Original Article

Bottlenecks identified in the Implementation of components of national health programmes at PHCs of Cuttack district of Odisha

Abstract

Introduction: Primary health care is the nucleus of country's health care delivery system. Bottlenecks in delivery of services at PHC level leads to decreased efficiency of health system and indirectly affects health of the citizens of a country. Keeping these issues in mind a study was carried out with the objectives i)To identify constraints/bottlenecks in implementation of elements of primary health care ii)To find out solutions to address these bottlenecks. **Materials and Methods:** This cross-sectional study was carried out in Cuttack district during Dec 2010 and January 2011 using a semi-structured pre-tested questionnaire. Data regarding various difficulties faced while delivering health care services at PHC was collected from participants attending district level IMNCI (Integrated Management of Neonatal and Childhood Illness) training after getting verbal consent. All 72 respondents who had attended the training during the above mentioned period were included in this study (Medical officer, AYUSH medical officer, Maternal Child Health co-coordinators and Block Programme Officers). Data were analyzed manually using content analysis. **Results:** Difficulty in vaccine delivery, inadequate infrastructure and lack of sufficient manpower for smooth functioning of JSY, difficulty in card updation and difficulty in retrieval of defaulter of alcoholic TB patients for Directly Observed Treatment Shortcourse (DOTS) are some of the problems identified in general. **Conclusion:** The study identified the need for strengthening infrastructure and manpower to provide quality care for institutional delivery. It also emphasized the need for construction of more number of sub centre buildings which forms the backbone of rural health care delivery system. Identification of loop holes and bridging the gap by corrective action will make the journey towards Millenium Development Goal (MDG) easier.

Key words: Constraints, implementation, national health programme, PHC

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INTRODUCTION

The Alma-Ata Conference defined Primary health care as the essential health care made universally accessible to individuals and acceptable to them through their full participation at a cost the community and country can afford.[1] It forms an integral part of country's health system. A major obstacle to achieving the health-related Millennium Development Goals (MDGs) is the weakness of the health systems in many low and middle-income countries and their struggle to effectively provide health care to populations in need.[2,3] Several global health initiatives have been created over the last decade to support the delivery of available interventions for priority health problems, and in recent years there has been some major new initiatives to support health system strengthening[2,4-6] (like Facility based new born care, reproductive maternal newborn child and adolescent health -RMNCH+A). Maternal and child morbidity and mortality stand out as huge challenges in India. In order to address this challenge, the Government of India launched the National Rural Health Mission (NRHM) in 2005 with the sole aim of protecting and promoting the health, well-being of its citizens.. It aims at reducing maternal and childhood morbidity and mortality through timely interventions like engagement of ASHAs at village levels, Rogi Kalyan Samiti (RKS), Janani Surakhya Yojana (JSY), training for Skilled Attendant at Birth (SAB) and Janani Sishu Surakhya Karyakram (JSSK) to name a few.[7] The figures state that in every five min, one woman somewhere in India dies due to

pregnancy-related complications, amounting to one lakh maternal deaths and 10 lakh new-born deaths each year.

Though India has well designed health programmes that have a wide outreach, bottle necks in service delivery hamper full utilization of these programmes. There are certain bottlenecks in implementation of elements of primary health care at the PHC (PHC). It is of immense importance to identify those bottlenecks, so that all elements of Primary Health Care can be effectively dispensed. PHC is the cornerstone of rural health services; it is the first point of contact for common people with a qualified doctor for curative, preventive and promotive health care. Identification of bottlenecks and initiatives to bridge the identified gap will definitely help the country to achieve the Millenium Development Goals.

Keeping all these issues in mind, this study was carried out in Cuttack district of Odisha to identify the bottlenecks.

OBJECTIVE

i. To identify bottlenecks in implementation of elements of primary health care.
ii. To find out solutions to address these bottlenecks.

