

Assessment of Infrastructure and Logistics at Various Facilities Providing Sterilization Services in Rajkot District

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Abstract:

Introduction : The National Population Policy 2000 and the Reproductive and Child Health (RCH) Programme Phase II emphasize the importance of achieving population stabilization and attaining the goal of replacement-level fertility. Sterilization services are largely being provided through a network of public and private sector facilities. **Objective**: To assess the infrastructure and logistics at various health facilities of Rajkot District where Sterilization services provided **Method**: A cross-sectional study was conducted by Community Medicine department, PDU Government Medical College, Rajkot, during February-March 2015. All health facilities of Rajkot district where Laparoscopic Tubal Ligation (Lap TL) camps were organized including 4 Community Health Centers (CHCs), 5 Sub-District Hospital (SDHs) 1 district hospital, and 1 medical college and hospital were selected for the study. A standard checklist was used for infrastructure and logistics available at various facilities. The data entry was done in Microsoft Office Excel 2007 and analysis was done using the same software. **Results**: Majority of places; infrastructure and facilities are available as well as clean. Storage facility for contraceptives was adequate at all the 11 facilities. All the 11(100.0%) facilities have vehicle/ambulance in running condition. At 3(27.27%) facilities there were no boards displaying service timings. Availability of staff as per sanctioned posts was at 3(27.27%) places and various categories of staff for the activities were present at 6(54.55%) facilities. **Conclusion**: Improvement is required in displaying of IEC materials and sitting arrangement for beneficiaries.

Key words : Infrastructure, Logistics, Sterilization Camp

Introduction:

The National Population Policy 2000 and the Reproductive and Child Health Programme Phase II emphasize the importance of achieving population stabilization and attaining the goal of replacement-level fertility by 2010.^[1] Sterilization services are largely being provided through a network of public and private sector facilities. In most states, camps are a major source of sterilization services. Hence, the camp approach is still being followed in several states.^[1]

The Reproductive and Child Health Programme provides a basket of choices of contraceptive methods, including terminal and spacing methods. Despite the general acceptance of sterilization, it is observed that the services being provided currently in the country are not meeting the needs of the people due to various factors, such as the absence of skilled

service providers and insufficient availability of service centers. As per the National Family Health Survey III (2005-2006) estimates, the unmet need for spacing method was 6.2% and the unmet need for terminal method was 6.6% with wide interstate variations.^[1]

In the year 1952, India was one of the first countries in the world to formulate a family planning program at national level. In the 1980s, the program entered the era of laparoscopic technique of female sterilization, which is simpler and less traumatic than the more common method of Tubal Ligation(TL) and today almost a two-third of all tubectomies are laparoscopic cases.^[1]

The term 'infrastructure' is used in manifold ways to describe the structural elements of systems. In the context of a health care system and in

reference to health care facilities, we defined “facility infrastructure” as the total of all physical, technical and organizational components or assets that are prerequisites for the delivery of health care services. It can be seen as a major component of the structural quality of a health care system.^[2] Same applies to health care facilities, i.e., functionality, quality and extent of such components and assets determine the accessibility, availability, quality and acceptability of health care services as well as the working conditions of facility staff.^[3-8]

Present study was conducted with the objectives of assessing the infrastructure and logistics at various health facilities of Rajkot District where Sterilization services are provided.

Method:

A cross-sectional study was conducted by Community Medicine Department, PDU Government Medical College, Rajkot, during February to March 2015. Total 11 health facilities of Rajkot district including 4 CHCs, 5 SDHs, 1 district hospital, and 1 medical college and hospital were included in this study. Sample size was proportion to size sample and random method of sampling was used.

The schedule of visit of all facilities was sent in advance to all Taluka Health Officers (THO) of Rajkot

district, all the above-mentioned health facilities and to all empanelled surgeons, who are doing these Lap TL operations. THOs of the concerned health facilities were intimated 1 day in advance about the visit of a team. Assessment team consisted of two Resident doctors, one Health Educator and one Faculty member of Community Medicine, Department, PDU Govt. Medical College, Rajkot.

Study Tool:

A standard checklist recommended by Research Studies & Standards Division, Ministry of Health and Family Welfare, Government of India, October 2006, quality assurance manual for sterilization services, was used for infrastructure and available logistics assessment.^[1]

Our team assessed health facilities for infrastructure facility, Operation Theater (OT) facility and logistics availability by using standard checklist for facility audit. Data were collected for infrastructure and logistics from all 11 facilities. The data entry was done in Microsoft Office Excel 2007 and analysis was done using the same software.

It was a survey by Health and Family Welfare Department, Government of Gujarat and conducted by PSM department, so no issue of ethical clearance was required.

