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QUALITY OF CARE: AN OVERVIEW

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This paper was presented at the "Workshop on Research Needs in Health" at the Centre for Development Management, Rajendrapur held on 6 June 1995.

INTRODUCTION

Inspite of the progress made in the last two decades at various level of health in developing countries, services provided through health care invariably raise questions of its quality of care. Initially, quality of care was only limited to the issues related to family planning and maternity care. In recent years, it has been expanded to encompass a wider range of reproductive issues, reflecting the needs and perspectives of women in different situations and at different stages of their reproductive life. This paper aims to present what we mean by quality of care, its importance on various aspect of reproductive health, how to measure the quality of care of an intervention programme, and to suggest some research recommendations to enhance quality of care.

DEFINITION OF QUALITY OF CARE

Quality is difficult to define. It has different meaning to different people. Whether a particular program's' quality is adequate is a matter of judgement. These judgements can be based on a set standardized within a particular country context or by international organizations. A clear distinction has been made between quality of services and quality of care. Quality of services refers to the attributes of different programme services whereas quality of care refers to the way clients are treated by the system providing these services (1). Without good services, it would be difficult to provide good care, although providers, in theory, could treat clients with dignity and respect even if they cannot provide required and desired services. In true sense, quality of care emphasizes not only on the quality of services but also on the interpersonal dimension of the interactions between providers and clients, resource allocation and infrastructure of programme management, and their motivation.

IMPORTANCE OF QUALITY OF CARE

There is a general consensus among researchers that in developing countries, health services play a very important role in overall mortality level. However, the mere existence of health services is

not enough. Acceptance and utilization of health services depend on its quality of care. Whatever being discussed on quality of care or quality of services, the most important issue is how quality of care of different reproductive health intervention influences in achieving the stated goals of a program, that is, decline of fertility, mortality and morbidity. Although socio-economic factors are significant determinants of human well-being, bio-medical factors can not be ignored. The importance of biomedical factors has been documented in the works of Chen and Mosley (2). In this section we will focus on the importance of quality of care of an intervention on different elements of reproductive health.

Maternal health

The provision of proper health care during pregnancy, delivery and puerperium is seen as a major component of the approach to improve maternal health and pregnancy outcome. Every year, worldwide, 500,000 women die due to pregnancy related causes, and three-fourths of them in developing countries (3). The maternal mortality rate of Bangladesh is 600 per 100,000 live births which is 300 times greater than that of Sweden (4). Besides socio-economic factors, the difference also indicates deficiency in quality of care of health services in Bangladesh.

One question often being debated is how the quality of care provided affects utilization of services. Lack of antenatal care increases the risk of maternal deaths. In a study in the north-west of Zaire, of 3413 women who attended a rural hospital between 1981 and 1983 for delivery of their babies, the risk of death was found to be increased 15-fold for women who had not received prenatal care compared with those who had (5). In a study in Addis Ababa, a maternal mortality rate of 2.4 per 1,000 live births was found among women who had received prenatal care compared with a rate of 6.4 per 1,000 for those who had had none (4). The necessity of antenatal care is clearly evident to reduce the maternal mortality rate.

Inadequate antenatal care is as hazardous as lack of antenatal care. Inadequacy can be seen by how many times a woman attend the

antenatal care centers and types of services women require. It was observed in many studies that lack of early and adequate antenatal care increases the risk of maternal deaths (5). In Thailand, mothers who started receiving antenatal care in their first and second months of pregnancy had lower maternal mortality rates than those who did not get antenatal care until the third trimester (5). Several antenatal visits are necessary over the gestation period to identify and follow up the complicated cases. In Zaire, the maternal mortality rate was 250 per 100,000 live births for those who had made four or more antenatal visits, 270 per 100,000 for those who had one to three visits and a very high 3,770 per 100,000 for those who had no antenatal care at all (5).

Use of maternal health services not only depends on the availability of adequate health services but also on the socio-economic factors and health behavior of the women (6,7,8). Adequate health services for pregnant women is constrained by lack of infrastructure, equipment and trained personnel. A study of primary health centers in India found that women attending antenatal screening were not screened either for anaemia or for high blood pressure or proteinuria to detect the risk of eclampsia (5). This harmful weakness is exhibited in another study done in Mozambique; more than 80% of women who died had visited antenatal clinic but was not examined for anaemia and eclampsia (5).