MATERIALS AND METHODS

A cross-sectional study was carried out in Cuttack district, during Dec 2010 and January 2011 using a semi-structured pre-tested questionnaire as study instrument. Data regarding various difficulties faced while delivering health care services at PHC was collected from participants attending district level IMNCI training after getting verbal consent. All 72 respondents who had attended the training during the above mentioned period were included in this study (Medical officer, AYUSH medical officer, Maternal Child Health co-coordinators and Block Programme Officers). The total duration of IMNCI training was-eight days for each batch. The questionnaire related to this study was distributed after explaining the purpose of the study on the fourth day of the training. Data collection on the fourth day ensured two things, the first one was getting cooperation and the other was collection of valid data due to establishment of rapport after four days of interaction. Since it was a residential training, the data collection was done after the training sessions for the day was over, so as to keep the quality of the training intact.

The questionnaire contained two portions. First portion collected data regarding various difficulties faced while delivering health care services and second part contained space for suggestion regarding solution for the stated problem/improvement of current situation. Respondents were asked to fill the schedule (without mentioning their name) and submit it on or before the seventh day of training. Collection of questionnaire was done during seventh day of the training.

Data were analyzed in the form of simple percentages. Content analysis method was used to identify thematic areas of the qualitative research. Common problems identified by more than 20% participants and some important area specific problems were enlisted . Open forum discussion on gathered data was carried out on eighth day to get a clearer picture and to arrive at a consensus.

RESULT

Out of total 72 participants, 38 were allopathic medical officers, 18 were AYUSH Medical Officers, 12 were BPOs and four were MCH coordinators. Various Problems identified by participants in various aspects were enlisted in tabular form in decreasing order of frequency (common problem stated by participants and important area specific problems were analyzed in this study). Table 1 reflects problem identified in programmes related to maternal child health where as Table 2 and 3 address issues related to immunization and communicable disease respectively.

Some other problems which came into light were irregular supply of small IFA, lack of coordination with AWW after creation of ASHA in some areas, inadequate time for counseling of Reproductive Tract Infection cases due to heavy workload, irregular payment of remuneration to ASHA, submission of health related report by ICDS functionaries directly without any copy to Medical Officer Incharge, lack of clarity regarding financial guidelines, difficulty in proper utilization of GKS fund due to involvement of PRI and difficulty in waste disposal, involvement of PRI with some degree of accountability.

DISCUSSION

The NRHM launched its JSY scheme[7] as one of its key interventions to reduce maternal mortality. Janani Suraksha Yojana (JSY) is an incentive-based programme for the promotion of institutional deliveries. Studies from various parts of Odisha reflected inadequate infrastructure (lack of space) and manpower in the health facilities to meet the increased demand after implementation of JSY scheme.[7,8] In this study the respondents also expressed their view regarding need for improvement of infrastructure like creation of more no of labour rooms with toilet facilities, more bed and more staff to take care of high load of institutional delivery after implementation of JSY. According to their view promotion of institutional delivery without strengthening the health facility/ health centres may increase the percentage of institutional delivery but the quality of care will be compromised. It may reduce the mortality but in the long run we may find cases of birth asphyxia and its consequences because of less manpower to take care of high load of delivery cases admitted simultaneously during the same time period, less chance to do proper monitoring of progress of labour. A large number of respondents gave suggestion about construction of sub centre building and promotion of delivery at sub centre, at the same time giving preference to ANM living near SC building while preparing the list for SAB training. It is the quality of care and not the financial incentive which is going to influence the trend of institutional delivery on the long run.

Table 1: Problems in programs related to maternal and child health and their suggested solutions