Table 1: Infrastructure facilities at various health care facilities

Infrastructure facilities	No. of Health Centers (N=11)	
	Yes N (%)	No N (%)
The building is in good condition	11 (100.0)	00 (00.00)
The facility is clean	10 (90.91)	01 (09.09)
Running water is available at the service points	11 (100.0)	00 (00.00)
Clean & functional toilet facility is available for staff & clients	10 (90.91)	01 (09.09)
Electricity is available	11 (100.0)	00 (00.00)
Functional generator available	11 (100.0)	00 (00.00)
Petrol, Oil & Lubricants (POL) available for generator	11 (100.0)	00 (00.00)
Available Space earmarked for examination & counseling to assure privacy	07 (63.64)	04 (36.36)
Waiting area with adequate seating facility available	10 (90.91)	01 (09.09)

Table 2 : Contraceptive stock position at various facilities

Contraceptive Stock Position	No. of Heath Centers (N=11)	
	Yes N (%)	No N (%)
Buffer stock available for one month		
1.Oral Pills	08 (72.73)	03 (27.27)
2.Condoms	04 (36.36)	07 (63.64)
3.Copper T	10 (90.91)	01 (09.09)
4.Emergency Contraceptive Pills (EC Pills)	06 (54.55)	05 (45.45)
Facility have adequate storage facility for contraceptives	11 (100.0)	00 (00.00)
Stock-out occur anytime	07 (63.64)	04 (36.36)
If yes, then stock-out occur for which contraceptives (n=7)		
1.Oral Pills	02 (28.57)	-
2.Condoms	05 (71.43)	-
3.Copper T	00 (00.00)	-
4.Emergency Contraceptive Pills	00 (00.00)	-
Availability of effective logistic system that easily track stock level	11 (100.0)	00 (00.00)
Supplies available in good condition (not expired, not damaged)	11 (100.0)	00 (00.00)

Table 3 : Availability of vehicle at various health care facilities

Availability of Vehicle	No. of Heath Centers (N=11)	
	Yes N (%)	No N (%)
Facility have a vehicle/ ambulance in running condition	11 (100.0)	00 (00.00)
Availability of POL for vehicle	11 (100.0)	00 (00.00)

Table 4 : IEC materials at various facilities

IEC materials	No. of Heath Centers (N=11)	
	Yes N (%)	No N (%)
Availability of Clients rights displayed at a prominent place	06 (54.55)	05 (45.45)
Board displaying service timings available	08 (72.73)	03 (27.27)
Availability of free & paid services displayed on wall painting	06 (54.54)	05 (45.45)
Availability of Signboard indicating the direction for each service point displayed	08 (72.73)	03 (27.27)
Flip charts, models, specimens & samples of contraceptives available in counseling room	04 (36.36)	07 (63.64)
Posters, banners & handbills available at the site & displayed	06 (54.55)	05 (45.45)
Suggestion & complaint system for clients (Complaint box and/or a book) available	06 (54.55)	05 (45.45)

Results:

Out of 11 facilities, all have building in good condition, running water, electricity and functional generator. Almost 90% facilities have clean and toilet for staff and waiting area with seating facility. Only at 7(63.64%) facilities, adequate space was earmarked for examinations. [Table 1]

It was observed that storage facility for contraceptives was adequate at all the 11 facilities. But stock-out was reported for condoms at 5(71.43%) and for oral pills at 2(28.57%) places. [Table 2]

All the 11(100.0%) facilities have vehicle/ ambulance in running condition as well as POL for vehicle. [Table 3]

At 3(27.27%) facilities, there were no boards displaying service timings; at 5(45.45%) facilities, no free/paid services displayed and IEC material such as posters, banners and handbills were also not available/displayed at 5(45.45%) facilities. [Table 4]

Discussion:

In the present study, majority of facilities were clean; running water and electricity was available. Generator and Petrol, Oil & Lubricants (POL) for generator were available at all 11 facilities for electricity back up. Similar findings were also observed by Mishra et al that majority facilities (95.8%) had continuous water supply and with alternate source of water supply during any disruptions.^[9] All facilities visited had the provision of electricity and alternate backup arrangement for electricity with generator or inverters during power disruptions.

In this study only at 7(63.64%) facilities, adequate space was earmarked for examinations. In a study by Mishra et al observed that 75% facilities do not have adequate space was earmarked for examinations and counseling.

Buffer stock of copper-T for one month was adequate at 11 facilities but condoms, oral pills and emergency pills were not adequate. So stock-out was reported for condoms at 5(71.43%) and for oral pills

at 2(28.57%) facilities. A study from Ghana by Adjei et al also reported that 75% public facilities had oral contraceptives available.^[10]

In present study 8(72.73%) facilities having Signboard displaying service timings available and indicating the direction for each service point displayed. At 5(45.45%) facilities, no free/paid services displayed and IEC material such as posters, banners and handbills were also not available/displayed at 5(45.45%) facilities.

All facilities had vehicles for transportation. In a study by Mavalankar et al reported availability of vehicles in most of the facilities but vehicles were over crowded.^[11]

Strength and Limitations of the Study:

A standard checklist recommended by Research Studies & Standards Division, Ministry of Health and Family Welfare, Government of India, October 2006, quality assurance manual for sterilization services, was used for infrastructure and logistics which is the strength of the study. Whereas, perception regarding infrastructure space and cleanliness of facilities was a subjective matter is the limitation of this study.

Conclusion:

In present study, all facilities were clean and having electricity, running water, clean and functional toilet and vehicle. Improvement is required in available space for examination and counselling, one month buffer stock of oral contraceptives, displaying of IEC materials.

Recommendations:

IEC materials related to contraception-sterilization along with board of service timings & scheme benefits should be displayed at prominent and suitable place. Sitting arrangement for beneficiaries-relatives should be increased as per need.

Declaration:

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Conflict of Interest: Nil

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