In BRAC's health program, there is shortage of supply of different health services in the antenatal care centres. A study done in Women's Health and Development Programme areas showed that two-thirds of women attended the health centres for antenatal care once or twice (8). Of the women received different services, about 82% received immunization, 66% iron-folic acid tablets and health education, 25% abdominal examination, 30% height measurement, and 42% urine examination (8). In the same study, women who had not attended the centres mentioned the following reasons for non-use of services: lack of time, disapproval by husbands, and distant location of health centres (8).

In developed countries, almost all deliveries are performed by

personnel who are usually highly trained and who have access to sophisticated services (4). On the contrary, in the developing countries, provisions of modern maternal health care are sparse or deficient and pitifully, a very few pregnant women are attended by trained personnel in rural Bangladesh (8). Another study argued that about 60% of women were delivered by the trained TBAs and of them just over one-third of the deliveries were conducted by following "three cleans" (9). The same study pointed out that the practice of clean delivery has no significant association with postpartum infection. One of the major reason of postpartum morbidity is due to infection introduced into the vagina by the birth attendant if the labour is prolonged or difficult (9).

It has been universally identified that lack of adequate facilities, lack of supplies and insufficient medical and logistic supply back-up make effective care difficult or impossible. Many countries have lack of trained personnel from the speçialist level to the midwife. In Tanzania, the following factors were identified which contribute to maternal mortality: scarcity of medical and paramedical personnel, especially in rural areas; poor training of the health staff and low salaries; poor working conditions; and demotivation of the health workers (5). In India, examination of the patient is completed within 1 minute and in Mexico 2 minutes (10). Such short time rarely includes any physical examination or measuring any vital signs which discourage women to attend the health centres. In rural Bangladesh it was revealed that half of the maternal deaths occurred before child birth and among all deaths less than one-fourth received services from qualified physicians (11).

Lack of blood bank or transfusion facilities is one of the most catastrophic inadequacies in a health facility. A study done in selected hospitals of Vietnam shows that lack of blood led to 36% deaths among women who were admitted for hemorrhage (5). Lack of basic equipment is a more acute problem in most peripheral hospitals. A Kenyan study found that of the 92 women, 19 had no facility for operative delivery, blood available was not available

in 21 cases and in 9 cases the hospital had no water or electricity supply (5). Delay in diagnosis and in adequate treatment are also responsible for maternal deaths.

Postpartum care is very much neglected in developing countries. In rural Bangladesh, there is no provision of postpartum care at village level. BRAC's health intervention provides very little services to women during their postpartum period. The majority of the women had inadequate knowledge about postnatal care (8). In the recent years, few studies revealed high maternal morbidities occurring in the postpartum period which draws our attention to postpartum care (9).

Unsafe abortion is another neglected problem in developing countries and a serious concern to women during their reproductive lives. Because abortion touches on some of the profound religious and moral issues, the health consequences of abortion have been overlooked in many societies. Every year between 40 and 60 million women seek termination of an unwanted pregnancy (12). WHO estimates about more than half of the deaths caused by induced abortion occur in South and South-East Asia, followed by sub-Saharan Africa. In Bangladesh, a report from a rural area spoke of 2,040 women dying per 100,000 illegal operations, though this is thought to be an exceptionally high ratio (13).

The risk of death is 100 to 500 times greater among the women who seek care to unqualified back-street abortionists than the women who have access to skilled operators and hygienic conditions (4). In India where abortion is legal, by 1984 only about 6.7% of the physicians who were trained to perform abortions provided service in the rural areas. There are considerable under-reporting of abortions carried out in private health facilities, but nevertheless it is evident that illicit abortions are widespread. In Tunisia and Zambia where abortion is legal, it is still carried out illegally by unqualified operators (4).

As the problem is treated secretly, the majority of the women are left out of the professional care. Women, in fact, are not aware of such service availability and also they do not have much

money to spend in seeking abortion under professional care. Lack of access to the system and legal and procedural delays are also obstacles to timely abortion. In this respect, modern abortion facilities must be made available at the village level. An Indian study shows that poor attendance to the government abortion facilities is also due to lack of inadequate facilities and of trained physicians, particularly female physicians (14). In all parts of the world, a small but increasing proportion of abortion seekers are unmarried adolescents. In most cultures young unmarried women fail to take professional care for the fear of isolation and shame. Hence, safe and effective services must be available to all women maintaining their confidentiality as well.