Health program-problem identified	Main issues	Suggested solutions
School health		
No clarity regarding financial guideline	Operational	Involve education department
No health education due to lack of manpower		Health education along with screening of disease
Adolescent health		
No separate clinic for adolescent	Operational	Letterbox approach at Subcentre (SC)
		Health Worker Male and Female (HW-M and F) to conduct adolescent clinic
		Coordination between health,Integrated Child Development Services scheme(ICDS) and education department to provide care to adolescent
Family Planning(FP)		
Less acceptance of vasectomy	Issues related to Information Education Communication(IEC)/ Inter Personal Communication(IPC)/ motivation	Vasectomy by role model to increase its acceptance
Resistant minority and tribal community		IEC to clarify misconception
Misconception of people regarding FP methods		IEC to increase acceptance of Cu T and vasectomy
Preference to son and late adoption of FP method		
Poor organization of tubectomy camps	Logistic and Human Resource(HR)	Proper follow up after FP (tubectomy)
Lack of equipment		One day hospital stay after FP (tubectomy)
		Supply of equipment
Lack of trained manpower for laparoscopy	Orientation and	Training of manpower regarding FP methods
Lack of skill to insert cu T	Training	
False reporting due to expulsion of Cu-T	Operational	Wastage multiplication factor for CuT
Nursing home cases are included in report		Reporting format should have space for couples adopting FP methods in nursing home/clinic
No space in format to document FP (Cu T) adopters from private practitioners		
Janani Suraksha Yojana		
Lack of manpower	HR	More manpower (Staff nurse, Medical Officer, Gynaecology specialist, attendant)
Lack of infrastructure(bed/space/labour room -toilet)	Infrastructure and Logistic	Infrastructure development
Janani express not available all the time		Strengthening SubCentre (SC) for delivery
Lack of Anganwadi worker(AWW)ASHA co operation	Intersectoral coordination	Supervision for better coordination and coordination at higher level
No accountability	Operational	Opening of a bank account during pregnancy and payment through e transfer
Importance to institutional delivery only,less emphasis to Antenatal care (ANC),Iron Folic Acid tablet (IFA)		Transportation money to be paid to mother if no Janani express is available (instead of paying it to ASHA)
Money gained indirectly though chemist		Make HIV test compulsory
Problem with cash/bearer cheque to collect money		Better quality care instead of financial incentive (support by supplying drugs, gloves, etc.)
ASHA gets demoralized when delivery occurs in nursing home (deprived of incentive of JSY)-so JSY money should be fragmented-a part for ANC, rest for delivery		
Some referral hospitals asked for result of HIV test at the time of admission,it was mandatory for admission in maternity ward		
Pregnant lady pays the cost for travel but money for transportation is paid to ASHA		
Skilled Attendant at Birth (SAB)		
Absence of sub centre building	Infrastructure and Logistic	Construction of SC building
No equipment		Supply of equipment
No equitable distribution of trained staff	Operational	Training of ANM where SC building exists as priority

(*continued*)

Table 1: (Continued)

Health program-problem identified	Main issues	Suggested solutions
Trained Auxillary Nurse Midwife (ANM) not staying at Headquarter		More stress to clinic approach/ fixed site approach instead of present day village to village service by ANM (more time at fixed site)
Nurse not supporting		Decrease burden of paper work by providing laptop and internet (and training to operate laptop)
ANM not available at the time of delivery(busy in field visit)		Provision of extra ANM per SC
		Mobility support to ANM (use of two wheeler)
Post Natal Care (PNC)		
Unaware of fixed day for PNC	Issues related to IEC/ IPC/ motivation	IEC by ASHA, AWW regarding PNC
Incentive to ASHA in Norway India Partnership Initiative project (NIPI) intervention district	Operational	Training of ASHA for PNC
IMNCI home visit not done properly-ANM overloaded with paper work		Introduction of Yashoda scheme and health education by Yashoda
		Clinic/fixed site approach for ANM
		Laptop and mobility support for ANM to save time
Exclusive breast feeding		
Lack of awareness	Issues related to IEC/IPC/ Motivation	Creation of Yashoda post in District Headquarter Hospital/First Referral Unit/Community Health Centre(DHH/ FRU/CHC) and health education by Yashoda
Misconceptions		Health education to pregnant women, mother in law, adolescent girls
		Health education during ANC
		Baby Friendly Hospital Initiative
Village Health Nutrition Day (VHND)		
No time for Health education	HR issues	Make Health Worker male accountable
Heavy load on ANM (need to take care of too many target groups simultaneously-under five, adolescent, pregnant and lactating)		Special group special topic each time
		More focus need to be given to recording weight of under-five and health of adolescent, inclusion of too many target groups dilutes the purpose
		More manpower if all target groups are to be included
Anganwadi worker(AWW)less involved	Intersectoral co ordination	Supervision for better coordination and coordination at higher level
No supervision		
Inadequate Logistic support	Logistics	Supply required logistics

The most commonly stated problem related to immunization was problem in transportation of vaccine.

