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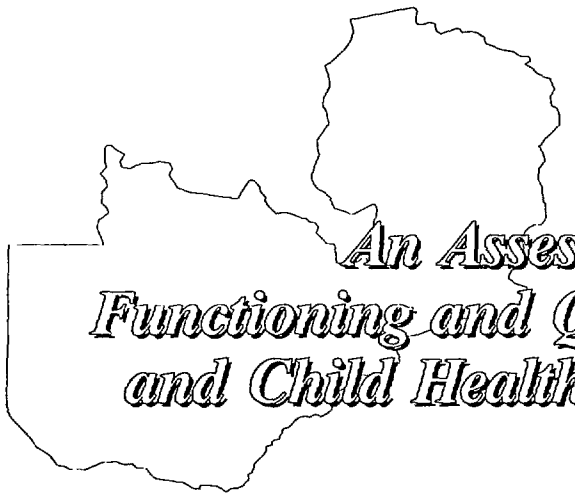

An Assessment of the Functioning and Quality of Reproductive and Child Health Services in Zambia

May, 1998

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The overall objectives of the Africa OR/TA Project II are to broaden understanding of how to improve family planning services in sub Saharan Africa, and to apply operations research and technical assistance to improve services by

- increasing access to a full range of family planning services and methods,
- developing service delivery strategies that are client-oriented and acceptable to various population groups,
- improving the operations of programs to make them more efficient and financial sustainable,
- improving the quality of services,
- strengthening the capabilities of family planning program managers to use operations research to diagnose and solve service delivery problems

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ACRONYMS AND ABBREVIATIONS

AIDS	*Acquire Immune Deficiency Syndrome*
BCG	*Bacilli Calmette Guerin*
CBD	*Community Based Distribution*
COC	*Combined Oral Contraceptive*
CSO	*Central Statistical Office*
CYP	*Couple Years Protection*
DHMT	*District Health Management Team*
DPT	*Diphtheria, Pertussis and Tabanus*
FP	*Family Planning*
HIV	*Human Immune Virus*
ICPD	*International Conference on Population and Development*
IEC	*Information Education and Communication*
IMCI	*Integrated Management Of Child Illness*
IUD	*Intra Uterine Device*
JSI	*John Snow, Incorporated*
LAM	*Lactational Amenorrhea*
MCH	*Maternal and Child Health*
MOH	*Ministry of Health*
NFP	*Natural Family Planning*
OPD	*Out Patient Department*
ORT	*Oral Rehydration therapy*
POP	*Progestin only Pill*
SDP	*Service Delivery Points*
SEATS	*Family Planning Services Expansion and Technical Support*
STD	*Sexually Transmitted Disease*
UNFPA	*United Nations Fund for Population Activities*
USAID	*United States Agency for International Development*
ZDHS	*Zambia Demographic Health Survey*
ZFPS	*Zambia Family Planning Services*

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EXECUTIVE SUMMARY

The main objective of the study is to provide base line data for strengthening the delivery of reproductive health, including family planning and STD prevention and treatment, and child health service provided by the Ministry of Health However, the immediate objectives are two fold,

(i) *To provide information on the constraints and weakness in the reproductive health and child health service delivery sub systems including facilities, staff preparedness, supervision, IEC, record keeping, and logistics/supplies that will be used to guide the interventions under the ZFPS, the CARE Community Family Planning project, SEATS, BASICS and UNFPA,*

(ii) *To provide the CBoH with measures of indicators of sub systems functioning and quality of care that can be used to monitor the progress in improving the availability and quality of clinic based reproductive health and child health services*

A total number of 254 health facilities belonging to Ministry of Health were included in the study sample On average 21 health facilities were canvassed in each province The study included 358 family planning health providers, 396 Family planning clients, 1727 Maternal and Child Health (MCH) clients, 467 sick child health providers and 1697 caretakers of sick children The main findings of the study are indicated below,

1 ACCESSIBILITY OF MCH/FP SERVICES

- *On the day of visit, most of the health facilities opened at 08 30 hours and closed at 16 30 hours*
- *Most of the FP clients prefer to come to health facilities in the morning*
- *The average walking time for MCH and FP clients to facilities is one hour for those in the rural and about 30 minutes for those in urban areas*
- *Rural MCH clients paid between K50 00 and K1,500 00 for either consultation, drugs, travel or other consumables compared to urban clients who paid between K500 00 to K8,500 00 for similar services Family planning services are offered free and therefore FP clients do not pay anything*
- *Most of the health facilities in rural areas reported that family planning services are available only one day in a week compared to urban areas, 5 days a week Both rural and urban facilities reported that services of sick children are available for all the days of the week.*

2 FUNCTIONING OF HEALTH FACILITIES SUB-SYSTEMS (readiness of facilities to provide reproductive health services)

- *Overall, 44 percent of facilities had piped water In rural areas only 23 percent had piped water compared to 82 percent in urban areas*
- *Only seventeen percent of facilities had incinerators*
- *Most of the facilities had the equipment required for basic general medical examination*

- *About half of the facilities had injectable equipment*
- *Only 15 percent of the facilities had IUD equipment.*
- *Examination rooms at most of the facilities are conducive and ready to provide medical examination service*
- *Only 40 percent of facilities held health talks during the day of visit*
- *Family planning and child welfare issues are the most commonly discussed issues during health talks*
- *IEC materials brochures and flip charts are hardly available in almost all the facilities Posters are common in all the facilities, particularly for family planning*
- *Most of the providers have had basic training in family planning and child welfare but many of them haven't had a refresher training to up date themselves or learn new ideas*
- *About one third of the facilities did not have written inventory for contraceptive*
- *Combined pill, Injectables, male condom and progestin only pill are usually provided at health facilities*

3 QUALITY OF CARE

- *A large number of family planning and MCH clients expressed satisfaction with the services provided*
- *Combined pill is the most commonly mentioned method to both new and revisit clients during provider client interaction*
- *The majority of family planning providers would recommend combined pill for delaying or spacing births Sixty four percent would recommend female sterilization for terminating child bearing*
- *Forty two percent of FP providers felt that a client must have a child or children before they prescribe the injectable*
- *Over two thirds of providers would not recommend IUD to clients with STI*
- *The vast majority of FP clients are given information on how to use a method and only about half are told about the advantages or disadvantages of the method*
- *Educational material are only used with new clients and very little with revisit clients*
- *Mild headaches were commonly reported by women taking pills*
- *Most new and revisit clients had their weight and blood pressure taken*
- *A substantial number of family planning new clients were given written reminders*

4 INTEGRATION OF FAMILY PLANNING WITH OTHER HEALTH ISSUES

- *Discussion of STDs, HIV/AIDS with family planning clients is still minimal although the majority of providers said that they were comfortable discussing HIVS/AIDS*
- *STD cases were treated once diagnosed in FP clients*
- *Most providers said that if the client is suspected of HIV/AIDS they would recommend counselling*
- *Common signs of symptoms of STD known by FP and MCH clients were lesions or sores*
- *Friends or relatives are the major source of information on STDs*
- *Almost all the FP and MCH clients are aware that HIV/AIDS is mainly contracted through sexual intercourse*
- *Staying faithful was reported to be the best way of protecting oneself from acquiring HIV/AIDS*

5 CHILD HEALTH

- *Half of the health providers attended at least some training in diarrhoea or ARI or malaria case management, although there seem to be a gap between their knowledge and their practice*
- *Health providers and sick child caretakers' interaction is very limited or inappropriate More than half of the providers do not know the key messages to tell the caretakers*
- *Immunization services seem inadequate On the day of visit only 12 percent of children who were due for immunization received antigens*
- *There is need for further improvements in counselling and communicating*
- *Very few providers have received IMIC training*