Simple reproductive health services have failed to meet women's perceived reproductive health needs. Lack of attention to the coordination of care and to clients' perceived needs and convenience is a major cause of under-utilization of services (15). Studies in Mexico have shown, how integration of maternal care and family planning have led to improved client-provider relationships and increased contraceptive utilization (16). Integration of all health services is essential not only to make services available at one place but also to raise users' satisfaction and demand for the services.

Family Planning

The importance of the quality of care in family planning services has been emphasized by Bruce (17), Donabedian (18), Hernan (19), Simmons, et al (20) and others. Choice of methods refers both to the number of methods offered on a reliable basis and their intrinsic variability. Various studies revealed that choice of methods increases contraceptive prevalence rate and continuation rate (21,22). Having a choice of method is both practical and philosophical to the user's need. In Bangladesh during late seventies and early eighties, the contraceptive programme mainly focussed on the promotion of a particular method but not on the effective contraception of an individual. But the same programme operated in the same area with better trained workers and seven

contraceptive choices result in dramatic contrast both in acceptance and continuation and fertility decline (23,24).

It is important that providers should give complete information to clients about the services offered, their efficacy, reliability, side-effects, and contraindications, so that women may decide about their own choice (17, 25). We know little about the direct impact of information given to users on contraceptive prevalence. Because of the influence of the media in disseminating information regarding contraceptives, it is very difficult to find out programme impact. Although no impact analyses are available with regard to information given, some data would give facts about users' knowledge and contraceptive behavior. A Mexican study showed a strong relationship between the receipt of accurate information about methods including side-effects and the inclination to continue with methods and to resist negative, ill-founded rumors (26). How the information is delivered is also important for quality of care. Most people remember message better if spoken word is reinforced by written or pictorial messages (27).

Family planning workers should be technically competent with current knowledge and skills. Despite lack of documentation, strong indirect evidence of the impact of insufficiently trained providers can be detected in nationwide experience with specific contraceptive methods. In Bangladesh, after receiving 18-month training none of 19 health workers took history of a patient and a minority washed their hands before physical examination (28). It appears that any method that need sophisticated technique is likely to be underutilized and or misused in some settings (29). It is also important to collect information on women's health. In a study in Bangladesh revealed that about 22% of women reported to have symptoms of reproductive tract infections (29). In such cases, due to lack of inadequate service facilities, women can be infected from each other.

Providers who are uncertain of their skills are sometimes reluctant to use them or worse, apply them badly. To be effective of the services, health workers must be technically skilled, along

with supply of appropriate equipments, drugs, etc. Refresher training should be given to the health providers to raise efficiency (30). Doctors must have education and knowledge on the latest technology. Family planning programme should continue to care (follow-up) for women after they accept a contraceptive method (30). Clinic performance can be assessed through the record keeping system.

The relationship between provider and client is essential for the quality of care. In review of family planning performance in India and Bangladesh, Simmons, et al (31) noted that the provider-client relationship depends not only on the frequency of contact, but also on the attitudes of the health workers. Health care can be effective if health workers would have acceptable living conditions, an appropriate workload, adequate training, realistic work targets, and supportive supervision.

In northern India and Bangladesh, Simmons, et al (31) identified that worker density is the basic determinant of frequency of contact between family planning workers and villagers. In early seventies, female village workers were expected to serve 10,000 people in several villages in India which was too low for effective achievement (31). In the non-government program at Matlab, Bangladesh where one worker served 1200 people of his/her own village, family planning utilization was found to be high (31). In rural Bangladesh, sex of a health worker is very important for the success of a health programme. In Matlab, the impact of outreach centres to raise contraceptive use is more pronounced if the worker is female (32).

People's dependency on the government for free service is also responsible to create an impediment against providing quality of care. BRAC's study pointed out that since the government distributed contraceptive free of cost, therefore contraceptive sale through the Shasthya Shebikas reduced its acceptance among poor rural women (33).

Community-based programme may have to approach the issue of continuity of care at individual's contraceptive practice, and also

promoting consistent and trusted relationship between field workers and the community. A follow-up study done in Taiwan showed that after thirty months 28% still had original intrauterine device, 27% not practicing contraceptives and 8% became pregnant. The discontinuation is usually due to poor initial contact, ignorance of side-effects, inadequate follow-up, etc. Different studies pointed a positive correlation between discontinuation and no follow-up of the patients (29).

