A Quality Assessment of Institutional Deliveries in Jaipur, Rajasthan

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PREFACE

The National Rural Health Mission (NRHM) was launched by the Government of India on 12th April 2005 to carry out necessary architectural correction in the basic health care delivery system, with a plan of action that includes a commitment to increase public expenditure on health. The mission envisages an additionally of 30% over existing annual budgetary outlays every year to fulfill the mandate to raise the outlays for public health from 0.9% of GDP to 2-3% of GDP. Under the Mission, multifarious activities have been initiated to strengthen the rural health care delivery system for the improvement of health of the rural population.

NRHM implementation framework does not envisage significant engagement of medical colleges in delivery of mission interventions. The role of medical colleges in RCH-II is largely limited to conduction of clinical skill based trainings. In the absence of any systematic engagement of medical colleges, faculty members of departments are clueless about the evidence based technical strategies being pursued in the implementation of various National Health Programmes. There is a huge potential available in medical colleges of the country for undertaking innovations, facilitating programme interventions and conducting health systems research, which largely remains untapped.

The Rapid Assessment of Health Interventions (RAHI), a collaborative activity with the United Nations Population Fund (UNFPA), is a unique initiative taken under the wider umbrella of the Public Health Education and Research Consortium (PHERC) of the National Institute of Health and Family Welfare (NIHFW) for developing partnerships with different organisations working in the field of health and family welfare. The objective of the project is to accelerate NRHM delivery in identified states by organising timely, quality and appropriate inputs through rapid assessments/reviews to address priority implementation problems. During the first phase of the RAHI project, the UNFPA supported 12 health systems research projects in five low-performing states viz. Madhya Pradesh, Jharkhand, Chhattisgarh, Uttar Pradesh, and Orissa. During the second phase, another 12 health system research projects from 6 low performing states viz. Uttar Pradesh, Uttarakhand, Madhya Pradesh, Jharkhand, Bihar and Rajasthan were taken up.

The rationale for supporting such rapid assessments stems from the discussions during the periodic Joint Review Missions and Common Review Missions. An impressive number of innovations have been supported by the states to improve access and enhance service quality. Many innovations are currently underway in the states and districts to deliver healthcare services in an effective manner. The state and district programme managers wish to know how well these innovations are performing so that in case of gaps corrective measures can be taken to achieve the stated objectives. There has been an increasing recognition for incremental improvements in the programme delivery by undertaking quick and rapid
health systems research and engineering the feedback into the processes. As an institutional response to such demand an attempt has been made to develop a network of institutions and strengthen their capacities on rapid appraisal methodologies for generating programme-relevant information at local and regional levels.

The rapid appraisal of some of the interventions taken up in the second phase of RAHI-project covered the issues of contribution of indigenous system of medicine in operationalisation of 24x7 services, interface of ASHAs with the community and service providers, logistics and supply management system of drugs at different levels, functioning of mobile medical units, birth preparedness and complication readiness as a tool to reduce MMR, quality assessment of institutional deliveries, performance based incentives to ASHA Sahyaogini, Referal transport systems, functioning of programme management units, functioning of RKS, utilisation of untied funds at various levels and utilisation and client satisfaction of RCH service. The present study report entitled “A Quality Assessment of Institutional Deliveries in Jaipur, Rajasthan” by the Department of Community Medicine, S.M.S. Medical College, Jaipur, was finalized by NIHFW in consultation with UNFPA.

The findings and recommendations of these studies will trigger a series of follow-up measures by programme managers in the state. We strongly feel availability of such a resource to the programme managers will provide necessary evidence based inputs enabling them to make any mid course corrections and also scaling up. An added benefit will be incorporation of information about newer programmatic interventions in the medical curriculum.

Dr. Dinesh Agarwal
National Programme Officer, UNFPA

Prof. Deoki Nandan
Director, NIHFW
ACKNOWLEDGEMENTS

I extend my sincere thanks to Prof. Deoki Nandan, Director, National Institute of Health and Family Welfare, for assigning the study on “Quality Assessment of Institutional Deliveries in Jaipur District, Rajasthan”, to the Department of Community Medicine, Jaipur.

We are extremely thankful to Dr. Govind Sharma, Secretary, Medical Education, without his support this research would not have been possible. We appreciate the efforts of Dr. Ashok Pangaria, Principal, S.M.S. Medical College, Jaipur. I convey my thanks and regards for his relentless work and constant guidance for the study. Dr. V. K Tiwari, Dr.M. Bhattacharya, Dr. U. Datta and other senior faculties of NIHFW deserve special thanks for their technical guidance, support and cooperation. Their inputs have enriched the quality and overall content of the analysis.

Thanks to Dr. S.C. Soni, (Asst. Professor and Co-Principal Investigator) for his support, enthusiasm and active involvement right from the initiation of the study, to report writing and dissemination.

I extend my thanks to Dr. A.S. Dua (Asst. Professor) for his excellent skills in data analysis, data management, data interpretation and report writing. I am thankful to the Co-Principal Investigator Dr.S.C. Soni and field supervisors Dr. A.S. Dua for their keen interest, hard work and team spirit during field data collection and Focus Group Discussions.

Special thanks to the post graduate students, Dr. Ankur Mitruka and Dr. Narain Agarwal for being actively involved in the study, data collection and have benefited for their academic activities. I am also thankful to Dr.A.K. Bhardwaj, Professor and Head, Department of Community Medicine for his valuable support during training and planning of the field work.

The CMandHOs I and II, Dy.CMandHO (FW) and RCHO of Jaipur district, Block CMOs, M.O.I/C CEmOCs/BEmOCs and Medical Officers of Accredited Private Hospitals and ANMs of Accredited Sub-centres of the studied CemOCs/BemOCs/Accredited Sub-Centres and Accredited Private Hospitals have provided excellent support and co-operation in providing information and their opinions during the field study and their generous participation in the FGDs and providing valuable information for the study.

Prof. (Dr.) M.P. Sharma
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acc. PH</td>
<td>Accredited Private Hospital</td>
</tr>
<tr>
<td>Acc. SC</td>
<td>Accredited Sub Centre</td>
</tr>
<tr>
<td>ANM</td>
<td>Auxiliary Nurse Midwife</td>
</tr>
<tr>
<td>ANC</td>
<td>Anti Natal Care</td>
</tr>
<tr>
<td>ASHA</td>
<td>Accredited Social Health Activist</td>
</tr>
<tr>
<td>AWW</td>
<td>Angan Wadi Worker</td>
</tr>
<tr>
<td>Block CMO</td>
<td>Block Chief Medical Officer</td>
</tr>
<tr>
<td>BemOC</td>
<td>Basic Emergency Obstetric Centre</td>
</tr>
<tr>
<td>CEmOC</td>
<td>Comprehensive Emergency Obstetric Centre</td>
</tr>
<tr>
<td>CMandHO</td>
<td>Chief Medical and Health Officer</td>
</tr>
<tr>
<td>Dy.CMandHO</td>
<td>Deputy Chief Medical and Health Officer</td>
</tr>
<tr>
<td>DPM</td>
<td>District Programme Manager</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>FRU</td>
<td>First Referral Unit</td>
</tr>
<tr>
<td>IFA</td>
<td>Iron Folic Acid</td>
</tr>
<tr>
<td>IPHS</td>
<td>Indian Public Health Standards</td>
</tr>
<tr>
<td>JSY</td>
<td>Janani Suraksha Yojana</td>
</tr>
<tr>
<td>MIS</td>
<td>Management Information System</td>
</tr>
<tr>
<td>M/O</td>
<td>Medical Officer</td>
</tr>
<tr>
<td>MO I/C</td>
<td>Medical Officer In-charge</td>
</tr>
<tr>
<td>NRHM</td>
<td>National Rural Health Mission</td>
</tr>
<tr>
<td>PNC</td>
<td>Post Natal Care</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>PRI</td>
<td>Panchayt Raj Institution</td>
</tr>
<tr>
<td>RMRS</td>
<td>Rajasthan Medical Relief Society</td>
</tr>
<tr>
<td>RCHO</td>
<td>Reproductive and Child Health Officer</td>
</tr>
<tr>
<td>SBA</td>
<td>Skill Birth Attendant</td>
</tr>
<tr>
<td>SHG</td>
<td>Self Help Group</td>
</tr>
<tr>
<td>TBA</td>
<td>Traditional Birth Attendant</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
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<th>Sl. No.</th>
<th>Title of the Tables</th>
<th>Page No</th>
</tr>
</thead>
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Executive Summary