CHAPTER ONE:

Background

1. BACKGROUND

In 1984, the National Commission for Development Planning (NCDP) – now part of the Ministry of Finance and Economic Development was mandated to initiate a draft population policy which aimed at among other things, achieving a population growth rate consistent with the growth rate of the economy and facilitating the supply of information on contraceptives The National Population policy was adopted in 1989, since its adoption however, not only have the socio-economic conditions in the country continued to change but even the context within which the government is operating has changed New challenges such as the HIV/AIDS pandemic, adolescent and youth sexual health, reproductive health rights and gender issues in reproductive health have emerged The government is also now operating within the context of decentralisation This process has been particularly rapid in the Ministry of Health which embarked on a programme of reforming the health care system as early as 1991 All these changes have necessitated a revision to the 1989 Population Policy and this was done in 1997 The revised Policy is however still in draft form

In 1991 the government through the MoH, begun a process of decentralisation of the health care system in which new roles and responsibilities for various levels of the health care system were defined New structures have been formed through the establishment of various committees and boards, e g Neighbourhoods health Committees, Health Centre Committees, District Health Management Teams, Hospital Management Boards etc The focus of the Health Reforms has been the decentralisation of responsibilities for service provision with the districts as the focal point of integrating health care, and the overall goal is to provide equity of access to cost-effective quality health care as close to the family as possible

Within the context of the Health Reforms Programme, the government of Zambia has committed itself to financing a basic package of cost-effective health care services This package has six major health thrusts of which Reproductive health, including sexual health and family planning is one The commitment to a basic package of reproductive health is to some extent a response to the International Conference on Population and Development (ICPD, 1994), whose Programme of Action was endorsed by Zambia The ICPD not only shifted the emphasis away from demographic target oriented Family Planning Programmes to achieving reproductive intentions through out life , but also called for increase in the availability and improvement in the quality of reproductive health services The commitment also comes in the light of the 1996 ZDHS findings in which the total fertility rate (TFR) for Zambia was at 6 1 against a background of low contraceptive prevalence rates According to the 1996 ZDHS, the contraceptive prevalence rates for all methods was 26 percent among all women, of which 14 percent were using modern methods Teenage fertility has also been identified as one of Zambia's major concerns , according to the 1996 ZDHS one in three teenage girls {15-19 yrs}, has begun child-bearing, by the age of 19 years almost 60 percent of Zambian women have either given birth or are pregnant with their first child With regards to HIV/ AIDS, the overall prevalence for the age group 15-44 years, was estimated at 27 percent for urban areas and 13 percent for rural, in 1996

In order to create a conducive environment within which Reproductive health is to be implemented, Policies and Guidelines have been developed, the first of these were the Family Planning in Reproductive Health Policy Framework, Strategies and Guidelines, which were launched in June, 1997 The Safe Motherhood and Adolescent Policies and Strategies have been completed and await formal adoption, the HIV/AIDS/STIs Policies and Strategies document is in its final stages As a logical follow-up to all these documents , a Reproductive Health Policies, Strategies and Guidelines document is in the process of being developed and once finalised , will serve as the overall umbrella to all the Reproductive Health components

Zambia's efforts to reform its health care system has attracted a lot of interest and support among donor partners, a number of which have committed themselves to augment Zambia's resources in the

area of reproductive health Some of the major partners in this field include SIDA, DFID, USAID, UNFPA etc

In supporting the Zambia Health Reforms, USAID-Zambia has selected as a mission goal "Sustainable improvement in the health status of Zambians" The strategic objective of the mission's programme is "Increased use of integrated child and reproductive health and HIV/AIDS interventions' To achieve this objective, USAID is focussing on six factors which contribute to the increased availability , quality , and utilisation of health services as follows demand, community partnerships (involvement), public-private partnerships , health worker performance, technical quality and USAID Cooperating Agencies' performance USAID is moving towards a set of integrated activities and approach by three USAID funded projects, the Zambia Family Planning Services Project, Zambia HIV/AIDS Prevention Project, and the Zambia Child Health Project to strengthen health services throughout selected districts through a referral network of services

1 1 RATIONALE

In 1995, a broad based contraceptive needs assessment was carried out in Zambia by a multi-disciplinary team representing a number of Ministries, local research institutions and NGOs with interest in Family Planning and Reproductive health The assessment recommended fundamental changes in the provision of reproductive health services and especially in the composition of Zambia's limited contraceptive method mix The 1992 ZDHS indicated that the pill was the most commonly used modern contraceptive method Use of the IUD, Injectables, diaphragm, foaming tablets and Norplant implants was negligible The assessment concluded that the under-utilisation of these methods resulted not from lack of demand but rather from constraints in the service delivery system, client and provider misinformation, and weaknesses in the management support system

The Zambia Family Planning Services Project (ZFPSP 1993-98), is USAID/Zambia's main mechanism for strengthening family planning and reproductive services In order to assist the government of Zambia in resolving constraints to the increased use of family planning , the USAID strategy focusses on solutions to the immediate service delivery problems broadening the choice of methods, enhancing access to services, up-grading the quality of services offered , increasing general awareness about the benefits and availability of family planning, and providing a social marketing commodity supply system which fills the gaps and prevents shortages The ZFPSP's major goal is to increase the percentage of married women using modern contraceptives from 9 to 20 percent and the percentage of all women using modern contraceptives from 7-18 percent between 1993-1998 To achieve this the project plans to strengthen about 60 public sector MCH/FP clinics An additional mandate of the ZFPSP is to provide permanent and long term FP methods in 10-15 selected sites

Apart from the ZFPSP, the USAID-supported CARE Community Family Planning Project support the MoH to increase access and use of reproductive health services at the clinic and community level The project focusses on the disadvantaged population in the peri-urban areas, and on local services and community mobilisation USAID is also supporting expanding and improving FP service delivery in Lusaka urban District through the SEATS II Project The goal of SEATS is to ensure access to high quality FP services for the catchment populations of seven clinics in Lusaka The project objectives are to train service providers in the delivery of quality FP services , increase CYPs from 2,000 in 1995 to a total of 10,400 by 1998, and increase the proportion of CYPs generated by long-term methods and permanent methods from 0-15 percent

Two other areas in which USAID is actively supporting the MoH through Central Board of Health are child and HIV/ AIDS The Zambia Child Health Project, being implemented by BASICS, aims at increasing the coverage and quality of promotive, preventive, and curative activities that contribute to the health of Zambia's children

The Zambia Child Health Project's activities are organised according to the following targets

- *Health Centre and community partnerships supported for improved child health*
- *Improved pre service and in service training of health Centre*
- *Strengthening of CBoH's central regional and district technical capacity*
- *Strengthening the HMIS at community, health Centre, district and national levels*
- *Strengthening the public/private sector partnership for child health*

In the area of HIV / AIDS USAID collaborated with the National AIDS, STD, TB and Leprosy Programme (NASTLP), in producing a universal objective tree for HIV/AIDS prevention which presents gamut of potential interventions USAID is supporting CBoH to achieve some of these interventions through the HIV/AIDS Prevention Project

UNFPA also supports the government of Zambia's reproductive health and FP programme by strengthening capacity at the national level and in 13 districts of four provinces of Zambia At the national level , the project focusses on strengthening capacity for reproductive health in terms of coordination, management, policy development and the provision of technical support in districts In order to increase the availability and accessibility of reproductive and FP services, the project supports the training of 240 health personnel in the 13 targeted districts and a broad programme of IEC activities