The quality of reproductive health services depends upon interconnections not only between various reproductive health interventions, but also between reproductive and other health services. Community-based reproductive health services must include sex education, contraceptive distribution, prenatal care, low-risk delivery, treatment of sexually transmitted diseases, abortion services and recognition and referral of complicated cases. Referral and supportive services must be provided by sophisticated facilities.

Child care

A 'Child Survival Revolution' is being promoted in the developing countries to reduce infant and child mortality. Significant progress has been made in the past two decades in the area of survival, growth, and development of infants and children. In spite of worldwide decline in infant and child mortality, still most of the deaths are due to preventable causes. In some developing countries health centres exist, but it lack trained and motivated staff, essential drugs and community support.

Immunization is one of the effective ways for child survival. Though vaccine made available in the health centres free of cost, the use of facilities is not satisfactory. A recent study of BRAC reported that about 62% were fully immunized in rural areas of Sylhet (34). Earlier, another study showed that inadequate supplies of vaccines, lack of proper maintenance, and inadequately sterilized equipments make people reluctant to take the services (35). Various reasons identified in another study done in India were: unaware of need for immunization; unaware of need to return for 2nd/3rd dose;

child illness; fear of side reaction; lack of interest; absence of vaccinator; non-availability of vaccine, etc. (36). Lack of health education and motivation among mothers were evident from the findings of the study.

Maintenance of cold chain is important for the effectiveness of vaccines. Most of the health centres properly maintained the cold chain were evident in studies in Bangladesh and India (34, 37). Correct knowledge and practice of maintenance of cold chain among health practitioners are of paramount importance. It has been noticed that a large majority of children are vaccinated by private medical practitioners and surprisingly, knowledge and practice of maintaining cold chain is unsatisfactory among them (38). Periodic assessment and refresher's training would help maintain quality of care.

Growth monitoring and promotion is a communication strategy by making health and nutrition education more individualized, more convincing and more effective (39). Besides weighing and plotting, growth monitoring tasks emphasize more on the interpretation of growth trend and counselling of mothers. In the same session, messages on immunization, diarrhoea, and acute respiratory infection can reached the mothers. Sometimes the mothers are reluctant to attend the growth monitoring session. Whatever be the reason, the quality of care issues would come first. The health workers must encourage mothers' regular attendance to the session. Service-related factors for regular growth monitoring, faulty weighing machine and relationship between provider and user should be considered.

Acute respiratory infections and diarrhoea kill large number of young children in the developing countries. UNICEF estimated 3.6 million children died from respiratory infections in the world in 1990 (39). WHO estimates that each year there are over one billion episodes of acute childhood diarrhoea and almost 5 million children die of diarrhoea.

Acute respiratory infections are mostly of bacterial origin and respond to simple antibiotic. The most important issues to be

addressed here are early case identification and timely treatment carried at the village level by health workers. Timely referral of the cases depends on correct knowledge of health workers. To maintain quality of services, the health workers must be well-trained and well-supervised. Adequate drug supply is needed because poor villagers can not afford the cost of drugs. More often, the child fails to receive complete course of antibiotic which brings more hazards to life. In the government health centres, drugs are provided free of cost, but lack of adequate supply often lead to failure of course completion. A complete treatment with antibiotic is to be ensured to provide quality of care. Mothers' proper knowledge of diarrhoea control would indicate how effectively quality of care is maintained.

Sexual health and infertility care

The recent emergence of AIDS has raised concern for sexually transmitted diseases (STDs). The consequences of STDs and HIV infections are devastating. The data on quality of sexual health services are widely scarce. All STDs but HIVs can easily be prevented, and treated if detected early.

In developing countries, treatment facilities for STDs are inadequate. In India, most STD patients usually seek health care to private practitioners and traditional healers rather than government health facilities. A recent study of BRAC reported that poor sexual health services were available at the tertiary level and no services at the secondary level (40). Sex education would play a significant role in preventing STDs. Services are to be provided in all health centres from primary to tertiary level.

