Research Society
Allama Iqbal Medical College Lahore

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The Punjab ANC Services Assessment Study

The Provision and Quality of Antenatal Services in First -level Care Facilities in Punjab, Pakistan

June 2010 to August 2011

Summary Report

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The Maternal and Newborn Health Programme-Research and Advocacy Fund (RAF)

Implemented by:
Research Society Allama Iqbal Medical College (RSAIMC), Lahore, Pakistan

Introduction

In Pakistan, morbidity and mortality levels among women of reproductive age are very high. The most recent estimates indicate that the Maternal Mortality Ratio (MMR) in Pakistan is 276 per 100,000 live births annually[1]. The major contributing factors are non-availability, lack of access, poor quality and underutilization of antenatal, natal and postnatal services. Recent reports on Maternal, Newborn and Child Health (MNCH) services in Punjab indicate that only 53% of pregnant women have access to antenatal care from medical professionals at least once during pregnancy. More than half (55%) of births in Punjab are delivered with the assistance of traditional birth attendants/dais (MICS-Punjab 2007-08)[2]. Only 41% of pregnant women, in Punjab, have access to postnatal care.

To evaluate the current status of ANC services in the first-level care facilities, i.e. Basic Health Units (BHUs) and Rural Health Centers (RHCs) in Punjab, Research Society Allama Iqbal Medical College Lahore (RSAIMC) conducted a research study in nine districts of the province. The project was funded by Maternal and Newborn Health Programme-Research and Advocacy Fund (RAF). RAF is a key component of the Department for International Development (DFID) and Australian Agency for International Development (AusAID) and supports the National MNCH Programme in its efforts to achieve Millennium Development Goals (MDGs) 4 & 5 in Pakistan.

This research study has evaluated the provision and quality of ANC services provided at primary health care (PHC) level in Punjab. The data provides vital information for health stakeholders to define the vision for health policy related to maternal and newborn health.

Objectives

- Quantitative assessment to study the institutional capacities in terms of measureable indicators relevant to management, facility resources, quality of services and facility performance for ANC in PHC health facilities.
- Qualitative assessment to study the triangular interactions of health system components, i.e. clients, providers and health managers, to explore the factors that influence the ANC services delivery process.

Methodology

A quantitative and qualitative cross-sectional study was conducted from June 2010 to August 2011 in selected districts of Punjab. The districts included in the sample were Bahawalnagar, Toba Tek Singh, Sahiwal, Vehari, Kasur, Sargodha, Multan, Gujranwala and Rawalpindi. Each district was given equal representation according to its social development status by using the appropriate sampling technique. From each district 17 BHUs and two RHCs were randomly selected for study. Thus a total of 171 health facilities were studied. Interviews of 171 ANC health care providers and exit interviews of the same number of pregnant women were done.

Quantitative data collection tools consisted of the following four modules that covered specific areas of evaluation:

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[1] Khan YP, Bhutta SZ, Munim S, Bhutta ZA. Maternal health and survival in Pakistan: issues and options. J Obstet Gynaecol Can. 2009 Oct;31(10):920-9.

[2] MICS (Multiple Indicator Cluster Survey). (2007-2008). MICS Punjab 2007-2008: Volume 1. Lahore, Provincial Report: Government of the Punjab Planning and Development Bureau of Statistics.

1. Health facility check list
2. ANC provider interview and facility records
3. Observation check list for ANC services
4. Client exit interview check list.

Consent forms approved by National Bioethics Committee (NBC) were used to get informed consent of the interviewees.

Quantitative data was processed and analysed to generate ANC indicators for management, facility resources, client assessment, treatment, counselling, client satisfaction and facility performance. Each indicator was generated by combining similar categories of questions included in the data collection tools, e.g. for infrastructure 12 items, for equipment 24, for supplies 14 and for drugs seven essential items were combined in categories. Scoring was based on the percentage of affirmative responses. ANC indicators/variables were ranked according to the percentage score of each constructed indicator/variable. Three scale ranking of good/adequate (>80%), average (60 to 80%) and poor (<60%) was used to generate frequency tables. The associations were studied between facility resources and performance, resources and quality of assessment, and quality of assessment and client satisfaction.