In order to plan for and evaluate the impact of this wide range of interventions targeted at strengthening reproductive health, family planning, and child health services, information is needed on the status of the basic reproductive health, family planning, and child health service delivery sub-systems i e , infrastructure, equipment, and supplies, staff preparedness, IEC, supply of contraceptives, STD and other drugs, vaccines, consumables and logistics for resupply, management support systems, and record keeping–as well as quality of care offered at service delivery points Weaknesses in the functioning of programme sub-systems negatively affect the quality of services available Poor quality of care , in turn , is thought to be associated with under-utilisation of services by potential users and early discontinuation by users Improving the functioning and quality of reproductive and child health services is essential if the Zambia health care system is to adequately assist women and men to plan their families, protect the health of their children, and improve their own reproductive health

It was against this background and the recognition that such information would be invaluable to CBoH's future monitoring and evaluation plans , that the Zambian Situation Analysis was conceived and executed The Situation Analysis was originally meant to cover MoH clinics which were being assisted by the ZFPSP, CARE, SEATS and BASICS, but through inter-Agency collaboration, the clinics being assisted by UNFPA were included as well The Central Statistical Office in collaboration with the Population Council's USAID funded Africa OR/TA Project II were requested by the MoH to undertake a study to assess the functioning and quality of the reproductive and child health services in the clinics being assisted by the above mentioned projects using the Situation Analysis approach A Situation Analysis Study collects data directly from clinical service points on a large number of indicators that describe the availability of facilities, equipment, and supplies for health services, the functioning of service delivery sub-systems, and the quality of services provided Data are also collected on client load and the mix of services and contraceptive methods utilised by clients Situation Analysis data are collected through a complete clinic inventory, staff interviews, observations of the interactions between providers and clients, and client exit interviews Model data collection instruments as well as model analysis plan have been developed and used in a number of countries

1 2 OBJECTIVES OF THE STUDY

a) Ultimate Objective

The ultimate objective of the study is to provide base line data for strengthening the delivery of reproductive health, including family planning and STD prevention and treatment, and child health services provided by the Ministry of Health

b) Immediate Objectives

i) To provide information on the constraints and weaknesses in reproductive health and child health service delivery sub systems including facilities, staff preparedness, supervision, IEC, record keeping, and logistics/supplies that will be used to guide the interventions under the ZFPS, the CARE Community Family Planning Project, SEATS, BASICS and UNFPA

ii) To provide the CBoH with measures of indicators of sub system functioning and quality of care that can be used to monitor the progress in improving the availability and quality of clinic-based reproductive health and child health services

1 3 STUDY DESIGN

The primary sampling unit for this study was a health facility The health facilities in the study are all under the overall management of the Ministry of Health A health facility was included in the sample on the account that a donor agency was interested in assisting the health facility and also ensured that every province was adequately represented In this regard, most of the health facilities included in the study sample were purposively selected apart from those selected in Central, Lusaka, and Southern provinces[1] The sample of facilities for the study included all ZFPS project sites, all SEATS project sites, all BASICS sites, all CARE Community Family Planning Project sites, up to seven sites in each of the districts in Eastern Province where the ZCHP is working, and a systematic random selection of the rural areas of two provinces (Southern and Lusaka) as requested by the MoH in order to have all provinces represented in the study Altogether 254 health facilities were included in the study sample

[1] In Central province the health facilities were randomly selected Southern province a random selection was done for health facilities except for those in Livingstone whose facilities were already included under CARE In Lusaka province Lusaka city was excluded because it was already covered by CARE and ZFPS in the sample

The distribution of health facilities were as follows,

Table 1 0 Distribution of SDPs by Province and by Agency Focusing on Selected Health Facilities

Province	MoH SDPs Under the Focus of				TOTAL
	CARE	No Agency	UNFPA	ZFPS/JSI/SEATS	
Central		20			20
Copperbelt	14		-	20	34
Eastern			-	27	27
Luapula		-	28	-	28
Lusaka	8	21		10	39
Northern			27		27
North Western			13		13
Southern	17	19	-	-	36
Western		-	30	-	30
Rural	1	45	88	30	164
Urban	38	15	10	27	90
Total	39	60	98	57	254

1 4 DATA COLLECTION AND ANALYSIS

(a) Instruments

At each SDP visited, information was collected through observations of a facility inventory, provider-client interactions, exit interviews with family planning, MCH clients and caretakers of sick children, and interviews with all staff providing family planning and those providing sick child health services Standardized data collection instruments had already been developed and tested elsewhere except for sick children Instruments for sick children were developed in Zambia and included in the Situation Analysis

The standardized instruments were adapted for Zambia through a three day questionnaire revision workshop facilitated by CSO and Population Council It was attended by representatives of all organizations interested in using the results (e g , Central Board of Health, selected DHMTs, National AIDS, STD, Tuberculosis and Leprosy Programme, ZFPS project, CARE, SEATS, JHU/PCS, Project Concern International, UNFPA, ODA (now DFID) The objective of the workshop was to ensure that the instruments collected the necessary data to measure progress on project activities and derive program indicators

The Situation Analysis approach defines and measures sub-system functioning and quality of care in reproductive health programs using the six element framework proposed by Bruce and Jain[2] Indicators for this framework have been proposed by Bertrand et al in The EVALUATION Project Handbook

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[2] Kumar Susheel Anrudh Jain and Judith Bruce Assessing the Quality of Family Planning Service in Developing Countries, Programs Division Working Papers No 2 The Population Council New York 1989 Bruce Judith "Fundamental elements of the Quality of Care A Simple Framework " Studies in Family Planning 21 2 1990

of Indicators for Family Planning Program Evaluation and also expanded to reproductive health[3] Workshop participants reviewed these approaches and adapted the elements of the standard Situation Analysis instruments, as necessary, to fit the national context

The eight data collection instruments used for the study are

- *Inventory for facilities available and services provided at the facility*
- *Interview schedule for staff providing family planning/reproductive health*
- *Interview for staff providing sick Child Health Services*
- *Exit interview for family planning clients*
- *Exit interview for Caretakers of Sick Children*
- *Observation guide for interaction between sick child clients and services providers*
- *Observation guide for interaction between family planning clients and services providers*
- *Interview for MCH clients attending the health facility*

Data collected through the inventory instrument provides information for every SDP visited on the availability of services, on client load, and, with the staff interview, on the following sub-systems through which family planning and other reproductive health services are provided

1 Logistics/supplies
2 Infrastructure/equipment
3 Staffing/training
4 Management/supervision
5 IEC materials and activities
6 Record keeping and reporting

Data collected for the above when aggregated across all facilities visited, give a measure of the level of readiness for the services provided Readiness indicators are also derived from these data

Data collected through the staff interview, observation guide (family planning and sick children health services), family planning exit interview, the MCH client interview and caretakers of sick children interview can be used to describe the quality of services provided and received The measures of quality are based on the Bruce Jain framework and include the following key elements [4]

1 Interpersonal relations
2 Choice of methods
3 Understanding clients' needs
4 Information given to clients
5 Technical competence
6 Mechanisms to ensure continuity of care

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3 Bertrand Jane et al Handbook of Indicators for Family Planning Program Evaluation The EVALUATION Project University of North Carolina 1995 Indicators for Reproductive Health

4 Bruce Judith Fundamental Elements of the Quality of Care A Simple Framework Studies in Family Planning 21 2 1990 S Kumar A Jain & Bruce Assessing the Quality of Family Planning Services in Developing Countries Programs Division Working Papers No 2 The Population Council New York 1989

