JAN SWASTHYA SAHYOG

IN-SERVICE MENTORING

IGUNTAMAC PROJECT
2019-2020

Background

In 2016 when we started this project, based on our assessments we realized that the clinical practices and basic processes in the maternity wing required significant improvement. We also realized that in order to improve practices and systems', training alone is insufficient to institutionalize improvements. Towards that, we devised on-site mentoring visits. These mentoring visits serve as practice sessions and checking adherence to protocols are done along with training. Mentoring and support visits focus on the identification and resolution of problems and helping to optimize the allocation of resources, promoting teamwork. It focuses on working with the health staff in identifying and correcting problems, proactively improving the quality of service, and using data for decision-making. It is an immersive process with brainstorming and hand holding.

A team consisting of a district coordinator and nurse mentor visits the facility for hand-holding support. An app has been developed to assess and monitor practices using Dakshata practices checklist. The team identifies gaps and prioritizes them with the help of the staff themselves.

Typically, we plan one mentoring visit for 3 to 5 days in each district every month. During each visit, the iGunatmac team (district coordinator and nursing mentor) spends most of the time in the labour room and other concerned departments including Maternity ward, Lab, blood bank, store etc. The visits include revision of the topics taught in training, hand-holding of new evidence-based practices that were introduced during the training, mock drills for management of complications and also to ensure that all resources are available to manage complications. These visits are carried out based on an agenda drawn up by analyzing data of previous visit scores.

During the visits we focus on:

- Observation of clinical practices
- Hand hold support to nurses.

- Fill 19 practices Dakshata checklist with them
- Meeting with labour room staff on issues and improvement
- Need based discussion with store keeper, CS, DPM, matron.
- Advocate for resources
- Advocate for equipment and its proper usage and maintenance

Last year we

1. Decided to spend more time in our mentoring visits in facilities where clinical practices needed more improvement
2. Increased our focus towards building culture of quality by
    a. Teaching QI methods like 5S to facility teams
    b. Improving teamwork via team building exercises

Improvements over last three years

Improvement in Resources

Three years ago when we started work in the facilities we saw

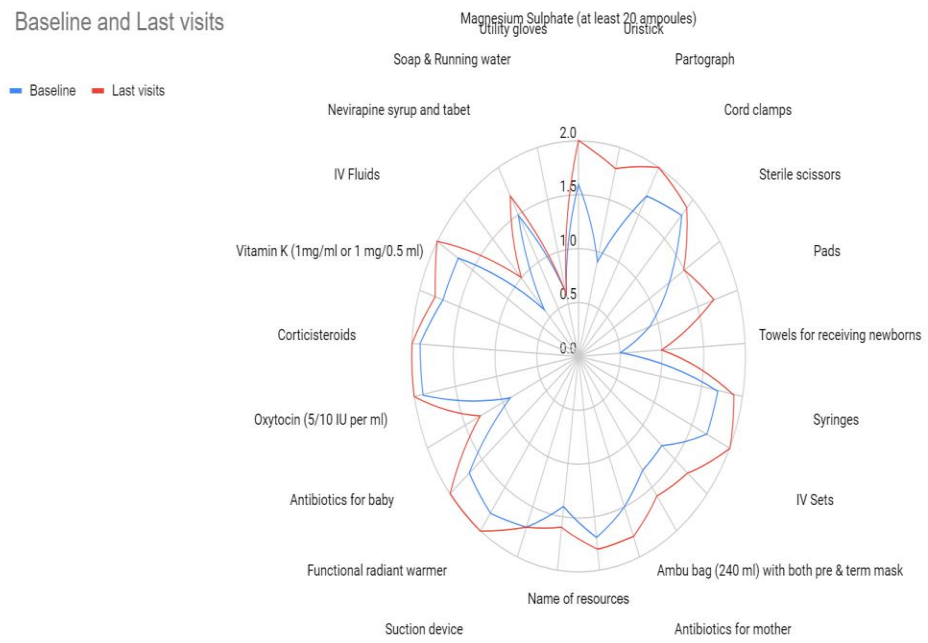
1. Essential equipment (fetal Doppler, BP apparatus autoclave etc) were frequently not functional or missing.
2. Equipment were not sufficient for the delivery load (like delivery trays, oxygen cylinders etc)
3. Insufficient consumables - especially sanitary pads, gloves
4. Basic things like thermometers were not there because monitoring of vitals was not at all happening
5. Appropriate medicines especially antibiotics were not reliably available all the time
6. Labour ward in-charges did not know how to do proper stock management. She used to indent once a month/infrequently whenever their stock was over.

