

## Assessment of infrastructure at government healthcare facilities for providing family welfare services in Odisha

Srimannarayan Mishra<sup>1</sup>, Bibhuti Bhusana Panda<sup>2\*</sup>, Tapaswini Mishra<sup>3</sup>, Trilochan Sahu<sup>4</sup>

<sup>1</sup>PG Trainee, <sup>2</sup>Assistant Professor, Dept. of FMT, <sup>3</sup>Assistant Professor, Dept. of Physiology, <sup>4</sup>Professor & HOD, Dept. of Community Medicine, IMS & SUM Hospital, SOA University, Odisha

**\*Corresponding Author:**

Email: bibhutifmt@gmail.com

### Abstract

This study was conducted to assess the various facilities available at Government Healthcare facilities for providing Family Welfare services. The facilities assessed were regarding general information, infrastructural facilities, facilities available at Operation Theater, staff pattern, record keeping and logistics. The facilities were studied to see their readiness for providing hospital based family planning services in- stead of earlier camp based approach. The findings were that 15.26% healthcare institutions have laparoscope sets and 18.11% healthcare institutions do not have empanelled surgeons at their establishments, 75% health institutions do not have space earmarked for examination & counseling and 73.62% healthcare institutions do not have clean bed, linen for post-operative care. In 63.89% healthcare institutions they do not have clean functional toilets and 38.89% healthcare institutions do not follow wet mopping. 47.21% healthcare institutions possess NSV kits for male sterilization, 55.55% healthcare institutions have emergency resuscitation equipment and 41.66% healthcare institutions have emergency medicine tray available with them.

**Key Words:** Government Healthcare facilities, Family Welfare services, Infrastructure, Operation theater facilities, Staff pattern, Record keeping, Logistics.

Access this article online	
Quick Response Code:	Website: www.innovativepublication.com
	DOI: 10.5958/2454-6712.2016.00002.X

### Introduction

Quality of care reflects adherence to professional standards and technical competencies, in a congenial service environment and satisfaction on the part of the user. Increasing incidence of documented cases of adverse events in health care has led to growing concern in a number of countries about patient safety, which remains a fundamental principle of patient care and a critical component of quality management.<sup>[1]</sup>

The National Health Mission envisages achievement of universal access to equitable, affordable and quality health care services that are accountable and responsive to people's need.<sup>[2]</sup> Access to quality reproductive health care and other economic and social encouragements for safe motherhood are highlighted as human right issues at the International Conference on Population Development beyond 2014.<sup>[3]</sup> The National Population Policy 2000 and the Reproductive and Child Health Programme Phase II emphasized the importance of achieving population stabilization and attaining the goal of replacement-level fertility by 2010.<sup>[4]</sup>

According to National Family Health Survey (NFHS-3), family planning services and supplies in

India are provided primarily through a network of government hospitals and urban family welfare centers in urban areas and primary health centers (PHC) and sub-centers in rural areas. The public sector is by far the most commonly used source for both female and male sterilizations (84-85 percent). Especially in the states like Himachal Pradesh, Orissa, Madhya Pradesh, and Tripura more than 95 percent of female sterilizations are done through the public sector.<sup>[5]</sup> While the majority of the populations rely on the family planning services provided by the public sector, attention diverted towards quality would enable appropriate response to the reproductive health and rights of women. Increase in complications, failures, and deaths due to sterilizations has also resulted in increased litigation being faced by the providers, which is another barrier in scaling up the sterilization services.<sup>[6]</sup>

Improving the quality of services provided in contraception is a major element that would enhance the acceptance of services. While the family planning services across the country including Odisha are in transition phase from camp approach to fixed day approach (round the year services), devoting attention towards quality issues would fetch rich programme dividend in terms of acceptance and faith in the system. Further, improving the quality of services provided in contraception would serve the dual advantage of enhancing client compliance and reduce the litigations faced by providers.

### Aim & Objective

1. To assess the functional capacity of the subsystems like structure (O.T.), staffing, equipment, logistics, record keeping, etc.
2. To compare the quality of subsystems against prescribed standards at the facility level as per Indian Public Health Standards (IPHS) guidelines revised in 2012.