Introduction

The National Institute of Health and Family Welfare (NIHFW), with financial assistance from UNFPA initiated capacity building workshops on rapid appraisal methodologies and concurrently undertook appraisals of health interventions under NRHM in collaboration with its academic partners in low performing states of India.

In regard to health care resources, quality may simply be described as the suitability for providing the programmed services in a reliable manner. It is indicated by the training, skills, knowledge, attitudes and behaviour of the personnel by the degree of cleanliness and safety of the health care facilities and by the adequacy of the equipment and supplies found in them.

Key Objective

To assess the quality of institutional deliveries in Jaipur district.

Specific Objectives

1. To review and compare the number of deliveries conducted at various public health facilities before and after the launch of JSY.

2. To study the gaps in resources (infrastructure, human resource, drugs and equipments) for institutional deliveries.

3. To study the status of service quality during ANC, Intranal and postnatal viz. frequency of care, timeliness of care, content of care, quality referrals etc.

4. To assess quality of services in reference to care providers and clients satisfaction, and suggest measures to improve the health care facilities.

Methodology

Sampling Design

Stratified sampling design was followed to cover the government hospitals in every direction and at every level starting from sub-centre to district level for Jaipur district.
Salient Findings

- There is lack/shortage of specialists e.g. Gynaecologist/Anaesthetist/Paediatrician and paramedical staff at CEmOC/BEmOC levels for the implementation of the programme, leading to increased workload and poor management especially for complications. There is either absence or lack of institutional logistics; ill equipped labour rooms at BemOCs and Operation theatre at CEmOC level. There is no labour room as well as equipments at the accredited Sub-centres to conduct deliveries while the most of the ANMs are skilled and SBA trained.
- There is shortage of antibiotics, non-availability of oxytocics, methergin, mesoprostol, magsulph and other medicines at various CEmOC and BEmOC levels. While no deliveries are conducted at the accredited Sub-centres except one with poor facilities to conduct deliveries, monitoring and supervision were absent for these centres thereby limiting corrective action.
- It was also found that there was delay in disbursement of funds to the identified private hospitals at some places.
- There was non-availability of transport facilities for referral cases at BEmOC level and Accredited Sub-centres where the attendants of patients hire the private vehicles for the purpose of transporting the patients in emergencies by their own efforts.
- Beneficiaries had inadequate knowledge about the components of the programme and their role and responsibilities. A big gap existed in the knowledge level of ASHA and other health functionaries regarding the programmes. All this Lack of awareness in the community resulted in non-use of services

Recommendations

- The vacancies at all levels need to be filled up immediately particularly for the specialists. There is immediate need for action, to meet out the demand for Emergency Obstetric Care at all CEmOCs/ BEmOCs.
- The inadequacy of equipments, drugs, infrastructure should be assessed through facility surveys and the deficits to be filled up urgently to meet the increased demand for services on. The availability of all essential drugs and their quantity must be ensured as early as possible like non-supply of Mesoprostol and Magsulph to manage complications.
- Sub-centres without proper building and without labour room need to be provided with them or taken off the list of accredited centres. Delivery facility at the sub-centre ought to be improved both qualitatively and quantitatively.
- Delay in disbursement of fund due to shortage or not getting it in time may be addressed appropriately.
- Transport facilities must be made available at the Sub-centre level for timely referrals.
- ANMs, HW (F) and ASHA must be kept informed about the different aspects of JSY from time to time or regularly.
- IEC activities must be strengthened to generate awareness among the non-beneficiaries regarding the benefits of Institutional deliveries. There is a need for repeated training and sensitization of MOs, ANMs, LHV's and ASHA about the benefits of the programme.
CHAPTER I

INTRODUCTION

Genesis of Study

Rajasthan is the state with second highest maternal mortality in India. Approximately total number of deaths of pregnant ladies in Rajasthan in one year is equivalent to total number of deaths of pregnant mothers in five years in Kerala.

District Jaipur has 3 medical colleges (1 Govt.+ 2 Private), 3 district hospitals, 7 sub-district hospital, 2 satellite hospitals, 7 FRUs, 8 CEmOC, 6 BEmOC, 16 static centres, 13 blocks with 18 CHCs, 97 PHCs (88 Rural + 9 Urban), 4 model PHCs, 8 Urban Family welfare centres, 19 MCWC’s, 81 accredited S.C.. A large number of peripheral health functionaries. Total population of district is 52,51,071 (Census 2001) and estimated population 60,39,382(2007-08), Males 27,68,203 and Females 24,82,868. There is 13 blocks (Panchayat samiti) among which only 4 are rural and remaining 9 blocks has been urbanized. While there is 488 gram-panchayat and 2131 villages.

In regard to health care resources, quality may simply be described as the suitability for providing the programme services in a reliable manner. It is indicated by the training, skills, knowledge, attitudes and behaviour of the personnel, by the degree of cleanliness and safety of the health care facilities and by the adequacy of the equipment and supplies found in them.

The Three delays (Delay at home for decision making, delay in arranging for transportation to hospital and delay at the facility) level for prompt medical care, are the causes of death. Addressing these three key delays can avert most of the deaths of pregnant mother.

JSY was implemented in Rajasthan in May 2005. Under this scheme, a selected number of ASHAs have been identified at the village level to facilitate early registration of antenatal women, provide Ante Natal Care and ensure timely transport for women for institutional delivery. Both the woman and the ASHA are given cash assistance for ensuring a safe institutional delivery.

CEmOC /BEmOC have been developed to increase the quality of institutional deliveries and the accreditation of sub-centres done to ensure the safe delivery close to homes of women. Higher the accreditation of the private hospitals has also been done to fulfill the requirement of the increased number of Health Care Facilities for better coverage of the services and the conduct of institutional deliveries. A total number of 187 institutions have been identified to provide comprehensive emergency obstetric care services. These institutions will be strengthened in a phased manner. In the first phase 137 institutions will be strengthened and remaining 50 institutions will be strengthened in the second phase. Similarly a total of 173 institutions are identified to provide basic emergency obstetric care services.
Objectives

General Objective

To assess the quality of institutional deliveries in Jaipur district.