To fill these gaps we conducted Dakshata training sessions for SNs and doctors to establish correct protocols of monitoring and care. There we explained the need for things like thermometers, BP machines and their importance in patient care. In these training doctors are also educated on the

various complications and treatment protocols for the same (including the right antibiotics).During our mentoring visits, we try to make things available from the store for the maternity wing by talking to facility administrators, labour room in charge. We started frequent (weekly) indenting by LR -in charges. We emphasized on specific numbers of delivery trays, medicines, equipment as well as preparedness of delivery during mentoring visits

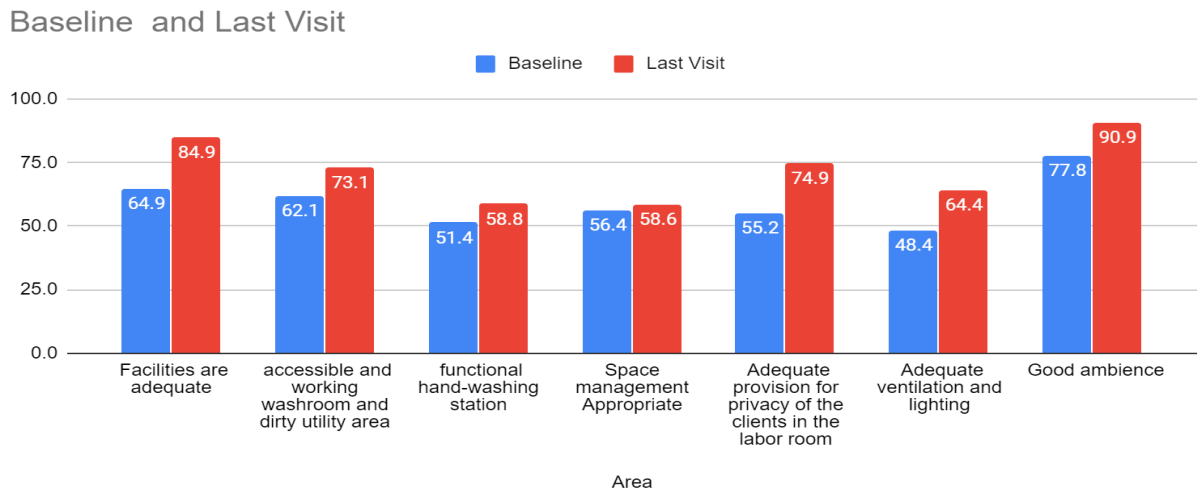
Furthermore, state governments are now being incentivized by the National Health Mission to get public facilities quality certified. Additional funds are being provided to improve the infrastructure and resources towards this initiative.

The graph below shows how availability of key labour room resources has changed in the intervention facilities over the last 3 years.