Qualitative assessment was carried out through Focus Group Discussions (FGDs) with pregnant women (9), a health facility in-charge, Lady Health Visitors (9), and in-depth interviews with health managers (12). Specific qualitative evaluation guidelines were developed for clients, providers, health facility in-charges, district health managers and provincial health managers by the Punjab Antenatal Services Assessment (PASA) team. Field teams were trained in both qualitative and quantitative evaluation and field monitoring was done by field supervisors and field coordinators.

Qualitative analysis was based on coding and categorising the views of participants under various themes. The findings were synthesised by availability, institutional efficiency, service quality, current pattern of utilization, decision power and policy issues at various levels of service delivery process.

Quantitative findings

Quantitative findings are described in terms of facility performance, quality of services, facility resources, and management issues.

I. Facility performance

Facility performances were evaluated in terms of overall ANC-1 coverage, revisits, loss of follow-up and ranking of health facilities by percent coverage of expected pregnancies in the catchment areas.

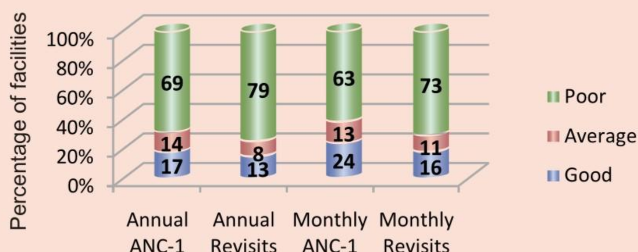
Annual ANC-1 coverage percentage was estimated by dividing the number of ANC-1 visits reported in the facility during the year before the survey by the expected number of pregnancies in the catchment area of the facilities. The catchment area population was estimated from records of MIS Punjab.

- The overall ANC-1 coverage in Punjab was 51.5% for the year 2009.
- After replacement of non-functional facilities, the overall ANC-1 coverage in the sample was 55.9% and revisits were 37.5%. The drop-out percentage for follow-up was 32.9%.

Ranking of facility performance by percent coverage of ANC-1 and revisits:

Health facilities were ranked on the basis of annual and monthly ANC-1 visits and revisits as percentage of expected pregnancies in the catchment areas. Facilities with coverage of more than 80% were ranked good, 60% to 80% as average, and less than 60% as poor. The facility performance ranking is given in figure 1.

Figure 1: Ranking of primary health care facilities by annual and monthly ANC services provided

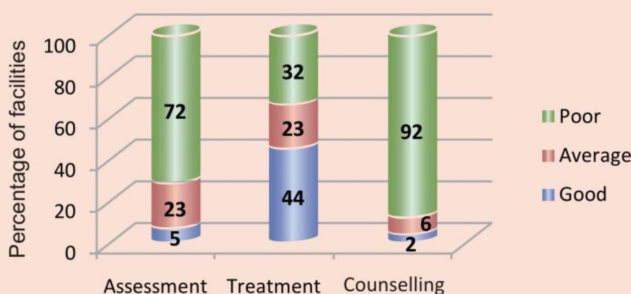


- Only 17% health facilities achieved good ranking for annual ANC-1 coverage and 13% for annual revisits.
- 24% health facilities achieved good ranking for monthly ANC-1 coverage and 16% for monthly revisits.

II. Quality of ANC Services

The indicators for quality of ANC services were assessment, treatment, counselling and clients' satisfaction. The quality of assessment, treatment and counselling was ranked on the basis of essential steps observed during the service delivery process. The quality of services was ranked as good if the providers in a facility followed more than 80% of the required steps, average if observed between 60%-80% of the steps and ranked poor if they followed less than 60% of the steps. The findings for quality of ANC services are shown in figure 2.