Specific Objectives

1. To review and compare the number of deliveries conducted at various public health facilities before and after the launch of JSY.

2. To study the gaps in resources (infrastructure, human resource, drugs and equipments) for institutional deliveries.

3. To study the status of service quality during ANC, Intranatal and postnatal viz. frequency of care, timeliness of care, content of care, quality referrals etc.

4. To assess quality of services in reference to care providers and client’s satisfaction, and suggest measures to improve the health care facilities.

The main causes of maternal mortality are hemorrhage, abortion, hypertension, anemia and sepsis. Most maternal deaths occur as unpredictable obstetric emergencies, thus a strategy to achieve a substantial decline of maternal mortality must prioritize improvement in medical treatment of obstetric emergencies at CEmOCs/BEmOCs. Reduction of maternal and perinatal mortality depends to a great extent on improved accessibility to quality obstetric services such as surgery and blood transfusion that can only be provided at CEmOC level in rural areas but also for technically simple medical interventions for sepsis and bleeding at BEmOC level. The Government of India has under NRHM made provisions for delivery of such services and instituted the Indian Public Health standards to ensure quality in services.

The main objective of this study was to assess the quality of care during institutional deliveries (EOC) in rural areas of district Jaipur.
CHAPTER II

METHODOLOGY

Study Design

It is a Cross-Sectional study. The study had a stratified sampling design with a mix of both qualitative (FGD in-depth interviews, record analysis) and quantitative techniques.

Sampling Design

Health facilities at various levels CEmOC and BEmOC facilities and their accredited Sub-Centres as well as accredited Private hospitals, stakeholders under NRHM, viz Health care providers (Ob.-Gyn. specialist, MOs, staff nurses, LHV and ANMs) and clients, were all included in the study.

The Study Respondents:

- District level: CM and HOs IandII and Dy. CM and HO (FW);
- CEmOC level: Block CMO, MO I/C of CEmOCs, LHV, ANMs and Beneficiaries including postnatal patients.
- BEmOC level: MO I/C of BEmOCs, LHV, ANMs and Beneficiaries antenatal natal and postnatal patients.
- Accredited Sub Centre level: ANMs and Beneficiaries (Post Natal Patients).

Accredited Private Hospital level: MO I/C of Accredited Private Hospital, Nursing staff and beneficiaries (Post Natal Patients).

Sampling frame

Two Accredited Sub-Centres (one nearest and the other farthest) were identified from each CEmOCs and BEmOCs amounting to a total of 5 study blocks. From each CEmOC and BEmOC, 2 Accredited Sub-Centres and 1 Accredited Private Hospital were randomly selected. Further, from each CEmOCs/BEmOCs/Accredited Sub-Centres and Accredited Private Hospitals all available beneficiaries (postnatal patients) were selected.

Sample Size

Health facilities:

- CEmOC facilities: 05 (there are total 8 CEmOC facilities) two nearest to city centre, i.e. Chomu, Bassi and farthest three i.e. Dudu, Phagi, Shahpura)
- BEmOC facilities: 04 (there are total 6 BEmOC facilities) two nearest to city, i.e. Watika, Sirsi and two farthest, i.e. Toonga, Achrol.
- Accredited 14 S.C. (there are total 81 Accredited S.C.) 10 Accredited S.C. of 5 CEmOC facilities, of which Five nearest and Five farthest, 4 Accredited SC of 4 BEmOC of which two nearest and two farthest of each BEmOC (because other two BEmOC don’t have Accredited S.C.)
- Accredited Private hospitals 08 (there are 49 Accredited Private Hospitals) one from each CEmOC and BEmOC (CEmOC, Dudu does not have the Accredited Private hospital).
- Method of sampling Purposive sampling after stratification

Table 2.1: Selection Method for the Institutions

<table>
<thead>
<tr>
<th>Selection method</th>
<th>(CEmOC) facilities</th>
<th>(BEmOC) facilities</th>
<th>Accredited SCs</th>
<th>Accredited Private hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stratified and Purposive</td>
<td>05(Out of total 08)</td>
<td>04(Out of total 06)</td>
<td>10Acc.SCs(CEmOC) + 04Acc.SCs(BEmOC) (Other two BEmOCs don't have Acc. S.C.)</td>
<td>04Acc.P.H. of CEmOC area (Dudu don’t have Acc. P.H.) + 04 Acc.P.H. of BEmOC area</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>04Acc.P.H. of CEmOC area</td>
<td></td>
</tr>
<tr>
<td>Stratified and Purposive</td>
<td>2 near, 3 farthest</td>
<td>2 near, 2 Farthest</td>
<td>1 nearest, 1 farthest to each CEmOC/BEmOC</td>
<td>1 each CEmOC/BEmOC</td>
</tr>
</tbody>
</table>

Table-2.2 : Region-wise Distribution of Sample in Jaipur District

Sample distribution

<table>
<thead>
<tr>
<th>Regions</th>
<th>Selected Tehsils/Blocks CEmOC/ BEmOC</th>
<th>Selected Health Care Facilities</th>
<th>Names Of Selected Towns/Villages</th>
<th>Accredited Private Hospitals (Name of Block)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-eastern Region</td>
<td>Shahpura (CEmOC)</td>
<td>CHC</td>
<td>Shahpura (CEmOC)</td>
<td>Shahpura Hospital and Research Centre, Shahpura.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two Accredited S.Cs.</td>
<td>Nithara and Nawalpura (manoharpura)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>achrol (BEmOC)</td>
<td>PHC</td>
<td>Achrol (BEmOC)</td>
<td>R. S. Mahila and General Hospital, Bus Stand, Rajawas, Siker Road, Jaipur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two Accredited S.Cs.</td>
<td>Devgudha and Kukas</td>
<td></td>
</tr>
<tr>
<td>South-eastern Region</td>
<td>Bassi (CEmOC)</td>
<td>CHC</td>
<td>Bassi (CEmOC)</td>
<td>Madhav Zenana and General Hospital,Gangadham mod, Bassi. (Bassi)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two Accredited S.Cs.</td>
<td>Khokhawala and Rajpura pitalwas</td>
<td></td>
</tr>
</tbody>
</table>
- Interview were taken of the staff who were involved at the various levels to conduct deliveries on...
- Principal Medical Officer (for assessment of constraints only)
- MOs (all)
- Staff nurses (all)
- LHV’s (all)
- ANMs (all –

- **Inclusion/Exclusion Criteria for interviews**
  All those staff involved in conducting delivery (Ob-Gynae specialist, MOs, staff nurses, LHV’s and ANMs) will be included in the study. All those not involved in conducting delivery and those who will refuse to take part will be excluded.
Selection of the Beneficiaries

From all the Institutions CEmOCs/ BEmOCs/Accredited Sub-Centres and Accredited Private Hospital beneficiaries present at the time of study after delivery and discharged post delivery were selected for Exit Interviews to find out birth preparedness and level of client satisfaction regarding availing the institutional facilities for institutional deliveries and the money received under JSY scheme.

Study Duration

12 weeks including data collection ie October-Dec. 2008.

Data Collection Methods

Tools and techniques

Data was collected using semi-structured interview schedules for In-depth Interviews (IDI), Check-list for Facility Survey, Focus Group Discussions (FGDs) and Exit Interviews of Beneficiaries. Primary and secondary data sources were used for data collection. Primary data was collected from all the respondents. In addition primary data was also collected from the beneficiaries of each institute by using semi-structured interview schedules.