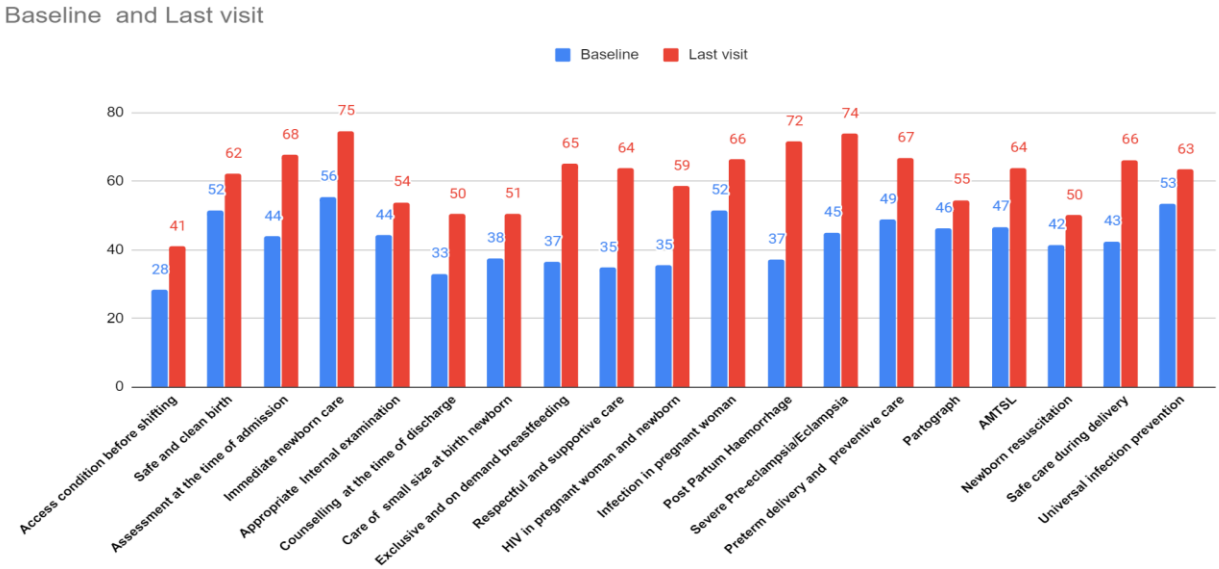
Improvement in labour room organization

We targeted availability of focus examination lights, availability of running water supply and hand wash. We also tried to better organize the labour room within the space. See graph below on how key parameters have changed over time.



Improvement in clinical practices

We put most emphasis and effort on this through regular visits to facilities by our nurse mentors. As a result, we have seen fair improvement in practices by the nursing staff of the maternity wing as can be seen here.



Top 5 Improvements in clinical practices over the past three years have been:

1. Provider identifies and manages postpartum hemorrhage

Postpartum hemorrhage is the leading cause of maternal deaths in India. Blood loss of 500 ml or more after delivery is called postpartum hemorrhage. PPH patients can be managed by administration of proper dose of uterotonics, uterine massage, treatment of shock with IV fluids, uterine compressions (Bimanual) and treatment of the cause of PPH. This score has improved from 37% to 72%. More improvement can be seen in CHC than District hospital. Among all causes of PPH, atonic uterus has the main cause.

Pre intervention: Initially there was partial or no compliance to administration of uterotonics, management of shock, administration of IV fluids, uterine massage and identification and treatment of cause of PPH.

Post Intervention: After demonstration, hand holding support during mentoring most of the staff in district hospital initiated use of uterotonics, uterine massage, proper identification and treatment of PPH after delivery. Special focus was given to administer a proper dose of uterotonics.

Improvement in shock management has been seen. Number of patients going into shock has decreased. So focus was on simple management.

2. Providers ensure respectful and supportive care for the women coming for delivery

The score of this area has improved from 35% to 64%.There are five components in this areas i.e. three sided curtain system, counseling of danger signs to mother and relative , encouraging to for the birth companion to stay with the pregnant woman during birth, explanation of important activities to mother and relatives, providing respectful and confidential care to mother.

Pre Intervention: Initially, two of the five essential components of respectful maternity care practices namely - use of a three sided curtain system and counseling of danger signs to mother and birth companions were not followed adequately.

