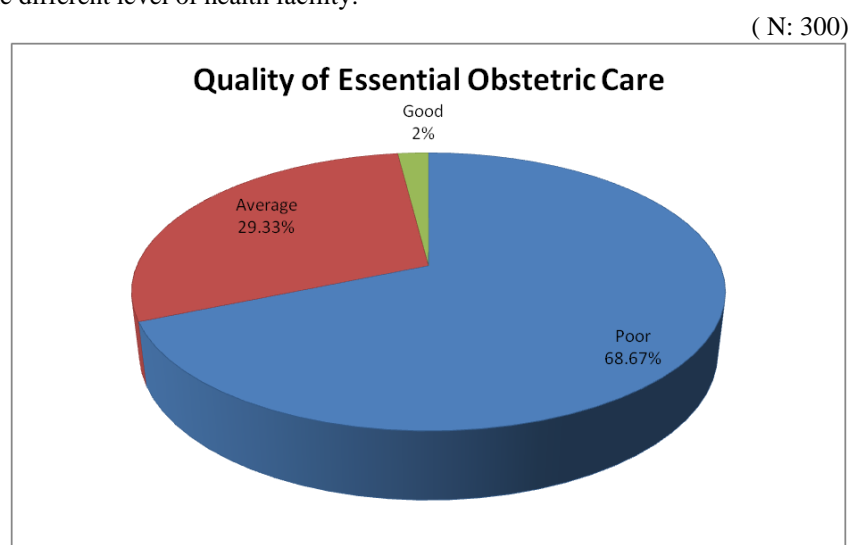


Figure -1: Pie Diagram showing distribution of mothers according to their quality of care score

The study (Fig:1) revealed that 68.67% of mothers received poor quality of essential obstetric care and only 2% received good quality of care.

Table –1: Distribution Of Mothers According To The Quality Of Interpersonal Interaction At The Different Health Facility:

(N: 300)

Interpersonal aspects	Primary health center (n ₁ =100)	Rural hospital (n ₂ =100)	District hospital (n ₃ =100)	Total (%)
Health worker – women interaction				
Making women comfortable – seat offered	100	100	100	300 (100)
Next visit	76	82	94	256 (85.33)
Showing respect / courtesy	64	74	70	208 (69.33)
Assure confidentiality	32	57	60	149(49.66)
Good counseling skill- non interruption	48	48	40	136(45.33)
Actively participates in discussion	40	46	46	132(44)
Selection of method of delivery	48	57	62	167(55.66)
If patient is being referred , then explanation of reasons for referral to patient or party *	6	18	12	36(12)

* 11 patients referred out from Primary health centres, 49 from Rural hospital and 15 from District hospital.

All of the mothers were comfortable with the health worker, and seat was offered to all of them. 85.33% of the mothers were told about next visit. 69.33% of the mothers said that health workers showed respect and courtesy. 49.66% of them opined that staffs assured confidentiality .45.33% mothers found that providers had good counseling skills and 44% actively participates in the discussion. Those referred out, 48% of them were explained about the reason for referral. Among all of the abovementioned procedure, maximum were followed up in the district hospital, and least in the PHCs. (Table- 1)

Table – 2 : Distribution Mothers According To The Quality Of Care Score At Different Health Facility:

(N: 300)

Quality of care Score	Primary health center (n ₁ =100)	Rural hospital (n ₂ =100)	District hospital (n ₃ =100)	Total (N=300)
< 5 (Poor)	80 (26.67)	70 (23.33)	56 (18.66)	206 (68.67)
6-10 (Average)	20 (6.67)	28 (9.33)	40 (13.33)	88 (29.33)
11-15 (Good)	0 (0)	2 (0.67)	4 (1.33)	6 (02)
Mean score obtained at different levels	3.58	4.31	4.56	

Median Score: 4, Maximum obtained score: 14, Minimum obtained score: 3

Mean score was poor at different health facility, and least in primary health centers.

Table – 3: Distribution of Mothers According To Quality of Care Score and Their Time of Antenatal Registration

(N: 300)

Score	Time of antenatal registration				Total (%)
	<12	12-15	16-24	>24	
≤ 5 (Poor)	44(14.67)	119 (39.67)	39(13)	4 (1.33)	206 (68.67)
6-10(Average)	31(10.33)	40 (13.33)	9(3)	8(2.67)	88(29.33)
11-15 (Good)	5(1.67)	1(0.33)	0	0	6 (2)
Total	80 (26.67)	192(64)	16(5.33)	12 (4)	300(100)

$X^2 = 19.86$, with df = 3, p value = 0 .00018

26.67% of the mothers had early registration i.e. <12 weeks of gestation. Early antenatal registration was found to be significantly related with quality of care score at the different level of health facility.

Table – 4: Distribution Mothers According To Quality of Care Score and Their Number of Ante Natal Visits

(N: 300)

Quality of Care Score	Number of antenatal visits			Total (%)
	<3	3-5	>5	
≤ 5 (Poor)	4(1.33)	171(57)	31(10.33)	206(68.67)
6-10 (Average)	2(0.67)	61(20.33)	25(8.33)	88(29.33)
11-15 (Good)	0	6(2)	0	6(2)
Total	6(2)	238(79.33)	56(18.67)	300 (100)

$X^2 = 5.74$, with df = 2, p value = 0 .056,

98% of antenatal mothers had at least 3 antenatal visits. But relation between quality of care & frequency of antenatal visits was not statistically significant at the different level of health facility.