Secondary data was collected from the reports and the records available at district (CM and HO I and II), CEmOCs, BEmOCs, Accredited sub-centres and Accredited Private Hospitals I regarding the operational mechanism, constraints faced by the service providers and utilization of the services under JSY. All the data collected were triangulated to have more clarity on the findings at the time of analysis.

Processes followed for conduct of the study

All the staff involved in the rapid appraisal research was provided two days of training on research guidelines, tools and research issues before the commencement of the actual fieldwork. The study maintained all research ethics throughout.

Initially a team of two investigators and one supervisor, worked at every CEmOC and BEmOC level. Co-PI and PI conducted FGDs at every CEmOC and BEmOC levels. Two teams comprising of a investigator, Co-PI visited two set of facilities due to time constraint. One investigator and PI or Co-PI worked for remaining institutions so as to be completed within time frame due to unavailability of the supervisor for the remaining facilities. Consultants from NIHFW visited Jaipur and monitored the training once but beyond that directions were received from time to time by e-mail as well as telephonically regarding field activities, data analysis, report writing and fund disbursement.

All In-Depth Interviews, Exit Interviews and FGDs were recorded after taking prior consent from the respondents and were transcribed. One FGD was conducted in each CEmOC and BEmOC. Data collected was from each CEmOC and BEmOC and from the LHV, PHN and ANMs. In-depth
interviews (IDI) of Medical Officer I/C of CEmOC and BEmOC was undertaken and Exit Interviews was taken from the beneficiaries available at the institute post delivery or being discharged at the time of study.

Quality Assurance for the data:

1. In order to ensure the quality of the data the Principal Investigator (P.I) / Co P.I conducted the FGDs at all CEmOC and BEmOC level and in-depth interviews at district level, CEmOC and BEmOC level. The investigators facilitated in ensuring the availability of respondents for the interviews and the FGDs.

2. Use of appropriate study tools:
3. Field visits to 31 health facilities which included:
   a. Five CEmOC facilities
   b. Four BEmOC facilities
   c. Fourteen Accredited Subcentres
   d. Eight Accredited Private Hospitals
4. In-depth interviews with officer incharges and service providers
5. Facility survey of all health facilities under study
6. Exit interviews for Client Satisfaction with pregnant mothers or their attendants

Data Analysis Plan:

Collected data was analyzed and expressed in percentages.

Ethical Clearance

The project structure was examined and cleared by the ethical committee board of NIHFW.
CHAPTER III
Findings and Discussion

Background

The process of strengthening health facilities for maternal care by increasing the number of centres and improving the quality of institutional deliveries started in 2005-06 with identification of facilities for strengthening to provide BEmOC and CEmOC services. Following these interventions, the government started also the process of accrediting private hospitals in November 2007 for provision of these services and better reach to beneficiaries.

Increase in Institutional Deliveries

On Government of India through the records of health facilities (especially government BEmOC and CEmOC facilities), an increase in institutional deliveries was noted in the surveyed facilities following implementation of Janani Suraksha Yojana (JSY). However, since information available on number of antenatal cases seen and on number of deliveries conducted was not corresponding for two consecutive years. (Table 3.1). Similarly, information received from Accredited Private Hospitals was also sketchy, as records were not properly maintained prior to implementation of JSY.

Table 3.1. Information on some Maternal Care Parameters from Different Categories of Facilities

<table>
<thead>
<tr>
<th>Facility</th>
<th>ANC Registration</th>
<th>Inst. Deliveries</th>
<th>JSY Beneficiaries</th>
<th>Referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>07-08</td>
<td>1.4.08 to 30.9.08</td>
<td>07-08</td>
<td>1.4.08 to 30.9.08</td>
</tr>
<tr>
<td>CEmOC Bassi</td>
<td>2378</td>
<td>1214</td>
<td>5070</td>
<td>3030</td>
</tr>
<tr>
<td>CEmOC Chomu</td>
<td>4813</td>
<td>962</td>
<td>6759</td>
<td>3416</td>
</tr>
<tr>
<td>CEmOC Dudu</td>
<td>486</td>
<td>282</td>
<td>824</td>
<td>504</td>
</tr>
<tr>
<td>CEmOC Phagi</td>
<td>6844</td>
<td>3038</td>
<td>1563</td>
<td>496</td>
</tr>
<tr>
<td>BEmOC Vatika</td>
<td>513</td>
<td>268</td>
<td>601</td>
<td>344</td>
</tr>
<tr>
<td>BEmOC Sirsi</td>
<td>227</td>
<td>151</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>BEmOC Tunga</td>
<td>1479</td>
<td>646</td>
<td>593</td>
<td>367</td>
</tr>
<tr>
<td>BEmOC Achrol</td>
<td>INA</td>
<td>INA</td>
<td>INA</td>
<td>447</td>
</tr>
<tr>
<td>Accredited Pvt. Hospital, Barala</td>
<td>INA</td>
<td>INA</td>
<td>314</td>
<td>264</td>
</tr>
<tr>
<td>Accredited Madhav Zanana Hospital</td>
<td>INA</td>
<td>INA</td>
<td>92</td>
<td>63</td>
</tr>
<tr>
<td>Accredited Shahpura Pvt. Hospital</td>
<td>2163</td>
<td>2278</td>
<td>1787</td>
<td>1472</td>
</tr>
<tr>
<td>Accredited St. Thomas Hospital</td>
<td>INA</td>
<td>INA</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Accredited</td>
<td>INA</td>
<td>INA</td>
<td>35</td>
<td>114</td>
</tr>
</tbody>
</table>

17 | Page
Thus provisional conclusion may be drawn that there is increase in number of deliveries especially after implementation of JSY scheme.

Planning for Birth Micro Plan
No service provider was aware of the term 'birth micro plan'; however, on interaction they specified about the issues needed to be looked into for preparation of delivery/birth of the child such as what is EDD, where the mother would deliver, how she would reach there, what were the danger signs during pregnancy, etc.

Infrastructure/Input

a) Physical Infrastructure of Institutions
All Accredited Private Hospitals had an operation theatre, a labour room and a casualty room. All of them had a generator of their own and 24-hour water supply. Their number of beds ranged from 7 to 30.

All the CEmOC and BEmOC facilities had an operation theatre and a labour room. All of them had 24-hour water supply, electricity and telephone connection but none had an intercom facility. None of these facilities had an ultrasonography machine. Three CEmOC facilities had a generator each. One BEmOC facility had neither a stretcher nor a wheel chair, while other BEmOC facilities had stretchers.

Small doable interventions requiring minimal or no investment for improving the quality of Intranatal and postnatal care at government health facilities.

While conducting visits with the purpose of qualitative evaluation of institutional deliveries at health facilities, some other key observations were made. These are some gaps that require minimal or no additional investment for improving the quality of institutional deliveries.

1. Use of examination table at the Sub-centre (Fig 9) – Examination table is available at the Sub-centre but completely unutilized. The inset picture shows a blanket, a pillow required to examine a client. Minimum or no investment is required to make it functional.
2. Foot Steps for the Labour-Table at a BEmOC facility (Fig 10) – Keeping in mind the average height of Indian women, the height of the stepping stool being used might not be adequate and a proper stepping stool might be required (lest we risk the mother falling down), as was seen in an Accredited Private Hospital and in other BEmOC and CEMOC facilities.