Post Intervention: Here we ensured the use of three sided curtains and explanation of danger signs to mothers and her companion. Staff and doctors were sensitized on these issues. Thus it showed improvement. However, we could not change the behavior of staff towards pregnant mothers while providing service delivery completely. Efforts were made to sensitize staff through videos and

interpersonal communication. Allowing a birth attendant of the mother's choice while she is in labour was part of this behavior change.

3. Provider identifies and manages severe Pre-eclampsia/Eclampsia (PE/E)

These are hypertensive disorders in pregnancy. This is the second leading cause of maternal deaths. It can be prevented and managed by proper identification of danger signs, vitals monitoring, administration of hypertensive drugs, nursing care. Furthermore, it also includes availability of diagnostics, instruments and drugs. This score has significantly improved from 45 % to 74 %.

Pre- intervention: Initially, irregular availability of MgSO4, antihypertensive drugs such as Labetalol and functional BP instruments were major stumbling found in District hospitals and CHCs. There was also a knowledge gap about diagnosis of hypertensive disorders, doses of MgSO4 and antihypertensive drugs among both staff nurses and doctors.

Post intervention: We sensitized staff and doctors about availability of antihypertensive medication, MgSO4 injection and the correct protocol for administration as per the Dakshata Trainings that were conducted by JSS. After training, mock drills and mentoring, staff initiated identification of danger signs and then administered MgSO4. Doctors started to prescribe antihypertensive medication, in correct doses.

4. Provider conducts an appropriate and adequate assessment of clinical condition of pregnant woman and fetus at the time of admission

This includes functional BP apparatus, fetal Doppler, thermometer, records of BP and temperature, History taking. History taking includes obstetric history, medical history and history of previous LSCS. The score of this area improved from 44% to 68%.

Pre- intervention: Initially, the facility was not taking history properly. Usually fetal Doppler was found non-functional. Even when it was found functional, the facility team was not monitoring fetal heart rate for 1 minute on the mother's abdomen.

.**Post- intervention:** We sensitized the staff for availability of functional BP apparatus, fetal Doppler. Furthermore, to keep the thermometer, it was necessary to sensitize them to keep temperature records. Our team did this. So they started to keep the thermometer. Our team emphasized not only to keep the fetal Doppler but also the facility nurse should monitor the abdomen for 1 min.

5. Providers prepare for safe care during delivery

Preparedness for labour avoids delay in care during an emergency. This section includes pre-filled oxytocin syringes before vaginal delivery, designated newborn corner in labour room, functional items in new born care corner, and sufficient numbers of delivery trays as per labour tables and finally providers should switch on radiant warmer 30 minutes before delivery.

The score on these practices has improved from 43% to 66%.Ten units' oxytocin should be given within one minute after delivery which minimizes chances of PPH by 70%. It can be given within one minute only if it is prefilled.

Pre intervention: According to MNH guidelines, 7 trays should be prepared prior to delivery. We found that staffs were preparing trays just to show visitors rather than using it. Most of the districts had already designed newborn corners.

Post intervention: Our team started to work on availability of sufficient numbers of delivery trays according to labour tables. Furthermore, we concentrated on autoclaving of delivery trays identified and the person who will do the autoclaving on a regular basis. Hands-on support was given during the mentoring visit. Need based demonstration of preparation of trays and autoclaving was given by the team.

Shifting focus towards building a culture of quality

After working with labour room staff for three years and providing handholding support, there has been good improvement in overall clinical practices of the staff nurses. Encouraged by this change, we have tried out a couple of things this year to sustain these changes.

- Implementation of 5S in four facilities: One of the ways we came up with is to teach QI methods to facility staff so they can start to identify and solve problems more on their own. We started our work with one of the more simple QI tools which is called the 5S method.
- Improve teamwork via team building exercises:

Implementation of 5S in four facilities

5S is a system for organizing spaces so work can be performed efficiently, effectively, and safely. This system focuses on putting everything where it belongs and keeping the workplace clean, which makes it easier for people to do their jobs without wasting time or risking injury.