Infertility has received increased recognition as a reproductive health problem during the last two decades. This led to a better assessment of its prevalence and causes which in turn led to the documentation of infection as an important causative factor. In developing countries, the predominant cause of infertility is STDs and pelvic inflammatory diseases (PID). The consequences of infertility is very pathetic. Considering the cost, treatment of infertility is a luxury in poor countries like Bangladesh. Since

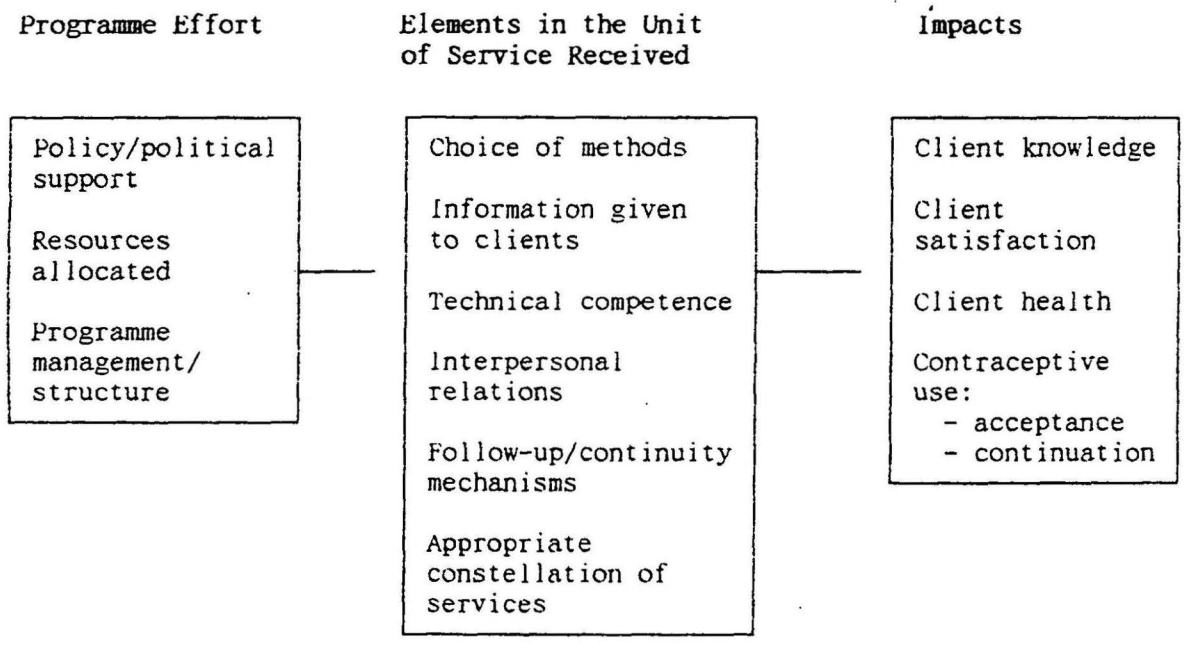
WHO's definition of health also includes infertility due to its psychological consequences on women, attention should also given to infertility treatment. However, emphasis should be placed on prevention. Infertility can be prevented if certain measures be taken during abortion, delivery and introduction of intrauterine devices.

III. MEASURING QUALITY OF CARE

Although the quality of care framework evolved by Bruce and Jain, is particularly used for measuring the family planning program, can also be used to investigate other areas of health care supplemented with more points. Figure 1 is a graphic display of framework and hypothesizes the relationships between programme effort, quality of the service experience, and its impacts (32).

Figure 1

The quality of the service experience: its origin and impacts



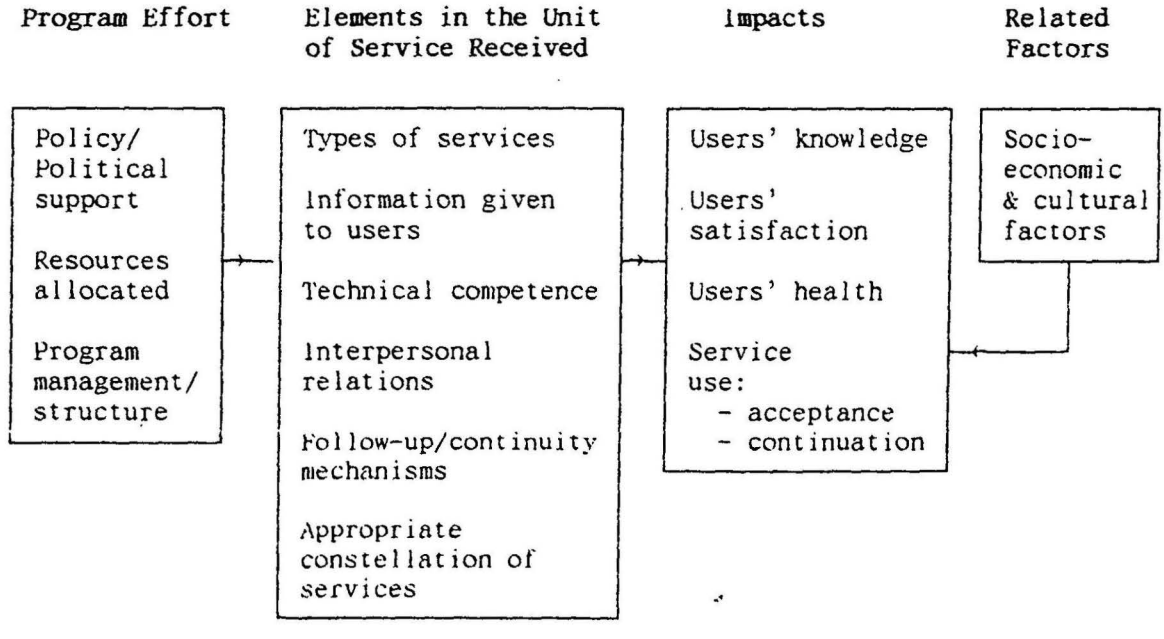
This framework is a unique tool to measure client's perspective on service experience. It accounts the individual level outcome as the consequence of service-giving. The framework highlights the role of the policy makers who