3. Use of side screen while examining clients – Right of the clients to privacy (Fig.11) – It is very unlikely that the side screen seen in the photograph was used in the past few/many months. With no additional investment, this could very well be utilized for ensuring privacy of the client during examination.
Fig 11. Side Screen lying unutilized at a BEmOC facility and wheelbarrow for waste disposal lying in the ward

4. Cleanliness and enough free space for the mother and her newborn in the ward while under 24 hours of observation period (Fig 12) – Adequate free circulation of dust-free air is good for the mother and her newborn, lest there is a risk of infection in either of them. In the photograph, the piled up vaccine carriers can be seen over the ‘non-functional’ ice-lined refrigerator (ILR) and Deep Freeze of a BEmOC facility. Not shown in the photograph are two bags of bleaching powder in another corner of the ward. These items can be simply moved to another unoccupied/unutilized room, reducing the risk of infection and improving the availability of space and the look of the ward.

Fig 12. Vaccine Carriers stacked over ‘condemned’ ILR and Deep Freeze, full of dust, lying in the maternity ward at a BEmOC facility
b) Availability of skilled manpower/input

The role played by Accredited Private Hospitals in managing maternal complications in towns and at sub-divisional levels was quite encouraging. While the government CEmOC facilities grappled with the issue of non-availability of anesthetists for assisting the Obstetricians in conducting caesarean section operations, All the Accredited Private Hospitals visited were conducting caesarean section operations with the assistance of (full time or on call) anesthetists (Table 3.2) and managing all kinds of complications including APH, PPH, pregnancy induced hypertension/toxemia, obstructed labour and puerperal sepsis.

<table>
<thead>
<tr>
<th>Specialist Category</th>
<th>Full Time</th>
<th>Part-time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrician/Gynecologist</td>
<td>8 (100%)</td>
<td>0 (0%)</td>
<td>8 (100%)</td>
</tr>
<tr>
<td>General Surgeon</td>
<td>3 (37.5%)</td>
<td>4 (50%)</td>
<td>7 (87.5%)</td>
</tr>
<tr>
<td>Pediatrician</td>
<td>4 (50%)</td>
<td>4 (50%)</td>
<td>8 (100%)</td>
</tr>
<tr>
<td>Anesthetist</td>
<td>2 (25%)</td>
<td>6 (75%)</td>
<td>8 (100%)</td>
</tr>
</tbody>
</table>

The government payment for an Anesthetist to conduct Caesarean Section operations are approved at Rs. 1,500 per case, yet most of the government CEmOC facilities have not been able to manage the services of an Anesthetist for assisting the Obstetricians for conducting a caesarean section operation. Though all Accredited Private Hospitals manage to get them whether full time or on call.

c) Availability of essential drugs/input

1. Parenteral antibiotics were in short supply.
2. Parenteral oxytocics were in short supply.
3. Mesoprostol for management of postpartum hemorrhage was initially supplied to BE mOC and CEmOC facilities but now has not been supplied for a long time.
4. All BEmOC facilities did not have supply of Magsulf for management of eclampsia.

d) Availability of blood/input

With regard to CEmOC facilities, they were trying to perform the signal functions specific to them—though none of them had a functioning Blood Storage Centre in the facility or an Anesthetist. Only one CEmOC facility had access to blood from a private licensed Blood Bank in a nearby hospital. Thus, most cases requiring blood transfusion or caesarean section operation were referred to the tertiary level hospitals.
Quality of Processes

a) Antenatal Care

Majority of women at most institutions were registered for antenatal care after 12 weeks of pregnancy. All subcentres had BP instrument, stethoscope, weighing machine and hemoglobinometer (Fig 2). But some of these were unused like the one in fig 2.

![Hemoglobinometer](image)

**Fig 2. An unutilized Hemoglobinometer at an Accredited Sub-centre**

Hemoglobin estimation is not being done at any sub-centre. The reason given by ANMs for not doing Hb estimation was that they did not have N/10 HCl. One ANM told that she had not been trained in estimation of blood Hb.

Antenatal care is provided to women for ensuring that pregnancy progresses smoothly – at the grassroots level, Good antenatal care includes conducting an abdominal examination, measuring BP, measuring weight, estimating Hb levels, administering Tetanus Toxoid injection and giving Iron and Folic Acid tablets.

In the study, instances were found where in over three successive antenatal check-ups no weight gain was observed (as per the filled MCHN Card) (Fig 3). In addition, the timing of the three antenatal check-ups was not as per the guidelines of IPHS Standards. This kind of an approach raises doubt over the utility and effectiveness of such interventions like antenatal care in ensuring the satisfactory progress of pregnancy for discussion.
Fig 3. A reflection of the quality of antenatal care
The ANM of an Accredited Sub-centre mentioned about not knowing how to measure blood pressure, inspite of having undergone a three day training.

I have the blood pressure instrument but do not know how to measure blood pressure. We were imparted three days’ training in which measuring blood pressure was also taught, but due to rush of trainees and because of the haste in which this was taught, I could not understand how to measure

b) Awareness of clients about the Antenatal Card and use for availing benefits under JSY
All service providers across all levels of hospitals, whether public or private, were aware of the importance of antenatal card for the mothers to avail benefits provided under JSY. In case the antenatal card was provided at the time of delivery, Rs. 1,400 were given to the delivering mother; however, if the antenatal card was not submitted, Rs. 500 was deducted and the balance Rs. 900 given to the mother.

Intranatal Care
a) Providing Emergency Services and Management of Maternal Complications
Exit interviews conducted at all health facilities indicated that all mothers delivering at BEmOC, CEmOC or Accredited Private Hospitals received immediate care and though 24-hour services were available at all these health facilities. However government hospitals were not providing all the services. Amongst the sub-centres, only one of the 14 Accredited Sub-centres was conducting institutional deliveries.

Signal functions specific to the BEmOC facilities were absent in government BEmOC facilities as most cases with complications were being referred to higher health facilities, though some of the cases could have been managed at these facilities – like puerperal sepsis, eclampsia, etc if the required drugs were available.
It was noted that the resources needed were not readily available example

Referral to a higher health facility
Many cases of maternal complications are referred by CEmOC facilities to tertiary level hospitals as detailed above. However, there should be a justification for referring any case to a higher facility. As
is evident in the photograph in Fig 4, a mother was referred to Zanana Hospital (a tertiary level hospital associated with SMS Medical College, Jaipur) for Labour Pains which does not seem to be justified–either the specific reason (any maternal complication) for which the client is being referred should be specified, or the case (in case it is simply ‘labour pains’) should have been managed locally at the CEmOC facility. This calls for efforts aimed at improving record keeping at health facilities and proper referrals to higher facilities only in the most deserving cases.