(b) Training

Training of data collectors lasted for 10 working days and was held one week before fieldwork The trainees consisted of 42 health staff (mainly women), 15 team leaders, 6 supervisors and 7 data entry staff[5] The team leaders and supervisors were social scientist from the CSO who have some field experience Training was provided by CSO staff, Africa OR/TA II Project staff and consultants, and by resource people from the stakeholder organizations (BASICS-Zambia, specifically gave assistance for the sick children health services questionnaire)

A pilot study was also conducted during the training at 7 health facilities in the southern part of Zambia As usual, after the pilot the questionnaires were amended as necessary and thereafter, exit questionnaires were translated in seven local languages

(c) Fieldwork

Fieldwork lasted for 56 days spread from the month May to July 1997 The field staff were grouped into 14 working teams, each consisting of one social scientist and three health workers (nurse-midwives/clinical officers) The team leader (social scientist) was responsible for arranging the travel logistics and ensuring adequate quality checks on the collected data A group of three teams was each assigned to a supervisor to assist with some of the administrative and logistical issues

Observations of client-provider interactions were undertaken by the nurse for family planning clients and the second nurse for caretaker of sick children In some cases two nurses did the observation of client-provider interactions for family planning simultaneously, depending on the work load Data collection on inventory and staff interviews, normally in the afternoon were conducted by the social scientist and the third nurse, when the health facility was less busy They also undertook all the exit interviews

(d) Data entry

All completed field questionnaires were sent to CSO head office for further scrutiny and data entry EPI-INFO package for data entry was used for editing and tabulation Again, technical assistance in training of data entry operators was provided by the Africa OR/TA II Project Training lasted for one week including development of screen and testing the programs Data entry took a duration of three weeks The Principal investigator and another staff from CSO spent 10 days in Nairobi, Kenya at the Population Council Office producing tables which were used for the data interpretation workshop

(e) Analysis

EPI-INFO was used to produce frequencies and cross tabulations, however, Word Perfect was used to perfect the tables while Excel was used to produce charts

(f) Sample characteristics

A total number of 254 health facilities were visited and below are the basic characteristics of the facilities in tables 1 2 and 1 3

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[5] Data entry staff attended the training workshop for one week

Table 1 2 Distribution of SDPs, Staff, and Clients Interviewed by Background Characteristics (Zambia Situation Analysis Study, 1997)

Background characteristics	SDPs	Family planning		MCH Clients	Sick child	
		Staff	Clients		Staff	Clients
Total Sample	254	358	396	1727	467	1697
Category (Percent)						
CARE	15	17	31	17	14	14
MoH	24	30	26	29	29	22
UNFPA	39	29	21	31	37	38
ZFPS	22	24	22	22	20	26
Locality (Percent)						
Urban	35	41	74	42	37	38
Rural	65	59	26	58	63	62
Sector (Percent)						
Government	90	90	92	89	88	90
Mission	8	9	5	10	10	8
Private	1	0	1	1	0	1
Industry	1	1	1	0	1	1
Province (Percent)						
Central	8	9	8	10	5	7
Copperbelt	13	15	24	15	14	15
Eastern	11	13	8	9	11	13
Luapula	11	13	2	10	13	13
Lusaka	15	16	22	17	15	15
Northern	11	9	5	5	8	11
North Western	5	4	2	5	4	5
Southern	14	18	20	17	20	13
Western	12	4	8	11	9	8

Table 1 3 Distribution Clients by Purpose of Visit

Characteristics	FP Clients (n=396)	MCH Clients (n=1727)	Sick Child (n=1697)
Family Planning (Percent)			
New FP	25		
Restart after break	8		
Revisit/resupply	56		
Problem with method	7		
Change method	3		
Discontinue	1	-	
MCH			
Child illness		7	
Child immunization		46	
Antenatal care		36	
Other		11	
Sick Child Caretakers[6]			
Fever			62
Cough			53
Diarrhoea			36
Poor appetite			3
Vomiting			15
Anaemia			1

(g) Revisit Study

A revisit study was as a result of some of the revelations from the data interpretation workshop in September 1997 The purpose of this workshop was to share with stakeholders selected tabulations and solicit their assistance with interpretation and presentation of the results During this workshop a number of issues were raised which included concerns on the availability and status of certain basic medical equipment, IEC materials and training of providers Participants also wanted to know the kind of service statistics which were being sent to DHMTs by SDPs Eighteen SDPs were selected and revisited in order to obtain information that would explain further the preparedness of health facilities in providing quality health service The findings of this study have been used in this report in order make meaningful interpretation Refer to revisit report entitled " Zambia situation Analysis, 1997 In-Depth information from revisited Selected SDPs"

(h) Dissemination

A data interpretation workshop was conducted in September 1997 in Lusaka at which stakeholders including MoH and CBoH were represented Fifty-five participants in all attended the workshop The workshop was intended to give the participants some of the insights of the findings and assist to make adequate interpretation of the findings The National Dissemination workshop is planned to be undertaken about mid 1998

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6 Caretakers of sick child brought a child to a SDP for more than one type of illness Therefore note that there is multiple response for some of the illnesses

CHAPTER TWO:

Accessibility of MCH/FP Services

2. ACCESSIBILITY OF MCH/ FP SERVICES

In this study accessibility of services to clients was assessed in terms of the following

- *Convenience of opening and closing time*
- *Travel time to facility*
- *Waiting time before client receives service*
- *Overall cost of service*
- *Number of days in the week services are offered at facility*
- *Announcement of availability of services of facility*

2 1 OPENING AND CLOSING TIMES

Although the official opening time for most health facilities is 08 00 hours in the morning and the closing time is 16 00 hours, the actual opening and closing time for most facilities on the day of the visit was 08 30 and 16 30 hours respectively Most MCH (91 percent) and FP (97 percent) clients expressed satisfaction with the opening and closing hours of the facilities

Table 2 1 Percentage of FP Clients first arrived, first seen and last seen

Time	Rural						Urban					
	1st Arrived		1st Seen		Last Seen		1st Arrive		1st Seen		Last Seen	
	No	%	No	%	No	%	No	%	No	%	No	%
7 00-12 59	40	82	36	72	28	55	48	67	46	66	14	20
13 00-17 00	9	18	14	28	23	45	24	33	24	34	56	80
TOTAL	49	100	50	100	51	100	72	100	70	100	70	100

According to Table 1 above 82 percent of the first FP clients arrived at the rural health facilities between 07 00-12 59, and 18 percent between 13 00-17 00 hours, while in the urban facilities, 67 percent of the first FP clients arrived between 07 00-12 59 hours, and 33 percent, between 13 00-17 00 hours respectively With regards to the first FP client to be seen, 72 percent were seen between 07 00-12 59 hours while 28 percent were seen between 13 00-17 00 hours In the urban facilities, 66 percent of the first FP clients were seen between 07 00-12 59 hours and 34 percent between 13 00-17 00 hours respectively 55 percent of the last FP clients were seen in the rural health facilities between 07 00-12 59 and 45 percent between 13 00-17 00 hours respectively, while in the urban facilities 20 percent of the last FP clients were seen between 07 00-12 59 hours, and 80 percent between 13 00-17 00 hours respectively

A number of conclusions can be drawn from this scenario, firstly, it appears that most FP clients both in the rural and urban health facilities come in the morning, i e , (07 00-12 59 hours) as is shown by the fact that (82 percent and 67 percent respectively), first FP clients are reported to have arrived during this period Secondly, it appears that most clients, both rural (72 percent) and urban (66 percent) are seen to between 07 00- 12 59 Thirdly, the data also indicates arrival of FP clients both in the morning and afternoon for both urban and rural facilities This seems to indicate that for the facilities that answered these questions (n=121), that FP services are being offered all day which implies that these facilities offer integrated services which is in line with one of MoH's strategies for achieving reproductive health objectives, (MoH, p6) The 133 facilities which did not respond to these questions are probably those which still offer FP services on a specified day and time in the week, it is therefore

possible that no FP services were being offered on the day of visit and therefore no FP clients were observed, or that no clients came that day at all