Figure 2: Ranking of facilities according to quality of ANC services



- Only 5% of the providers were ranked good for assessment, 2% for counselling and 44% for treatment.
- On being directly questioned about satisfaction with the received ANC services, 46% of clients said that they were satisfied.

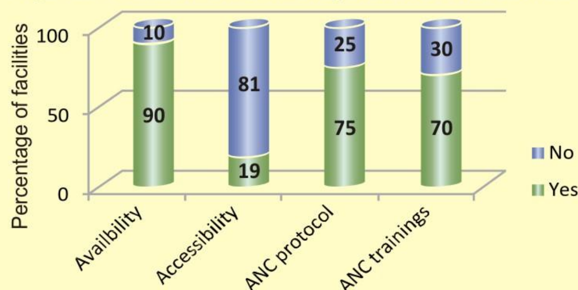
IV. Management Issues

The indicators used for evaluation of management were availability and accessibility of ANC services, availability of ANC service delivery protocols, ANC trainings, and supervision of ANC services.

Availability of ANC services: This was assessed by the percentage of health facilities where ANC service providers, Lady Health Visitors (LHVs) or other health providers, were available and providing services at the time of survey. ANC services were available in 90% of PHC health facilities. These services were available at 100% of RHCs. (Fig. 5)

Geographical accessibility: Percentage of health facilities with all catchment area population within 5km of their location were defined as accessible. According to this criterion, only 19% of PHC health facilities were accessible to clients. RHCs were relatively more accessible than BHUs. (Fig. 5)

Figure 5: Assessment of management of ANC services

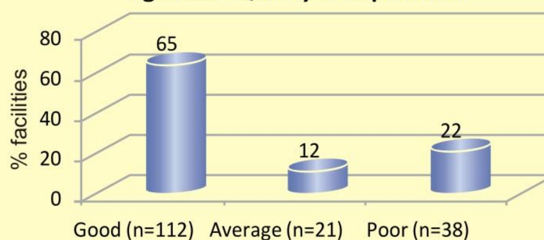


ANC protocols: The availability of ANC protocols was assessed by the percentage of health facilities that had these protocols. Protocols were available in 75% of health facilities. The availability of ANC protocols was relatively better in RHCs than BHUs. (Fig. 5)

ANC Trainings: This indicator took into account the percentage of ANC providers who received trainings related to ANC topics during the last three years. Out of the ANC providers surveyed, 70% had received training in the last one year. The availability of trainings was relatively better in BHUs than RHCs. (Fig. 5)

Quality of supervision: Quality of supervision was operationally ranked as good, average and poor on the basis of eight steps of supervision included in the study questionnaire. Overall 65% of facilities achieved good ranking. The trends for quality of supervision were similar in BHUs and RHCs. (Fig. 6)

Figure 6: Quality of supervision



Qualitative findings

The perceptions of health system stakeholders: clients, ANC providers and health managers (facility in-charges and district and provincial managers) were very helpful in understanding the social and managerial reasons of low coverage and poor quality of ANC services. A summary of perceptions of each health system stakeholder is given below:

Perceptions of clients

- Distant location of facilities
- Lack of transport
- Insufficient and inconvenient facility working hours
- Unhelpful attitude and non-availability of staff
- Insufficient facility resources and diagnostics
- Limited decision making power for ANC utilization
- Influence of community based providers

Perceptions of providers

- Non-conducive working environment
  - Lack of incentives
  - Lack of transport
  - Security issues
  - Lack of educational facilities for children
  - Lack of facility resources
- Low client awareness and decision making power
- Negative Influence of community based care providers

Views of health managers

- Lack of coordination between vertical programmes and routine integrated health services
- Lack of transport/fuel for supervision
- Health facilities situated outside community dwellings
- Low level of client awareness and decision making power to avail ANC services
- Influence of spiritual healers and quacks

Discussion

The distinctive aspect of this study was the combined quantitative and qualitative assessment approach that broadened the scope of the findings and provided opportunity to extract reasons of gaps in the coverage and quality of ANC services.