Fig 4. Photograph from the Indoor (IPD) Register of a CEmOC facility indicating referral of a patient to Zanana Hospital (a tertiary level hospital) for Labour Pains.

b) Use of Partograph

Most service providers were aware of the partograph – one Block CMHO, however, had not heard of the term. Similarly, Medical Officer In charge of a BEmOC facility had not heard of the term partograph. All ANMs who had undergone training in Skilled Birth Attendance (SBA) had heard of the term and knew its use. However, at no level of health facility – whether an Accredited Subcentre, a BEmOC facility, CEmOC facility or an Accredited Private Hospital – a partograph was being used. According to some health service providers, stationery related to partograph had not been supplied to them and they will start using it once it is supplied. On a one-to-one interaction with the Obstetrician/Gynecologist in the CEmOC facilities and in Accredited Private Hospitals, it was informed that although they were not using partograph as a separate entity, progress of labour during Intranatal care was being monitored.

e) Post Natal Care: Time of discharge was variable and many were discharged within 4 -5 hours.

f) Role of ASHAs (Accredited Social Health Activists)

ASHAs create awareness on the need for skilled attendance at birth, on danger signs during pregnancy, counsel pregnant mothers for birth preparedness, motivate them for antenatal check-ups and accompany them to health institutions at the time if institutional delivery, in addition to other roles and responsibilities. Each ASHA is supposed to make 10 home visits daily in the village. At the time of survey, not every village in the surveyed blocks had an ASHA. E.g., in Bassi Block there are 210 villages and 256 Anganwadi Workers and 145 ASHA Sahayoginis. Now, an additional 30 ASHAs
have been sanctioned, making it a total of 175 in the block. Some ANMs were of the opinion that in such villages the Dai should be designated as ASHA.

<table>
<thead>
<tr>
<th>People still have a lot of trust and faith in the local Dai, whether trained or untrained, even if an ASHA is there in the area. Although the Dai might be illiterate, she should be designated as ASHA in the area. The local Dai conduct deliveries in the neighboring 10-15 villages and even accompany the woman to the hospital, if required. People have more faith in the Dai, and she should be trained and designated as ASHA. (FGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANM of an Accredited Sub-centre</td>
</tr>
</tbody>
</table>

Some ANMs were critical of the role of some ASHAs. One ANM said “The ASHA in our area has networking with the Medical Officer of the CHC. When the expectant woman or her attendants go to ASHA for accompanying them to the hospital, she makes some excuse that she will not be able to accompany, and tells them to get her name entered in the hospital records. She then gets benefit even though she has not done her duties”. However, some ANMs were of the opinion that the incentive of ASHA should be increased to Rs. 200-300 per delivery.

The Doctors and nursing staff of one more CEmOC facility highlighted the problem of ASHA, not accompanying the mother to the hospital at the time of delivery. (See Box).

<table>
<thead>
<tr>
<th>ASHAs do not come with patients on time. Especially in night deliveries, they do not accompany the patient and turn up the next day and insist that her name be added as having accompanied the mother. (FGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Staff of a CEmOC facilities</td>
</tr>
</tbody>
</table>

**c) Standard Treatment Protocols**

<table>
<thead>
<tr>
<th>Standard Treatment Protocols for Management of Maternal Complications were not available at any health facility, whether public or private, BEmOC or CEmOC.</th>
</tr>
</thead>
</table>

**Referral Transport System**

Of the five CEmOC facilities visited, two had two ambulances each and the other three had one ambulance each. In addition, ambulances provided to general public through ‘Dial 108’ facility through Public Private Partnership under NRHM are also available. These are stationed at Police Stations of block headquarters. None of the BEmOC facilities had an ambulance of its own. BPL patients are provided free transportation, while others are charged Rs. 350. Of the eight Accredited Private Hospitals surveyed, seven had their own ambulance for transporting clients in case of an emergency.
Fig 5. Ambulance stationed outside a CEmOC facility

All CEmOC facilities have their own ambulances, which are functional. In addition, service providers are aware of the Dial 108 facility for calling an ambulance in case of an emergency. This facility is being provided through Public Private Partnership under NRHM.

With regard to transport facility at BEmOC facilities, clients come in own/hired vehicle and go to SMS Hospital by the same vehicle.

Capacity Building of Consumers Institutional Deliveries

Banners, hoardings and wall paintings relating to JSY were seen in remote villages of Jaipur. At the government health facilities such as Accredited Subcentres, BEmOC facilities and CEmOC facilities – numerous flexi-sheets and posters related to JSY and other issues related to maternal and child health supplied under NRHM could be seen., IEC material related to JSY was seen lying, even at Accredited Private Hospitals.

Non-Governmental organizations are not involved in mobilization activities for increasing/promoting institutional deliveries.

Citizen’s charter indicating the range of services available, the quality of the services and the timing of the hospital could be seen at all BEmOC and CEmOC facilities that were visited. In addition, some facilities had also displayed prominently the documents required for availing the benefits of JSY Scheme and the necessary conditions for availing these benefits (Fig 1).

To begin with, a minimum of 48 hours stay at the hospital after delivery of the child was an essential pre-requisite for availing the financial incentive provided under JSY. Later on, due to operational constraints, this was reduced to 24 hours stay at the hospital after delivery of the child. All government health facilities visited prominently displayed this qualification for the benefit of JSY.
Outputs
c) Facilities and Conduct of Caesarian Sections
It is evident that government health institutions conduct the major proportion of institutional deliveries. However, it is also clear that while government health facilities (whether BEmOC or CEmOCs) refer women with maternal complications, private hospitals tend to manage most of the complications at their own institutions – especially by caesarean section operations. This can be seen by the rate of caesarean section operations among total deliveries at individual private hospitals (Table 3.3).

Table 3.3. Caesarean Section operations conducted by private hospitals

<table>
<thead>
<tr>
<th>Name of Accredited Private Hospital</th>
<th>No. of deliveries in a specified period</th>
<th>No. of Caesarean Section operations in that period</th>
<th>Rate of Caesarean Section operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ganpati Hospital</td>
<td>149</td>
<td>9</td>
<td>6.0 %</td>
</tr>
<tr>
<td>R.S. Mahila Hospital</td>
<td>76</td>
<td>9</td>
<td>11.8 %</td>
</tr>
<tr>
<td>St. Thomas Hospital</td>
<td>28</td>
<td>3</td>
<td>10.7 %</td>
</tr>
<tr>
<td>Agarwal Hospital</td>
<td>93</td>
<td>14</td>
<td>15.1 %</td>
</tr>
</tbody>
</table>

N.B.: Information on caesarean section operations from other private hospitals not available
Grievance Redressal System
There is no system of grievance redressal at any Accredited Subcentre or BEmOC facility. However, three of the five CEmOC facilities surveyed had a Grievance Redressal System in place – there were complaint, suggestion and appreciation boxes at the entrance of the hospitals (Fig 6). Exit interviews conducted on clients getting discharged from private hospitals indicated that there was no specific grievance redressal mechanism at those hospitals in private sector.

Client Satisfaction with the Institutional Deliveries
Exit interviews were conducted with clients or their attendants from BEmOC facilities, CEmOC facilities and Accredited Private Hospitals regarding their satisfaction with services at the facilities. All beneficiaries availing delivery services under all the hospital categories whether government or private, were provided emergency care immediately on reaching the institution. All clients interviewed responded that 24-hour delivery facilities were available at all the surveyed institutions. All clients interviewed, whether at the government or private hospital, were satisfied with the quality of services and rated them as either excellent or good.

With regard to private practice by doctors of government hospitals, only one client out of the 27 interviewed at CEmOC institutions told that doctors do private practice and one out of the two interviewed at BEmOC institutions said the same. Amount of money charged from attendants of mothers delivering in accredited private hospitals for conducting deliveries was about Rs. 2,000 per client. Money was charged from one-third mothers by health staff for conducting deliveries at government CEmOC institutions – in almost all cases, the amount of money charged was less than Rs. 500.