2 2 TRAVEL TIME TO FACILITY

Table 2 2 Average Travel time to Health Facility by client type

Client Type	Travel Time (Minutes)	
	Rural	Urban
FP (n=396)	60	31
MCH (n=1549)	57	34

The distance and travel times required to get to the facility may determine the frequency with which the services of the facility are sought by clients The more easily accessible a facility is the more its services will be sought by clients The majority of FP and MCH clients walk to the health facility, the rest use public transport or bicycles According to data, both MCH and FP clients in rural areas walk for an average of one hour to the health facility while their urban counterparts walk for about 30 minutes

2 3 WAITING TIME BEFORE CLIENT RECEIVES SERVICE

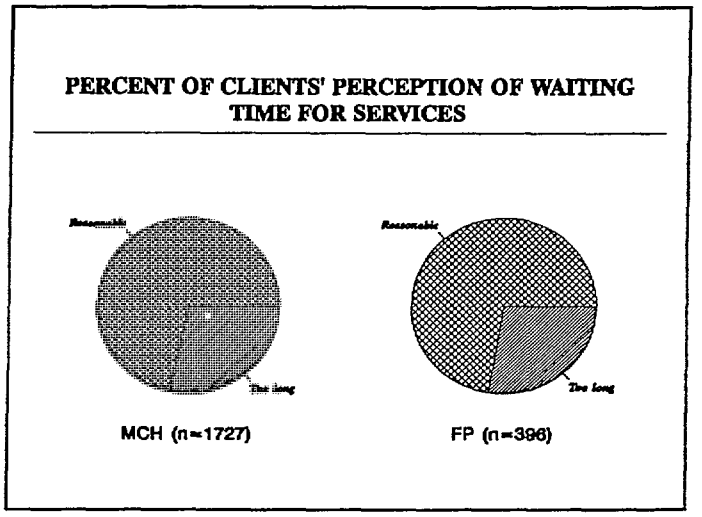

Figure 2 1

On average, MCH clients wait for 34 minutes and FP clients for 40 minutes before receiving the service On the whole, both MCH and FP (71 percent) clients, felt that the waiting time before receiving the service was reasonable, although 28 percent and 27 percent respectively felt that it was too long Clients' perceptions of waiting time broken in terms of rural and urban facilities indicate that, 30 percent FP clients and 32 percent MCH clients in rural facilities felt that the waiting time was too long, while 27 percent FP clients and 24 percent MCH clients in the urban facilities felt the same Eighteen percent of both MCH and FP clients indicated that there was another facility nearer to their home/work place other than the one visited The reasons given for not choosing to visit the facility nearer home/work was that, they preferred the provider at the facility visited and that the facility nearer home offered fewer services in comparison to the one visited

2 4 OVERALL COST OF SERVICE

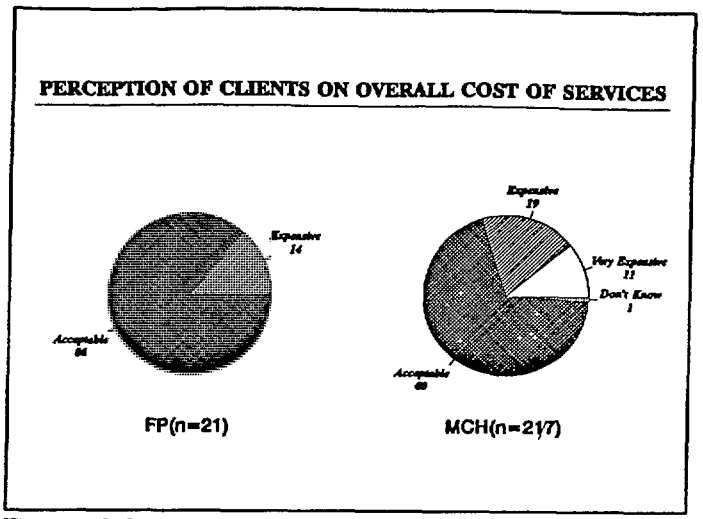

Figure 2.2

According to Figure 2 2, 86 percent FP, and 69 percent MCH clients felt that the overall cost of services was reasonable However, 19 percent of the MCH clients felt that the cost of the services was expensive Clients' perceptions of overall cost of services broken in terms of rural and urban facilities show that 35 percent of rural MCH clients who responded to this Question (n=118), felt that the cost of the service was expensive, while 24 percent of urban MCH clients responding to this Question (n=99) felt the same way The fact that most FP clients felt that the services were reasonable is explained by the fact that family planning information and services are offered free according to government policy, while MCH clients may have had to pay for medicines depending on the service they sought According to data the minimum payment made by rural MCH clients was K50 00 and the maximum was K1,500 00 while the minimum for urban MCH clients was K500,00 and the maximum was K8,500 00 These payments were either for consultations, drugs, travel or other consumables

2 5 AVAILABILITY OF SERVICES PER WEEK

Table 2 3 Percent of Availability of Services at a Facility

Service	Number of Days per Week								Facilities Total (n)
	0	1	2	3	4	5	6	7	
RURAL									
Antenatal	0	46	33	3	1	13	1	4	160
Family Planning	4	35	9	0	1	27	7	18	159
Postnatal	22	42	2	0	0	22	3	9	159
Sick Child	0	1	1	0	1	4	5	89	160
STD Counsel	6	4	1	1	0	7	4	78	160
Under Five	0	48	26	4	1	16	2	38	160
URBAN									
Antenatal	0	7	17	6	1	54	3	12	89
Family Planning	0	2	2	1	0	72	1	21	89
Postnatal	3	9	3	1	0	63	1	19	89
Sick Child	2	0	0	0	0	15	5	78	88
STD Counsel	0	0	1	1	0	23	4	70	90
Under Five	2	4	2	9	2	63	0	17	90

Table 2 3 shows type of service and number of days per week the service is available at a facility according to whether the facility is urban or rural based According to results in that table, most services are offered one or two days a week in rural areas facilities, for instance antenatal services are offered only once or twice a week by 79 percent facilities, FP once a week by 35 percent facilities, immunization and postnatal services are offered once or twice a week by 72 percent, 42 percent and 46 percent health facilities respectively The only services that are offered for five or more days a week in rural health facilities are sick child, 89 percent , STD counseling , 78 percent and under five, 38 percent of the facilities respectively

According to the *Family Planning in Reproductive Health Policy Frame Work*, "integrating family planning information and services into primary health care activities and with those of safe motherhood and child health, adolescent health, and prevention and management of sexually transmitted diseases (STDs) including HIV, is one of the strategies the Ministry of Health in Zambia has adopted for achieving its reproductive health objectives, (MoH 6) The integration of MCH / FP with other reproductive health services was introduced in the late 1980s, according to this strategy, a client should be able to obtain all the services mentioned above in a single visit to a health facility From the data shown in Table 5, it would appear that not all health facilities in the sample have realised this goal as yet, especially those in rural areas where most services are only offered once or twice a week

2 6 ANNOUNCEMENTS OF AVAILABILITY OF SERVICE

One way of alerting clients that a service is being offered at a facility is to publicize the information in the form of a sign either outside or inside the facility in a prominent place which is immediately visible to clients A family planning logo was approved by the MoH this year and some facilities have this poster either outside or inside the facility to show that they offer FP services According to the data in Table 2 4, 66 percent of urban and 33 percent rural facilities had either a sign or the National Family Planning Logo displayed, either outside, or inside the facility or both For the National Family Planning Logo parse, 48 percent urban and 26 percent rural facilities had it displayed either outside, or inside the facility or both This shows how lacking rural facilities are in IEC materials in comparison with their urban counterparts