### Materials & Method

With support of the Director Family Welfare, Govt. of Odisha, Bhubaneswar the study was undertaken by Department of Community Medicine, I.M.S & SUM Hospital for assessment of quality of facilities available for providing Family Welfare services from June 2014 to December 2014 at various health facilities. The present work was done in 18 randomly selected districts of Odisha. There were 18 District headquarter hospital and 54 Community health centers included in the study.

Facility observation techniques were adopted in a semi-structured questionnaire. The target groups (ADMO-FW and health officer in charge of family welfare services, nursing personnel, LHV etc.) involved in service delivery were interviewed.

### Observation and Discussion

The facilities assessed were regarding infrastructural facilities, facilities available at Operation Theater, staff pattern, record keeping and logistics and observations were as follows.

1. **Infrastructural Facilities:** Out of seventy two facilities visited in eighteen districts, only three-fourth facilities were having the buildings in good conditions and two-third facilities were clean as per perception of the assessors. A clean and functional toilet for the use of clients was available in only one-third facilities. Almost all facilities (95.8%) had continuous water supply and with alternate source of water supply during any disruptions. All facilities visited had the provision of electricity and alternate backup arrangement for electricity with generator or inverters during power disruptions. As per IPHS guideline for CHC & DHH there should be zoning of various department based on level of cleanliness which were not found. For example layout of the Out Patient Department should follow the functional flow of the patients: e.g. Enquiry → Registration → Waiting → Sub-Waiting → Clinic → Dressing room/ Injection Room → Billing → Diagnostics (lab/X-ray) → pharmacy → Exit which was lacking in all the hospitals.

Close to two third of the facilities (63.9%) was not having adequate waiting space for the clients and three fourth facilities were lacking enough space or earmarked space for counseling. Adequate space with clean beds, linens for post-operative care was lacking at 73.6% facilities. These data were also not confirming to IPHS guidelines.

2. **Facilities available at O.T.:** Out of the 72 health institutions visited one-third (31.9%) facilities were not having a proper operation theatre with an OT table with trendelenburg facility. Running water supply in the OT was lacking in 14% of the facilities. Functional shadow-less lamp and suction apparatus was found only in two-third facilities.

Surprisingly half of the facilities were missing emergency resuscitation equipment like AMBU bag and face mask etc. and 58.3% of the facilities were not having an emergency medical tray and oxygen cylinder was not available in one-third facilities. Emergency light was not available in case of 18.1% of the facilities.

Sterile consumables like aprons, caps, gloves etc. in the dressing drum were witnessed at 86.1% facilities. Similarly, availability of surgical equipment like Minilap kits (83.3%), NSV kits (47.2%), IUCD kits (86.1%) and a laparoscope set (15.3%) were witnessed at the facilities.

As per IPHS guideline all O.T.s should have four well defined zones of varying degree of cleanliness/asepsis namely, Protective Zone, Clean Zone, Aseptic or Sterile Zone and Disposal or Dirty Zone. Normally there are three types of traffic flow, namely, patients, staff and supplies. All these should be properly channelized. An Operation Theatre should also have Preparation Room, Pre-operative Room and Post – Operative Resting Room. Operating room should be made dust proof and moisture proof. These points were lacking in all Operation Theatres visited.

3. **Staffing Pattern, Record Keeping and Logistics:** 18.05% facilities did not have empanelled surgeons posted at their location. All facilities had trained IUCD persons posted at their respective locations. 93.04% facilities were maintaining sterilization procedure records. 77.77% facilities had effective logistics system to track stock levels and notified staff to reorder at a particular level. DHHs having Post-partum centers were having adequate number of doctors and staffs posted there as per IPHS guidelines. 6.9% (n=5) facilities had no ambulance services in our study.