Fig 6. Complaint, Suggestions and Appreciation Boxes displayed at the entrance of a CEmOC facility

Management of the System

Managing the Reporting System for Institutional Deliveries
Increase in institutional deliveries brought about by JSY Scheme has also helped improve the MIS of health facilities. An improvement in MIS is also necessary to keep a track on trend in number of institutional deliveries at different health facilities. While an improvement in reporting (for MIS) was
seen at many health facilities, specific attention needs to be drawn to a case where an institution is delivering good services but the MIS does not reflect so.

The case relates to a PHC providing 24-hour delivery services as a BEmOC facility. Deliveries at this facility have increased by more than 25% over two years, but Form C to E of this facility in which performance of this health facility is reported annually shows only 62 inpatient admissions annually even though 636 deliveries were conducted by this facility in the same calendar year (see Fig 7). All women who delivered at this facility got the incentive amount for institutional deliveries, a prerequisite for which is at least 24-hour stay at the PHC after delivery. Understandably, deliveries are also done on inpatient basis. Thus, these figures should reflect in the inpatient figures of the PHC.

![Image](image_url)

Fig 7. While the Annual (C to E) Report shows just 62 admissions (of whom only 34 were women), 636 mothers delivered at this BEmOC facility during the same period of one year.

In this case, if attention is given only to the first page, it would appear that this health facility is functioning sub-optimally (with a bed occupancy rate of 2.8%, while if the 636 deliveries are also included, the bed occupancy becomes 31.9% two beds out of six available being occupied daily on an average). Thus, even though this PHC is functioning well, its MIS does not reflect so, thereby necessitating efforts aimed at improving MIS.

Management of Fund Flow and Payment under JSY

There was no problem with regard to fund flow in any of the health facilities visited except to one Accredited Private Hospital in Shahpura block where the Accredited Private Hospital did not receive funds for 2-3 months. With this exception, there was no problem related to release of funds under JSY to beneficiaries for getting delivery conducted at a health facility. In Bassi block, one PHC and two Private Hospitals are accredited for institutional deliveries. No lump-sum amount is paid to
private accredited hospitals for institutional deliveries, and on receiving information from the private hospital about institutional delivery having been conducted, one Compounder is sent for verification and on verification the cheque is given for payment. About 5-8 deliveries per month are conducted in the accredited private hospital.

At most of the facilities visited, payment of incentive amount under JSY is given by cheque to the mother or the attendant mostly at the time of discharge and only in some instances is the payment delayed in case of Sundays, when signatures of the authorized signatory are obtained on the next working day and cheque is handed over to the mother or her attendant. In almost all cases, payment is given within 24-48 hours.

For ensuring that the incentive amount reaches the beneficiaries on time at BEmOC facilities, the Block CMHO advances the amount to Medical Officer In charge of the health facility with the directions that when 50% of the released funds are utilized, a Utilization Certificate is sent and on receiving the UC, additional funds are released. This is done to ensure that funds are always available for giving incentive money to the beneficiaries on time.

Despite exhaustive publicity of the pre-condition of stay of at least 24 hours in the hospital / health facility after delivery, some cases do occur wherein attendants of delivering mothers take her back after delivery in less than 24 hours and still claim the incentive amount under JSY, which is paid to them (see Fig). With this, the basic purpose of ensuring immediate post-partum care to the mother and newborn care to the baby might get a setback.

Fig 8. Mother and newborn discharged within less than 11 hours of delivery from a CEmOC facility against the norm of keeping them for at least 24 hours as inpatients for the mother to get JSY benefit

Charges levied by Accredited Private Hospitals
Amount of money charged by private hospitals for a normal delivery ranged from Rs. 1,200 to Rs. 1,500 and that for a Caesarean Section operation ranged from Rs. 1,200 to Rs. 5,000.
CHAPTER IV
CONCLUSION AND RECOMMENDATIONS

There are both Strengths and Weaknesses, of the Institution providing services for institutional deliveries as follows:

Strengths:

- Government institutions are conducting a major proportion of the institutional deliveries
- Staff is open about barriers they face.
- Staff is available and attending duties and providing 24x7 services at CEmOCs/BEmOCs.
- Basic infrastructure is in place and mostly functional.
- Fund flow is smooth except at one Accredited Private Hospital.
- Citizen’s Charters are displayed at all CEmOCs
- Grievance Redressal System is in existence at all CEmOCs.

Weaknesses:

- Government institutions are conducting major proportion of the institutional deliveries but complications of pregnancy mostly not dealt with but referred to higher Centre while in comparison Accredited Private Hospitals manage most complications.
- Government institutions are not conducting Caesarian Section because of non-availability of Anesthetist except at one CEmOC. while all the Accredited Private hospitals are conducting Caesarian Section.
- Lack of blood transfusion facilities except in one CEmOC, where blood bank is available in private sector.
- Grievance Redressal System is not in existence at any BEmOCs.
- Practices not up to date.
- Resources are incomplete lack of proper logistics and supply.
- Out of 14 Accredited sub-centre only one is conducting deliveries.
- Role and responsibilities not clear.
- Poor communication.
- Lack of documentation and inefficient MIS.

Based on the study findings a set of suggestions has been formulated for provision of efficient emergency Obstetric Care services under JSY at all institutions who are conducting Institutional deliveries.
All sorts of efforts should be made to avoid any kind of delay at every level i.e. decision at home to go to a health facility, transportation to the hospital, and attending the patient urgently at the institutional level by the service providers.

Actual implementation of the knowledge imparted from various F programmes should be enforced with enthusiasm to prevent maternal mortality as well as maternal morbidity and neonatal mortality and morbidity at every level of the institutions.

On Government of India and regular updates and orientation to the service providers about various skilled based programme to increase their capability to implement better obstetric services under JSY and their roles and responsibilities within it.

Key Recommendations

<table>
<thead>
<tr>
<th>Areas of Concern</th>
<th>Actions Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Issues</td>
<td></td>
</tr>
</tbody>
</table>
| • Lack/shortage of specialists e.g. Gynaecologist/Anaesthetist/Pediatrician and paramedical staff for the implementation of the programme, leading to increased workload and poor management of complications. | • A Zero tolerance policy should be made for these and the vacancies at all levels to be filled up immediately particularly specialists.  
• Needs immediate action to meet out the demand for Emergency Obstetric Care at all CEmOCs. |
| • Absence of institutional logistics, ill equipped labour rooms at BemOCs. | • The inadequacy of equipments drugs, infrastructure should be assessed through facility surveys and the deficits to be filled up urgently to meet increased demand on labour rooms. As funds are available, accountability of officials at these centres should be instituted.  
• The availability of all drugs and their quantity must be ensured.  
• Sub-centres without proper building and without labour room need to be provided with adequate infrastructure and should not be accredited.  
• Delivery facility at the Sub-Centre ought to be ensured both qualitatively and quantitatively. Unavailability of N/10 HCl for Hb estimation to be made available. |
| • Shortage of antibiotics, Non-availability of oxytocics, Methergin, Mesoprostol, Magsulph and other medicines. |                     |
| • Shortage of Subcentres building with proper construction and availability of labour rooms with facilities. |                     |
| • Lack of adequate facility within the Sub-Centre to conduct deliveries. |                     |
| • Ineffective monitoring and supervision by the medical personnel. | • There is a need for clear policy on monitoring and supervision on regular basis. |
The monitoring and supervision diary at district and block level must be made mandatory. The supervision needs to be supportive at every level.