Table 2 4 Percent of Facilities announcing and displaying the National Family Planning Logo

Announcement /logo displayed	Sign announcing FP services						FP logo displayed					
	Urban (n=89)		Rural (n=162)		All (n=251)		Urban (n=89)		Rural (n=162)		All (n=251)	
	No	%	No	%	No	%	No	%	No	%	No	%
Outside building	7	8	11	7	18	7	1	1	11	7	12	5
Inside building	41	46	29	18	70	28	35	39	23	14	58	23
Both inside & outside building	11	12	13	8	24	10	7	8	8	5	15	6
Announcing sign /Logo not visible	30	34	109	67	139	55	46	52	120	74	166	52

2 7 SOCIAL DEMOGRAPHIC CHARACTERISTICS OF MCH AND FP CLIENTS

Figure 2 3 shows selected socio-demographic features of MCH and FP clients The MCH and FP clients were similar in terms of marital status (77 percent and 81 percent married monogamously respectively), religion, (75 percent and 69 percent protestants, and 20 percent and 26 percent Catholic, respectively) and education (58 percent and 47 percent primary), however there seem to be more FP clients with secondary education than MCH (43 percent and 29 percent respectively)

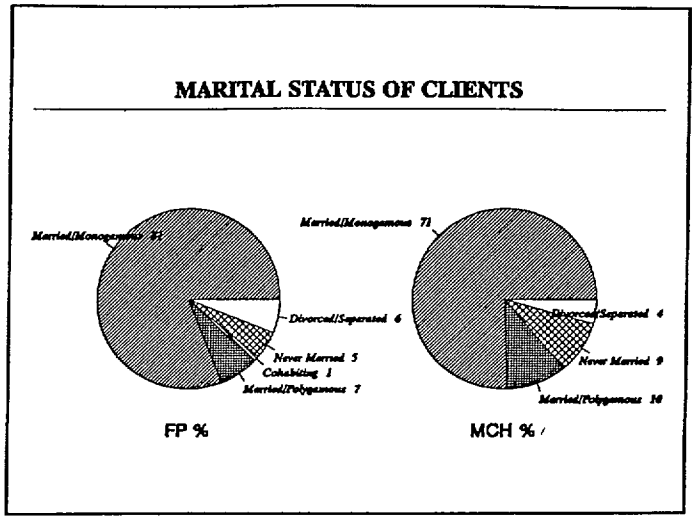

Figure 2 3

2 8 KNOWLEDGE OF FAMILY PLANNING BY MCH CLIENTS

The family planning methods widely known by MCH clients are the pill, (96 percent), male condom (55 percent) and the IUD (20 percent) The methods commonly used by MCH clients are the pill (53 percent) and the male condom (21 percent)

CHAPTER THREE:

Functioning of Health Facilities Subsystems

3. FUNCTIONING OF HEALTH FACILITIES SUBSYSTEMS

3 1 PHYSICAL INFRASTRUCTURE

When a health facility has basic physical infrastructure, supplies are available and there are adequate trained staff, then the health facility is ready to provide a particular service In this study the infrastructure of the health facility was evaluated in terms of availability of piped running water, electricity or solar power, working toilets or latrines for clients, sufficient seating for clients, protected well or borehole and incinerator on the day of visit Further, health facilities were also evaluated in terms of availability of communication facilities and transport

Clean and adequate water is paramount at a health facility in providing a health service Figure 1 shows that 44 percent of the health facilities in the study sample had piped running water on the day of visit The situation was more acute in the rural areas where only 23 percent of the facilities had piped running water compared to urban areas, 82 percent Overall, 72 percent of the health facilities had electricity or solar power, in urban areas almost all the facility had electricity while in the rural areas 43 percent lacked electricity or solar power The results in Figure 3 1 further shows that 17 percent of the facilities had incinerators Among the provinces, the health facilities in Luapula were found to have no incinerators (See the distribution of physical infrastructure by province in Annex 1) Sixty-six percent of the facilities had sufficient seats for clients, resulting in making them stand or laying on the ground while waiting to receive a service

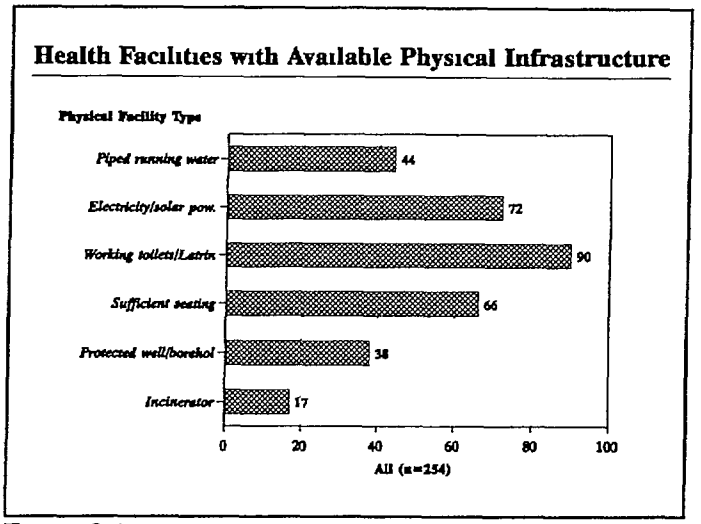

Figure 3 1

It was observed that toilets (either a flush toilet or pit latrine) for clients were available at 90 percent of the health facilities, 91 and 90 percent in the urban and rural areas respectively

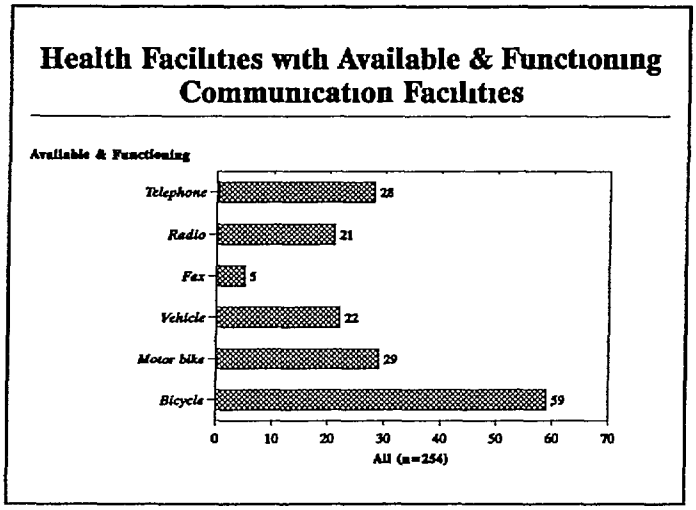

Figure 3 2

3 2 COMMUNICATION AND TRANSPORT

Communication and transport is vital in providing a health service Modern communication facilities which enables health facilities to communicate with the district or provincial office or with each other are not available at many health facilities The fax machine is available at 5 percent of the health facilities in the study sample, and 2 percent of the facilities in rural areas compared to 11 percent in urban areas, see Figure 3 2

Twenty-eight percent of facilities had telephones, in rural and urban areas 9 and 63 percent respectively In regard to transport that may be used to ferry a client to the hospital or to a referral hospital, 22 percent of the health facilities had vehicles, 15 and 36 percent in rural and urban respectively The results further show that rural health facilities rely on bicycles, with two thirds having bicycles compared to about half in urban areas