The institutional capacities, i.e. management, facility resources, quality of ANC services and facility performance were evaluated through quantitative approach in terms of measureable indicators and gaps were identified.

In qualitative assessment triangular interactions of health system components: clients, providers and health managers were studied to explore the factors that influence the ANC services delivery process.

The quantitative findings revealed that 52% of the expected number of pregnant women in the catchment areas of the PHC health facilities in Punjab came for first ANC visit. Out of those who reported for a first visit one third never reported for follow-up. The quality of provided services, especially clinical assessment and counselling, is very poor and leads to low client satisfaction. The study identifies multiple managerial and social factors responsible for low coverage and poor quality of services.

Reasons for low coverage and quality

- The geographical accessibility and availability of ANC are compromised due to distant location of health facilities, lack of transport, insufficient and inconvenient working hours, unhelpful attitude of facility staff, lack of empowerment of clients for decision making, and highly influential and accessible community based providers available within the communities.
- Deficiencies in health facility management are present in all areas e.g. maintenance of buildings, equipment, supplies, medicines and human resource management.
- Quality of laboratory services is highly compromised at PHC level due to non-functional equipment or shortage of supplies. The essential lab tests required in the package of ANC services are not usually available at these facilities.
- Only half of the supervisors document their comments on the supervisory visit books. Supportive supervision in its true spirit is not being followed in most districts.
- The strategic and operational planning e.g. provincial and district target setting and its monitoring are weak areas on both provincial and district level. The indicators of quality of ANC services were not accounted for in routine MIS. The mid-year and end-year evaluation of ANC targets are not clearly spelled out at either district or provincial level.

  The present interventions for MNCH are mostly through special (vertical) programmes with minor strengthening of routine integrated health services in the devolved district health system. The district health managers are not able to accommodate the special programmes in addition to their current responsibilities in managing the integrated health services. The parallel efforts through various special programmes dilute the impact of interventions and leads to wastage of resources.

Conclusions

The current situation, as reported by this study, indicates that approximately half of all expected pregnancies in Punjab are being enrolled for ANC-1. Of these, about one third do not report for follow-up visits.

The quality of clinical assessment and counselling does not meet the standard protocols and procedures for ANC. There were multiple reasons for this compromised coverage and quality that include deficiencies in facility resources (infrastructure, equipment, supplies, medicines and diagnostic facilities) and administrative issues (supervision, training and health services management). Other contributory factors are low level of client awareness about importance of ANC, limited decision making power of clients for availing services, and detrimental role of community based service providers in client motivation to utilize ANC services from health facilities.

The policy issues regarding implementation of Maternal, Newborn and Child Health (MNCH) services through special vertical programmes rather than integrated district health system are also one of the factors for low coverage and compromised quality of services.

Recommendations

Interventions are recommended at facility level to improve the facility resources and availability and accessibility of services. Behavioural change interventions are required for both providers and clients. A Policy shift is required from special vertical programmes towards strengthening of routine integrated health services to achieve MNCH related MDGs. Specific recommended interventions are summarised below.

Address availability and accessibility of services through:

- Extension and readjustment of facility working hours at PHC health facilities
- Geographical accessibility must be a high priority for establishment of new health facilities
- Client awareness and empowerment to avail ANC servcies with involment of NGOs
- Advocay and motivation of community based providers to improve facility referral for ANC

Address deficiency of resources through:

- Clear guidelines for supplies, drugs and equipment
- Technical assistance
- Delegation of financial powers for readjustment and reappropriation
- Strengthening of ANC Laboratory services up to BHU level

Train providers in technical skills to improve:

- Clinical assessment
- Treatment
- Counselling
- Client satisfaction

District capacity building for:

- Strategic and operational planning
- Local target setting and monitoring
- Mid-year and end-year evaluations

Strengthening of routine integrated servcies:

- For better coordination in service provision process
- To avoid wastage of resources through duplication of interventions

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