actually plan the programme. The role of field managers is also crucial to making the programme run successfully.

This analytical framework may be applied to measure the quality of care in the areas of maternity care, child survival programmes and also sexual health programme with certain changes. From authors' point of view, the quality of care does not mean provision of quality services by an intervention programme. In true sense, it should encompass a wider aspect, that is, socio-economic and cultural aspect of the society. What is meant by that is, health providers deal not only with the immediate illness but also with its underlying causes. For example, a pregnant women suffers from anaemia, the programme will not only provide iron supplements but also look into her daily diet and family situation. Analyses of socio-economic and cultural factors along with quality of care would give much more insights into the facts of programme impacts.

Figure 2

The Quality of the Service : Its Origin and Impacts and Relationship with socio-economic and cultural factors



CONCLUSION

The paper has attempted to give some insights into the significance of quality of care in various aspects of reproductive health care in developing countries. The most important thing we found here is paucity of data. Moreover, almost all the findings shown in this paper have been done in countries other than Bangladesh. Progress in quality of care depends upon data generation and analysis within the country context. How much would be needed to ensure accessible and affordable reproductive health services is constrained by paucity of data. Considering the significance of research in respect of reproductive health care, the Research and Evaluation Division of BRAC would recommend the following research issues to improve the quality of care of different health services:

1. **Maternal health care** (antenatal care, intranatal care and postnatal care).

a) Quality of Services given to high risk pregnant women and normal pregnant women at service delivery points

-Types of services women received

-Information given to women

-Regular follow-up of women

-Competence of health workers and their relationship with users

-Availability of services and convenience of the health centres

-Worker density to population served

b) Cost analysis of all pregnancy related care

c) Impact of resource allocation on mortality

d) Knowledge, attitude and satisfaction of the program management

e) Knowledge, behavior and satisfaction of health users

f) Need assessment study of pregnancy related care

g) Do Socio-economic and cultural issues need to be focused to improve quality

of care?

f) Impact of maternal health programme on maternal mortality and morbidity and perinatal mortality

2. Family planning

a) Quality of Services given to family planning service users at service delivery points

-Choice of methods

-Information given to women and men

-Regular follow-up of women and men

-Competence of health workers and their relationship with users

-Interrelation between workers

-Supervision of workers

-Availability of services and convenience of the health centres

-Worker density to population served

b) Knowledge, satisfaction and behavior of the clients

c) Knowledge, attitude and practices of health workers

d) Knowledge of health workers of women's health

e) Impact of family planning program on fertility

f) Quality of care in postpartum contraception.

3. Child Health

a) Impact of immunization and growth monitoring on infant and child health

b) Knowledge, practice and satisfaction of mothers about immunization and growth monitoring

c) Quality of services provided at the growth monitoring session and EPI centres

4. Sexual Health

a) Inventory of services at the different level of health sectors

b) Quality of Services given to STD cases at service delivery points

-Treatment given

-Information given to women and men

-Regular follow-up of women and men

-Competence of health workers and their relationship with users

-Availability of services and convenience of the health centres

-Worker density to population served

c) Knowledge, attitude and practices of cases regarding STDs

c) Knowledge of medical staff and health workers regarding STDs

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