3 3 EQUIPMENT AT A HEALTH FACILITY

A health facilities must have at least basic equipment in order to provide health services A check list of equipment was used in evaluating their availability a health facility Some health facilities were revisited to check the status (functioning or non-functioning) of the equipment The revisit study revealed that most the equipment were available and functioning The results from the main study in Table 3 1 show that overall, most of the health facilities seem to be fairly well equipped, although sterilizing equipment and disinfectants are lacking particularly in the rural areas Table 3 1 shows the percentage of health facilities with basic equipment in urban and rural areas The distribution of equipment by province is in Annex 2

Table 3 1 Percent of facilities with certain type of equipment

Type of equipment	Area		
	Urban (n=89)	Rural (n=165)	All (n=254)
Adult scale	86	96	96
Blood pressure machine	99	92	95
Examining couch	98	91	94
Kidney dishes	99	98	98
Scissors	93	86	89
Sterilization equipment	84	87	86
Stethoscope	100	98	98
Disinfectant	81	69	74
Fridge for EPI	98	88	92
Antiseptic Lotion	76	72	73

General medical examination equipment, *The necessary items required for a basic general medical examination are blood pressure machine, weighing scale and stethoscope Ninety percent of health facilities had all the items while 10 percent had 2 of the items No health facility completely lacked all the equipment necessary to carry out a general medical examination*

Injectable equipment, *Basic injectable equipment includes needles and syringes, antiseptic lotion and sterilizing equipment No health facility appeared to have nothing, although 42 percent had 1 or 2 of the equipment and 58 percent had all the required basic equipment.*

IUD equipment, *In order for a health facility to be ready to provide IUD services, they must have basic equipment such as sterilizing equipment, uterine sound speculum, tenaculum, gloves, and antiseptic lotion The study show that one percent of health facilities did not have any of the equipment required, while 84 percent had some of the equipment but not all and only 15 percent had all the necessary basic equipment*

3 4 CONDITION OF THE EXAMINATION ROOM

The examination rooms at the facilities were assessed in order to determine whether they were conducive enough to adequately provide medical examination service Figure 3 3 shows that 68 percent of the health facilities had auditory privacy in the MCH/FP unit In urban and rural areas, 66 and 70 percent of facilities had auditory privacy respectively

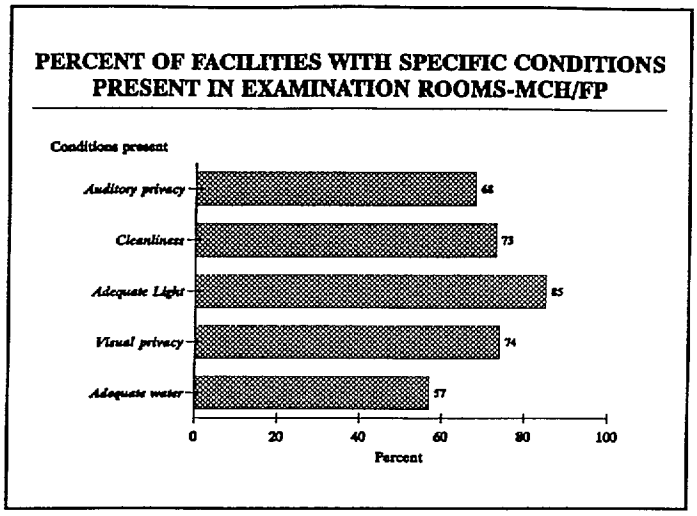

Figure 3 3

Overall, 73 percent of facilities were observed to have clean floors (swept and mopped at the start of the day) and there was no dust on widows sills and tables, 85 percent in urban and 64 percent in rural areas Functioning electric light or sufficient natural light is required during various examinations, however 15 percent of health facilities did not have enough light In rural areas, 21 percent did not have adequate light Many examination rooms in rural areas seem to get light through windows and is adequate for purposes of examining a client Forty three percent of facilities did not have adequate water (sufficient quantity of clean water for washing hands and equipment), 25 percent in urban areas and 55 percent in rural areas

3 5 IEC ACTIVITIES

Family planning providers at all health facilities are supposed to give group health talks to clients every day when the facility is open Health talks are intended to provide information to clients in order for them to make an informed decision on a number of health matters, including choice of method On the day of visit 60 percent of the facilities did not hold health talks This certainly denied clients who visited the facilities in sharing health information with providers and other clients as a group

Of the 40 percent of the health facilities that held talks, Table 3 2 shows that two topics dominated the discussions, family planning and nutrition HIV/AIDS management was only discussed at 5 percent of the health facilities and was never discussed in the rural areas One of the reasons for not discussing it is the lack of training of providers to confidently discuss HIV/AIDS as only one third of the health providers attended training courses which covered HIV/AIDS Topics on management of abortion, danger signs for child mortality are rarely discussed at most of the health facilities, particularly in the rural areas

Table 3 2 Percent of Health Facilities Which Held Health Talks with Clients on the Day of Visit

Topic covered	Urban(n=54)	Rural (n=44)	All (n=98)
Family planning	69	27	42
Antenatal care	43	23	34
Delivery service	17	10	14
Postnatal care	20	2	12
HIV/AIDS management	9	0	5
STD management	23	7	16
Child immunization	41	18	31
Child growth monitoring	44	18	33
ORT	13	16	15
Management of abortion	4	0	2
Nutrition	33	48	40
Curative services	15	16	16
Breastfeeding	34	14	25
Danger signs for child mortality	11	5	8
TB prevention	18	20	19

Most health facilities lack IEC materials Figure 4 shows the scarcity of IEC materials at the health facilities Posters are the most available and displayed at the health facilities (less than 50 percent of the health facilities),most of them on family planning, HIV/AIDS, nutrition and child immunization Rural health facilities are even less likely than urban facilities to have IEC materials

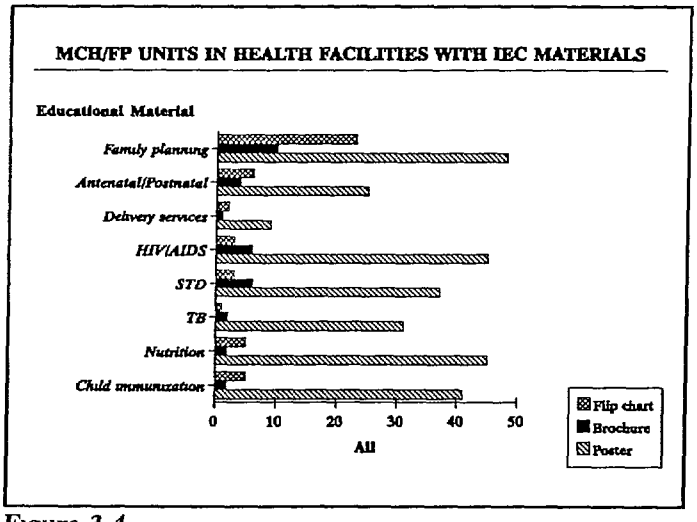

Figure 3 4

The results from the revisit study on IEC materials, revealed that brochures are only available at less than 20 percent of the facilities and mainly for family planning and HIV/AIDS The messages on most of the IEC materials are in English

One of the major reasons for the lack of IEC materials is that there is very little systematic coordination, documentation, or evaluation of the various family planning, reproductive health and child health communication projects carried out Not much has been published about IEC components of family planning, reproductive health and child health programs The John Hopkins IEC field report number 2 highlights the factors that constrain IEC activities,