Regarding family planning, participants had a view that vasectomy by celebrities and role models may increase acceptance of the procedure. Respondents emphasized the need to give health education to mother in laws for promotion of exclusive breast feeding. Making the HWM more accountable and creation of post of Yasoda were the other suggested methods to improve quality of maternal child care. (Yasoda is a post created in maternity ward of district headquarters hospital and FRU in NIPI intervention districts of Odisha, her role is to counsel mother regarding new born care, Post natal care and FP). The need to reduce the time spent by ANM on paperwork and travel was realized and provision of laptop with internet connection and mobility support by two wheelers for ANM and LHV was also emphasized.

As far as IPPI is concerned honorarium for driver, provision of extra vehicle for data collection and financial guideline (remuneration) and accountability of extra three persons/teams while doing micro planning for IPPI was pointed out. Three extra teams were suggested: i) first team to send vaccine carrier to the booth in morning hr and collect report and vaccine carrier at the end of session and during daytime to supply vaccine and frozen ice pack to booths as per demand ii) second team to prepare vaccine carrier in morning hour and receive vaccine carrier at the evening hour iii) third team to compile data and do reporting. Some persons should be made accountable for these works or else the supervisor

Table 2: Problems identified in immunization program and suggested solutions

Health program-problem identified	Main issues	Suggested solutions
Immunization		
Problem with transportation of vaccine carrier	Vaccine delivery	Alternate vaccine delivery system need to be strengthened (involve Non Governmental Organization)
Not sticking to timeliness of session(delay in starting session due to problem in vaccine delivery)		
Irregular payment for Alternate Vaccine Delivery (AVD)		Early initiation of session by proper AVD
Poor incentive for AVD, so less interest to return vaccine carrier after the session		Raising the amount of incentive for AVD
Shortage of manpower (Vacant posts)	HR issues	Responsibility to HW (m)
		Appointment for the vacant posts
Inadequate skill/training of health care provider	Training	Training of HW-micro plan, list of beneficiary, waste disposal
Micro plan not prepared		
List of beneficiary not prepared		
Improper disposal of waste after immunization session		
Lack of monitoring	Supervision and Monitoring	Proper monitoring
		Vehicle for supervision
Irregular supply of vaccine (Out of stock)	Logistic supply and infrastructure	Regular supply of vaccine from district
Cold chain maintenance problem		Posting of at least two cold chain mechanic per district to ensure early repair (decrease time gap between breakdown and repair of equipment)
No place for immunization (outreach area)		Supply of stabilizer
		Inverter for cold chain maintenance
		Use of solar energy for cold chain maintenance
		Provision of space by building sub centre
		Special outreach session
Poor coordination among AWW, ASHA and ANM	Intersectoral co ordination	Biannual campaign for drop outs
Drop outs		MCH tracking
Difficulty in documentation during busy session of immunization		Use of tally sheet for documentation during session and coordination among AWW,ASHA,ANM
Confusion regarding administration of Hepatitis B and DPT vaccine during busy hour (as both are administered in thigh by IM route)	Operational	Choosing one leg for Hepatitis B and other one for DPT (example-left leg Hepatitis and right leg DPT) will decrease the confusion
Intensified pulse polio Immunization(IPPI)		
Problem while supplying extra vaccine/ice pack to booth due to non availability of extra vehicle	Operational (HR and Logistic related)	Provision of extra vehicle to supply vaccine/ice pack to booth and collect vaccine carrier
Problem in		Extra manpower support to
collection of report and vaccine carrier		collect vaccine carrier and report
sending report(compilation)		to send and receive vaccine
sending and receiving vaccine		to compile and send report
		Increase incentive for booth
		Financial incentive to driver
Resistance by minority community	Issues related to IEC/ motivation/ IPC	Intensive IEC activities
		Involve religious leader

or ANM/HV gets overburdened because of these added responsibilities thus decreasing the quality of supervision (IPPI guideline gives remuneration to booth members and supervisors only, either there should be no remuneration at all or there should be remuneration to all who are putting much extra efforts for this programme, like driver etc.). Majority opted for one day booth activity because house to house visit makes family member feel that, workers will come to their house to immunize their children so why should they take the pain of taking the child to booth. Respondents feel that people should be made accountable for their own health; door to door visit will make people complacent.

Similarly booth approach with spot administration of drug was suggested for Mass Drug Administration (MDA) as there is poor compliance of drug in the present scenario. There was a need to improve IEC regarding role of Diethylcarbamazine (DEC) in elimination of Filariasis.