Why did we choose to teach 5S?

Despite improvement in HR, staff shortage continues to plague the public health facilities. A disorganized workspace adds to the workload of overloaded staff and not only can reduce the productivity and cause delays but also can increase errors. Hence, we felt the need to teach them a technique to organize the workspace. 5S is also a simple and easy to implement method over some of the other QI methods so we started with this.

We started this activity in 4 facilities last year. In each facility we followed this common process

1. First a short training was done by our Nurse Mentor to share concepts was done in facilities with all nurse staff. The decision to implement 5S in the labour room was taken by the staff themselves. Staff decided the time duration to work as a team. Material for preparation bought by staff itself prior to implementation. Our nurse mentor facilitated the process
2. Each facility chose one problem to work on. These were the issues chosen by the facility team to improve via 5S
    - The lab test kits kept in the labour room fridge would be difficult to find
    - Delay to find registers and files
    - Unnecessary things kept in the labour room
    - Cleaning up one room filled with junk to create space for nurses to relax

Learnings from this exercise

- Buy in by facility staff is important: We shared a concept first with the labour room in charge. We followed it with a classroom session on 5S. After that all staff felt the need to implement. Every staff took part in the activity. Involvement of staff in decision making to implement any activity affects positively on the activity and its outcome.
- Only theory is not sufficient: To help the facility staff understand the concepts well, we ran a 5S project in the facility.

Here's what Mrs. Janaklali Patel of District Hospital Anuppur shared with us her experience of the 5S training and implementation at DH Anuppur which was facilitated by our team. Mrs. Patel has been working at DH Anuppur for the last 5 yrs. and recently a year ago she started working in Maternity Wing. She shared her experience about how 5 'S' helped her in her work.

Mrs. Patel, while sharing her experiences at District Hospital, Anuppur mentions the condition of files and documents lying around the nursing station. Because of such a disorganized structure, if we need any file or document we have to find it at multiple places and go through every file to find out any particular document. This system was time consuming and at the same time if someone is not able to find a document we will make another copy which leads to too much duplication of work. Because of this sometimes patients have to wait for a long time just to get a discharge card and they might not get the vehicle to go to their villages and also would increase the hospital stay. Eventually it reduces our productive working hours since rather than focusing on their clinical work one has to spend a lot of time to search documents or file.

Further Mrs. Patel shares "**all of us were aware about this problem but they didn't know how to solve this".**

Explaining further about the intervention and its implementation to solve the problem, iGunatmac Nurse Mentor suggested to do 5 'S' and all of us agreed to do it. The Nurse Mentor explained everything about 5 'S' quality tools and how it is helpful in this set up.
But the interesting thing about it was not only they gave us theoretical knowledge but after the class, all of us together did practical exercises which gave us better understanding of implementation. Doing this practically enhanced our confidence to make things better.

Later, we all decided to do 5 'S' for the nursing station. Doing 5 'S' together was a great learning experience and also a fun activity for the team. After accomplishing the activity within a few days we could see the effects. Like if we need to find a document it was such an easy task because we knew where it is and how to find it.

It saved a lot of time and during the process, there were a lot of unnecessary things lying around which we got rid of and of course it looked good like the arrangement, labeling etc. And more importantly because of this nurses are spending their maximum time in clinical work and patients also don't have to wait for a long time to get any document.

Improving teamwork via team building exercises

While visiting the facilities we felt a lack of teamwork among the staff working in the maternity wing. To better explain the importance of teamwork and communication we decided to run a few team building activities (Trust fall and Chinese whisper) in our facilities. These activities were appreciated by the staff.

Benefits of team building activities

Team building activities also work to improve activities that involve teamwork because it helps the **teams** understand each other better. After completing **team building** activities together, employees better understand each other's strengths, weaknesses, and interests