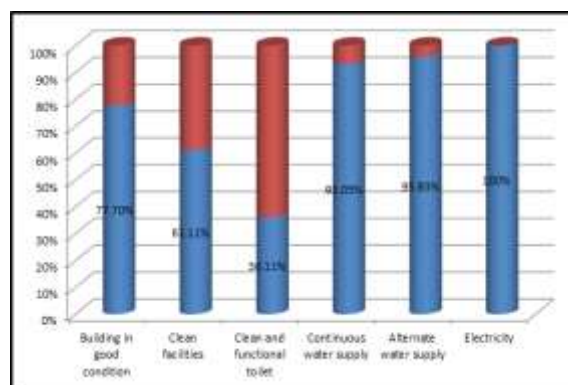


Fig. 1: Infrastructural Facilities

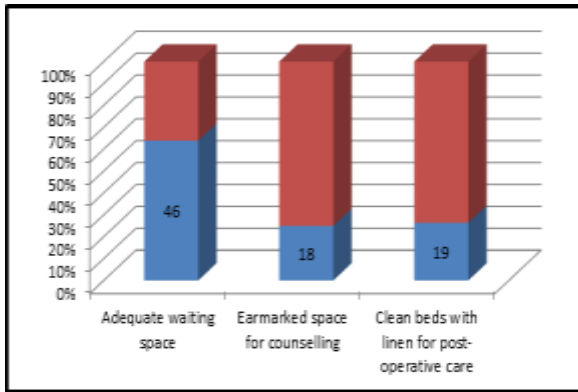


Fig. 2: Review of Infrastructural Facilities

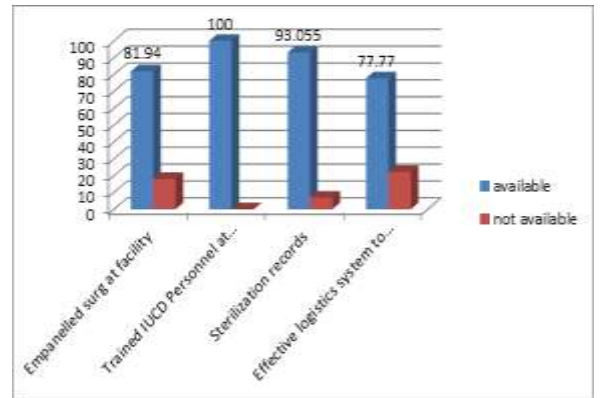


Fig. 6: Staffing pattern, Record keeping and Logistics at facility level

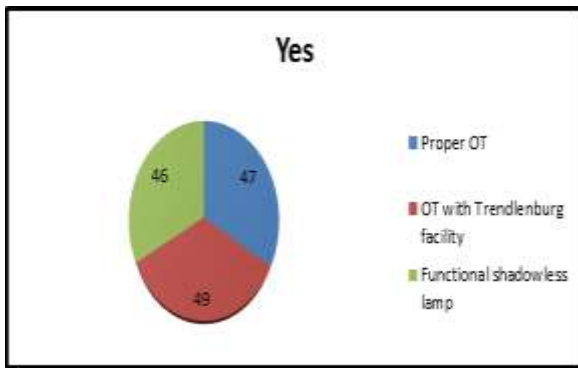


Fig. 3: Facilities available at O.T.

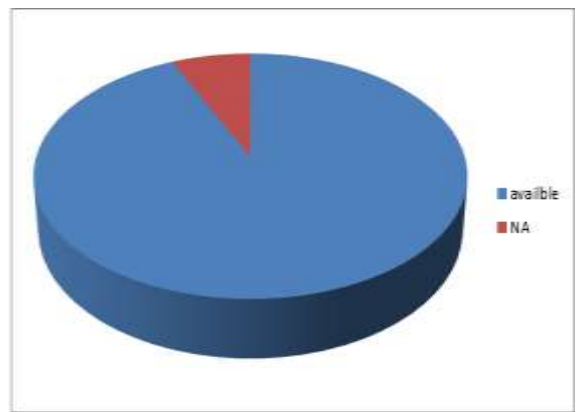


Fig. 7: Availability of vehicle

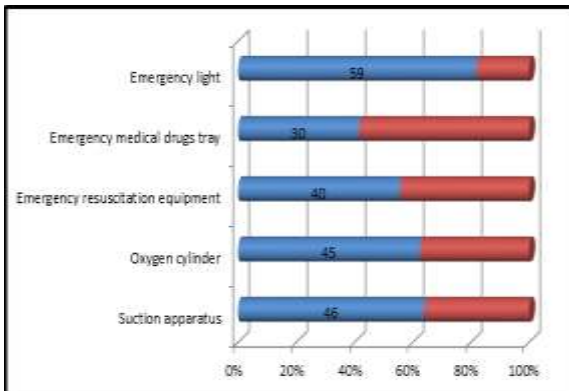


Fig. 4: Equipment's available at O.T.