The present study showed that few records of maternal complication were available at the primary health centers. Relevant records and registers were either incomplete or not available at all the three levels of health care delivery system. Thus it showed poor quality of the records maintenance too. This study revealed that quality of care did play an important role in the service utilization at the different centers.

IV. Discussion

In this scenario, the present study was a type of Health Service Research in connection with essential obstetric care at the different levels of health care delivery of Government Health Institution and conducted to assess the quality of essential obstetric care provided to the mothers at the different levels of health delivery system of a district of West Bengal. From the current study, it was found that mean score was poor at the different health facility. 68.67% of the mothers had poor quality of care when we considered all aspects of care.

C. Boller et al.^[14] showed quality and comparison of antenatal care in public and private providers in the United Republic of Tanzania in their study. This study used a process attributes of quality of care as shown below : Making woman comfortable (89%) , Showing interest (93%) , Non interruption of woman's speech (70%) , Politeness (98%) , Concerns of woman asked about (71%) , Privacy maintained (81%) , Explaining before examination (89%) , Explaining diagnosis (55%) and Explaining about prophylactic drugs (91%) . Compared to the above mentioned study, the present study showed the comparable quality of care score in some categories like making women comfortable (100%), mentioning next visit (85.33%) etc. But the current study found poor result in respect to maintaining confidentiality (49.66%), non interruption during counseling (45.33%), and active participation during discussion (44%). In a descriptive study to assess quality of care in the postpartum wards conducted, by M. Simbar et al.^[15] showed that mothers were very satisfied with facilities and less satisfied with personnel interaction with their visitors in hospital, which was comparable to the current study. There was no significant correlation between quality of services and clients' satisfaction. In the present study, we found that significant relationship with early registration of mothers, but no such with the frequency of antenatal visits.

In the study conducted by B.Prasad et al.^[16], it was also found that, 27.2% of the antenatal mothers did not receive any advice, the majority 68.2% received advice on diet, 49.2% received family planning related advice. 26.2% of the mothers were given advice on regular consumption on Iron & Folic acid tablets, next visit for ANC check up and Tetanus toxoid immunization. Present study found poor mean quality of care score, in all three categories of health facility. A. Bhattacharya et al.^[17] conducted a study on the perceptions and expectations of attendants regarding the quality of medical care, general satisfaction and infrastructure at the ward. Overall level of satisfaction with doctors ranged from 89.3% to 99.6%. Very high levels of satisfaction were expressed on technical quality of doctors' work and their approachability. The percentage of satisfied attendants regarding technical aspects of nursing care was above 90%, but was poor score with behavior and attitude of nurses. 24.2% attendants thought that some of the nurses were rude whereas 21.4 % felt they were indifferent. It was also found that, according to 62.7% attendants, the hospital provided best facilities for treatment. None of the respondents categorized treatment facilities as bad but 37.3% thought that it could be better.

Kyei et al.^[18] showed that 29% of the mothers in Zambia received good quality antenatal care and 24% of mothers received moderate quality antenatal care. Only 19% of mothers registered their pregnancy in the first trimester and 60% had the recommended four antenatal visits. Present study showed 26.67% of mothers have early registration and 98% of mothers had 3 or more antenatal visits, whereas half the women found to have four or more ANC visits in a study conducted in Nepal.^[19]

But The Global Network for Women's and Children's Health Research,^[20] one of the largest international networks for testing and generating evidence-based recommendations for improvement of maternal-child health in resource-limited settings, found good quality of care regarding maternal health care services. It was found that 96% of women reported at least one antenatal care visit and most of them initiated antenatal care during the first trimester. The current study shows that, few records of maternal complication were available at the primary health centers. Similar to our study, lack of documentation and absence of notes on activities were found to be more common in the government hospital along with record keeping, monitoring and follow up, in a report conducted in rural Tanzania.^[21] A study conducted in Uganda also found poor quality of the antenatal consultation process, as found in the current study.^[22] Some study conducted in rural districts of Burkina Faso, Ghana and Tanzania found that some technical quality scored poorly, especially counselling and laboratory examination.^[23] An Indian study conducted in Agra found urban rural difference in quality of antenatal care.^[24]

Another study conducted in Pakistan found lowest level for standard protocol steps for both technical and counselling services.^[25] Quality of maternal care was also low in Kenya, particularly clinical quality of antenatal and delivery care.^[26] Lower than desired quality of antenatal care was observed in both north and south Indian states, in a study conducted by Manju Rani et al. The quality was found to be significantly better in south

India compared with north India, especially among the disadvantaged women. A significantly positive relationship was observed between the quality and utilization of antenatal care.^[27] Thus it was found although infrastructural, technical qualities were good in most of the studied areas, but quality of interpersonal interaction was lagging far behind. So utilization of service by beneficiary could only be improved if overall quality of care was improved.

V. Conclusion

The Reproductive and child health programme was launched on 15th October 1997. RCH and phase II was launched on 1st April, 2005. The new strategy was initiated as RMNCH+A Approach in 2013. The provision of good quality is the crux of the RCH programme. The present study undertaken found unacceptable quality of essential obstetric care provided at the different levels of health care delivery system and also found out that mothers' compliance to routine antenatal check up provided at different health care delivery unit was related to quality of care. Poor quality of antenatal care was likely to reduce its utilization. It was found that good quality of care not only ensured better compliance but also ensured better outcome. Thus emphasis must be given to improve the quality of antenatal care to increase utilization of antenatal care and achieve better maternal health outcomes.

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