A study by Babu BV and SK Kar[9] in Khurda dist in 2002 reported 35.15% drug compliance. (BV Babu reported fear of side effect to be a major reason for non-consumption). Another study in coastal districts of Orissa by Rath *et al.*,[10] reflects poor knowledge regarding role of DEC in elimination of Filariasis.

Table 3: Problems identified in programs related to communicable diseases and suggested solutions

Health program-problem identified	Main issues	Suggested solutions
Integrated Disease Surveillance Project		
Poor data cleaning	Operational	Inclusion of AYUSH OPD register
AYUSH OPD register not included		Instruction to treating physician to mention diagnosis clearly in OPD register
Clear cut diagnosis not mentioned in OPD register		
Internet connectivity problem		
Mass Drug Administration (MDA)		
Poor compliance of drug	Issues related to IEC/ Motivation	IEC by mass media to improve compliance
		Onsite administration of drug
		Pulse polio like booth approach
Poor supervision and monitoring	Supervision and monitoring	Improve monitoring
No survey to assess compliance		Survey to assess compliance of drug and find out causes of non-compliance
Lack of trained manpower to distribute drugs	HR issues	Training and involvement of local educated youth for drug distribution
Poor coverage		
National Vector Borne Disease Control Program		
Irregular supply of drugs and RDK	Logistic	Use of net in hotel and mess (it should be made compulsory)
Non availability of Medicated Mosquito Net (MMN)/ Long lasting insecticidal net (LLIN) for middle class family in market		Social marketing of LLIN/ MMN
Slide collection by Health worker male (HWM) is not regular	Supervision and monitoring	Survey to assess use of LLIN/ MMN
		Improve supervision by mobility support
Nonuse of medicated mosquito net (LLIN/MMN)		
Revised National Tuberculosis Control Program		
Problem in Card updating	Supervision and monitoring	Fixed date for card updating
Poor sputum follow up examination		Need to train other Doctors (most of the time only MOI/C is trained)
Poor awareness about clinical feature of extra pulmonary TB (cold abscess in neck)	Issues related to IEC/ motivation/ IPC	IEC regarding sign and symptoms of extra pulmonary TB
Problem in defaulter retrieval (especially if alcoholic)		Involve Panchayat Raj Institution(PRI) to motivate defaulters
Leprosy Control Program		
Problem in drug distribution in absence of pharmacist (patient returns when pharmacist remains absent)	Operational	Training of other staffs
		Involve PRI members
Delay in case detection		

Purpose of village health nutrition day (VHND) was not served because of multiple responsibilities in the same session. Restricted manpower and logistic support has diluted its role. Increasing accountability of HWM and giving special focus to one aspect in each month may improve the scenario.

CONCLUSION

Difficulty in vaccine delivery, inadequate infrastructure and lack of sufficient manpower for smooth functioning of JSY, difficulty in card updating and retrieval of defaulter of alcoholic TB patients in RNTCP are some of the problems identified in general.

The study, identified the need for strengthening infrastructure and manpower to provide quality care for institutional delivery. It also emphasized the need for construction of more number of sub centre buildings which forms the backbone of rural health care delivery system. Keeping in view the workload of ANM it was suggested to provide her with laptop to enable her to prepare and send the reports and with a two-wheeler for house to house visit. There ought to be provision of appointment of extra staff in heavy stations so that quality of work is not compromised. Mobility support should be provided to LHV to ensure good and timely supervision.

In order to bring about a proper implementation of Primary Health Care the people themselves should be aware of their problems, responsibilities and should be able to share their views in the Village Health and sanitation Committee. The ASHA's, AWW workers and ANM's play a significant role in ensuring primary health care as they form a bridge between the people and the health personnel. So co-ordination among these functionaries is highly essential for optimum utilization of available resources. Socio economic development of a country depends upon health status of its citizen and health status gets influenced by functioning and utilization of services provided by its existing health system. There are various constraints in implementation of various programme components in our health system and identification of these constraints will help in taking corrective action for effective delivery of all elements of primary care. It is critical that the public health services are provided to all sections of the population in India to meet its national goals and MDG's. Better service delivery is a prerequisite for inclusive growth.

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