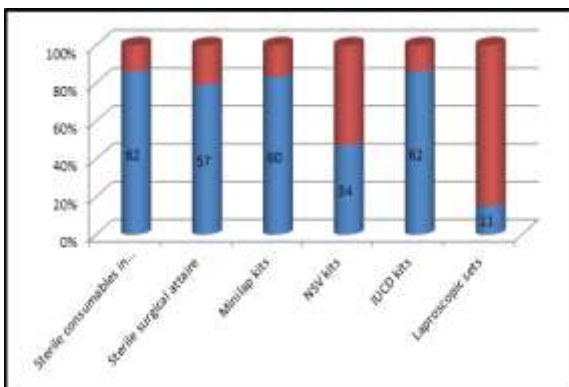


Fig. 5: Preparedness of the O.T. in terms of availability of kits

**Conclusion**

15.26% healthcare institutions have laparoscope sets and 18.11% healthcare institutions do not have empanelled surgeons at their establishments. To assure privacy of patient examination and provide clean post-operative care is of utmost importance. Hospitals should provide these facilities, but 75% health institutions do not have space earmarked for examination & counseling. 73.62% healthcare institutions do not have clean bed, linen for post-operative care. Clean functional toilet is to be provided in all hospitals, but in 63.89% healthcare institutions they do not have clean functional toilets. To achieve good asepsis, more hospitals should adopt wet mopping; but 38.89% healthcare institutions do not follow wet mopping. More number of NSV kits are to be made available at hospital level to encourage male participation in sterilization procedures, but 47.21% healthcare institutions possess NSV kits for male sterilization. Emergency resuscitation equipment and emergency medicine tray are to be properly stocked and provided to the hospitals, but 55.55% healthcare institutions have emergency resuscitation equipment and 41.66% healthcare institutions have emergency medicine tray available with them.

The following few recommendations from the assessment of the healthcare facilities for the

improvement of family planning services like adequate size of the theatre, good cleanliness, privacy in examination and counselling, providing clean post-operative care. To increase the efficiency in providing the services, necessary number of empanelled doctors and paramedics need to be provided along with emergency equipment and medicines are to be stored to face unforeseen emergencies.

**Ethics:** Cleared

**Funding:** Self

**Conflict of Interest:** None declared by all authors.

**Declaration & Copyright:** Attached in the prescribed format.

### Acknowledgement

I acknowledge the contribution of Prof (Dr) E. Venkat Rao for allowing us to work in this project. I also acknowledge all faculties and staff of Community Medicine Department, I.M.S & SUM hospital, Bhubaneswar for extending their contributions for this project.

### Reference

1. WHO: Rapid assessment methods for estimating hazards, report of the working group meeting, 2002. (Available at the URL: [http://www.who.int/patientsafety/activities/system/en/rapid\\_assessment\\_methods.pdf](http://www.who.int/patientsafety/activities/system/en/rapid_assessment_methods.pdf))
2. National Rural Health Mission: Goals, Government of India. (Available at the URL: <http://nrhm.gov.in/about-nrhm/goals.html>)
3. Manual for family planning insurance scheme, Ministry of Health and Family Welfare, Government of India. (Available at the URL: <http://mohfw.nic.in/WriteReadData/1892s/Manual%20Family%20Planning2009-99209825.pdf>)
4. Park K, Park's Textbook of Preventive and Social Medicine, 22nd Edition, 2013.M/S Banarasidas Bhanot Publishers, India. Page-453.
5. NFHS-3 report.(Available at: <http://rchiips.org/nfhs/report.shtml>)
6. Quality Assurance Manual for Sterilization Services, Research studies and standards division, Ministry of Health and Family Welfare, Government of India (2006).(Available at the URL: <http://www.mohfw.nic.in/WriteReadData/1892s/file21-43442181.pdf>)
7. Indian Public Health Standards (IPHS) Guidelines for Community Health Centers (Revised 2012.). (Available at URL: [health.bih.nic.in/docs/guidelines/guidelines-community-health-centres.pdf](http://health.bih.nic.in/docs/guidelines/guidelines-community-health-centres.pdf).)
8. Indian Public Health Standards (IPHS) Guidelines for District Hospitals (101 to 500 Bedded) Revised 2012.(Available at URL: [health.bih.nic.in/Rules/District-Hospital-2012-Revised.pdf](http://health.bih.nic.in/Rules/District-Hospital-2012-Revised.pdf).)