Programme Issues
- Delay in disbursement of funds to the acc. private hospital.
- Non-availability of transport facilities referral cases at BEmOC level and Accredited Subcentres.
- Delay in disbursement of fund due to shortage of funds or whatever it is needed to be addressed appropriately.
- Transport facilities must be made available at the Sub-Centre level for early referrals.

IEC
- Inadequate knowledge about the components of the programme and the role and responsibilities of all staff and officers.
- A gap in the knowledge level of ASHA and health functionaries.
- Lack of awareness of community resulting in large number of non-beneficiaries.
- Sensitization of district and block level programme managers need to be stepped up.
- ANMs, HW (F) and ASHA must be kept informed about the different aspects of JSY from time to time on regular basis.
- IEC activities must be strengthened to generate awareness among non-beneficiaries regarding benefits of Institutional deliveries.
- There is a need for repeated and sensitization of MOs, ANMs and LHV and ASHA.

Limitations of the study
- As this was a rapid assessment a large sample could not be attempted.
- Lack of proper records compromised data quality.
- All aspects could not be observed due to restriction of time for the study.

Details of facilities

Basic Emergency Obstetric Care Center (BEmOC)

BEmOC is a center, which should cover a population of 1.25 lakhs (four centers for a population of five lakhs) and should provide the following services.

- Parenteral administration of Antibiotic
- Parenteral administration of Anticonvulsants
- Parenteral administration of Oxytocics
- Assisted Vaginal delivery.
- Removal of retained products of conception.
Comprehensive Emergency Obstetric Care Services (CEmOC)

CEmOC to cater the needs of population of around five lakhs and provide all the above six services along with the following services round the clock throughout the year.
1. Availability of blood and blood transfusion facility.
2. Facility for Caesarian section for delivery of fetus in emergency cases.

Accreditation of Sub-centres:

The strategy of promoting institutional delivery aims towards reducing maternal mortality. However the realistic situation is that home deliveries are Government of India on for a number of reasons. To reduce this to a large extent, where Sub-centres are located in government buildings having proper facility of lighting, drinking water, sanitation, labour table, instruments, basic obstetric care drugs as also the services of ANMs, such Sub-centres were accredited for the purpose of institutional delivery. District Health Society is authorized to identify such health sub-centres and issue accreditation.

The untied fund released for sub-center strengthening may be utilized for the purpose of strengthening these Sub-centres for institutional delivery. All pregnant women who utilize the services of such Sub-centres for the purpose of delivery are eligible for financial assistance admissible under the JSH.

Accreditation of Private Hospitals:

This task has to be basically ensured by Chief Medical Officers of the districts. The private nursing homes/clinics registered under the Societies Registration Act or Indian Trust Act, or functioning as a private clinic/nursing home can apply for accreditation. The task is entrusted to the District Health Society of the district, who would assess the performance of the institutions.

Every private medical facility (those who have applied) will be visited by a member of DHS for an assessment of its suitability as an authorized service provider under the scheme. The agreement would be executed only with those private providers who have been assessed as suitable by the DHS. That means the private hospital can provide comprehensive Emergency Obstetric Care to the patients coming for institutional delivery to their centre. In case a medical facility does not qualify for the proposed scheme, it would be informed in writing.

Beneficiary’s choice

The beneficiary will have full freedom in choosing a service provider. For example, she may seek the first ANC services from an ANM or a public health facility (PHC, referral hospital, district hospital etc.) or may like to avail the same from a private practitioner/charitable hospital accredited under the scheme. She will also have the freedom to change her service provider at any time during the course of her pregnancy or later. For example, she may choose to avail the second ANC service from another service provider than that she may have chosen for the first ANC.
Annexure I

Indicators for monitoring quality

Quality of antenatal care:

Indicators for measuring the pertinent characteristics of antenatal care might be:

- Frequency of care: the percentage of women covered who have at least three consultations before delivery.
- Timeliness of care: the percentage of women covered who have their first antenatal consultation at a gestational age of 16 weeks or less.
- Content of care: the percentage of women covered who have their blood pressure taken at least a specified number of times, a urine analysis done at least a specified number of times, and who receive two doses of tetanus toxoid during their pregnancy.
- Referrals to a Doctor: the percentage of women who are referred among those who need referral (because of bleeding, Hypertension, edema, proteinuria, tuberculosis, or a history of early jaundice in previous babies).
- Indication of delivery in Hospital: the percentage of women needing hospital care (because of their obstetrical background, current morbidity, age, height, or presentation of the fetus) who receive such a service.

It may be useful to assess also the quality of the resources with which that activity is carried out. Examples of indications of such quality are:

- For manpower providing antenatal care: The percentage of staff who has received at least a specified number of months of training in midwifery.
- For the material resources with which antenatal care is given in each area: percentage of clinics, posts or health centers in which there is a clean space for examination with privacy, minimum necessary equipment (examination table, measuring rod and tape, stethoscope, sphygmomanometer, hemoglobinometer, equipment for detecting proteinuria) and supplies (such as iron folic acid, Tetanus Toxoid, penicillin).

Indicators of the outcome of pregnancy – maternal and fetal/neonatal survival, weight at birth should be measured.

Quality of the attendance at deliveries:

Indicators for measuring the quality of this activity may include:

- Timeliness of the attendance: percentage of cases in which attendance began during the first phase of labour.
Content of care: percentage of cases in which an initial physical examination was done and the pulse, blood pressure, frequency of contractions, dilatation of cervix, and fetal heartbeats were monitored.

Care of newborn: percentage of cases in which the newborn was examined promptly and with clean hands the umbilical cord was dressed aseptically, ocular prophylaxis was given, and the infant was kept warm.

Follow-up to the delivery: percentage of cases in which an appointment was given for check up and in which advice on birth-spacing and breast-feeding was provided.

The rate of complications during delivery and the puerperium in each area or institution is a complimentary “result” indicator that may help in evaluating the quality of attendance at delivery. The same can be said of a rating of the satisfaction of the mothers after delivery.

For Facilities, Installations and equipment:

- The percentages of health facilities having safety of the buildings/boundary wall.
- The percentages of hospital beds that have clean mattresses and sheets and not more than one occupant.
- The percentage of consulting rooms and hospital wards that have one hand-washing facility in working order.
- The percentage of facilities with a standby generator in working order.
- The percentage of facilities with a continuous and safe water supply on the premises.
- The percentage of facilities where the toilets for use by patients is found to be clean and in good working order.
- The proportion of facilities with at least one blood pressure manometer, weighing scales for adults and for infants and measuring rod and tape (or other equipment considered essential).
- The proportion of health centers with a basic functioning laboratory.
- The proportion of vehicles in working order as established in national standards.
- The proportion of health posts (the most peripheral units) that have easy access at all times to a telephone.
- The proportion of health centres that have waiting area or Dharamshala at health facility site.
For essential supplies:

1. The proportion of a standard list of such supplies that are found to be in stock during supervision visits, in a defined category of facilities.
2. The proportion of such supplies that is correctly stored, according to existing standards.
3. The proportion of essential drugs in use that have been tested for potency and safety.
REFERENCES