- *Lack of trained professional IEC personnel at national, provincial and district levels,*
- *Weak coordination and collaboration among organisations and agencies involved in IEC activities,*
- *IEC activities carried out as isolated programs without adequate institutional bases,*
- *Shortage of transportation and equipment,*

- *Inadequate local funding,*
- *Lack of base line data for designing population IEC interventions, and*
- *Lack of systematic monitoring and evaluation mechanism*

To strengthen the use and awareness of IEC activities and materials, Zambia will need to increase and coordinate IEC activities for reproductive and child health with emphasis on institutional and human resource capacity building at all levels

3 6 SUPERVISION

Supervisory visits ensures quality and motivate providers The study revealed that 22 percent of the health facilities had not been visited by a supervisor in the last 6 months Twenty-three percent were visited once and another 23 percent were visited twice while the 32 percent were visited at least 3 times during the same period

For those health facilities that received supervisory visits, the results in figure 5 show that examining of records (68 percent) and inquiring about service problems (69 percent) were the most frequently mentioned About half of the supervisory visits, supervisors observed delivery service and made suggestions for improvements However, only 14 percent of health facilities mentioned that offering praise to staff for good work was undertaken during visits Generally supervisory visits in rural areas are fewer compared to urban areas

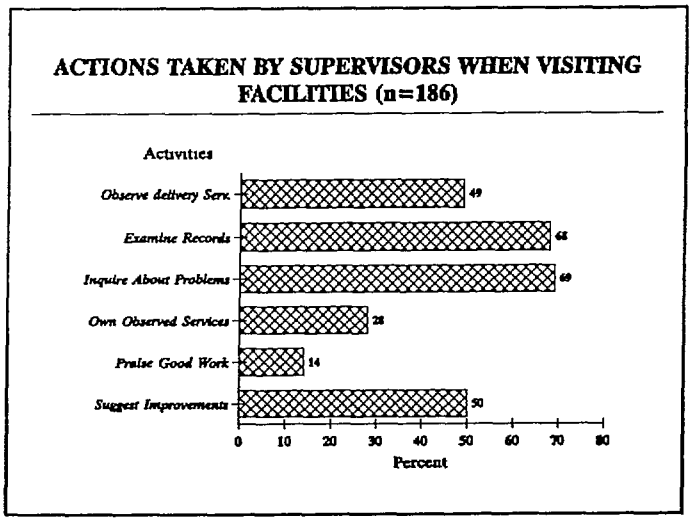

Figure 3 5

The study also established that of those health facilities visited, 82 percent supervisors came from DHMT, 7 percent from MoH and 9 percent from the regional office Some health facilities were also visited by donor agencies whose main aim of visit was to monitor the provision of certain services, for instance IUD

3 7 TRAINING OF STAFF, PREPAREDNESS OF STAFF PROVIDERS OF MCH/FP SERVICES

All the facilities were found to have at least one family planning provider at the MCH/FP unit Some health facility had only one provider while others had more than one However, facilities with more than two providers only two were found on duty, while others were allocated other responsibilities within the facility Enrolled nurse midwives (98) dominated the category of family planning providers while the registered nurse midwives were only 21, totalling to about 33 percent as those being trained as midwives The study further revealed that at some health facilities, MCH/FP units are manned by daily classified employees (9 percent), especially in the rural areas

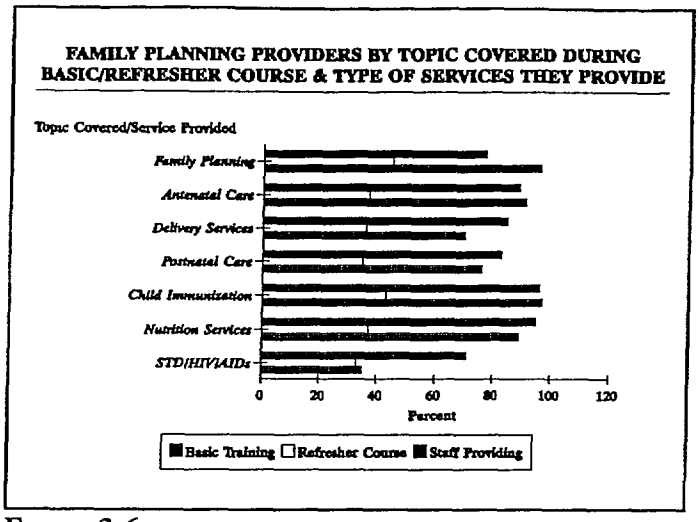

Figure 3 6

To determine the ability of staff to provide a wide range of services at a health facility, providers were asked about their basic and refresher training Refresher courses included workshops/seminars Figure 3 6 shows distribution of staff who had basic and refresher training in certain health services and those who provide the service Seventy-seven percent of providers said that their basic training included topics on family planning and over 90 percent covered child welfare topics, thus, Child immunization and Child growth monitoring

Unfortunately not many family planning providers in Zambia are afforded refresher courses or seminars on various services Of the 347 providers, only 45 percent mentioned that their refresher course included family planning and about one third mentioned STD\HIV\AIDS

Forty three percent of staff mentioned that during their refresher course, child welfare including ORT topics were included However, in terms of providing services, a significant number of staff providers provide most of the services except for STD/HIV/AIDS where only 35 percent provide the service

Looking at some key services such as family planning, STD/HIV/AIDS and Child immunization, 37 percent of providers attended both Basic and refresher courses which included topics on family planning as shown in Table 3 3 Forty-two and 11 percent of providers attended only basic and refresher training respectively which included family planning and 10 percent had no training in family planning Twenty-three percent of the providers during their training ,STD/HIV/AIDS topics were not included Only 2 percent of providers had no training in child immunization

Table 3 3 Percent of Staff Whose Training Included FP, STD/HIV/aids and Child Immunization Topics

Staff Training	Family Planning (n=330)	STD/HIV/AIDS (n=333)	Child immunization (n=337)
Basic and Refresher	37	31	43
Basic only	42	42	53
Refresher only	11	6	2
No training	10	23	2

3 8 LOGISTICS AND SUPPLIES

Documentation of supplies is very important if a health facility is to operate effectively It is therefore important to write down all supplies and equipment available in the facility on daily basis in order to have records of how many are available, expired etc A check list on contraceptive, drugs (essential drugs only), laboratory supplies and vaccines was used to see if there was a written inventory The

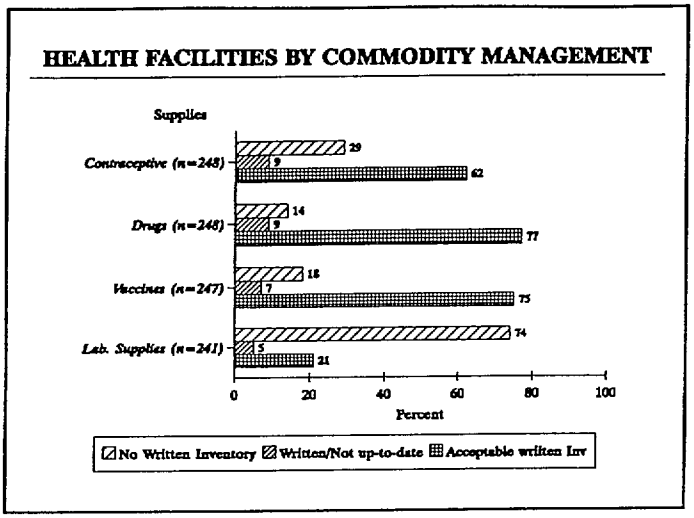

Figure 3 7

results in Figure 3 7 shows that 29 percent of the facilities did not have a written inventory for contraceptives, 14 percent for essential drugs, 74 percent for laboratory supplies and 18 percent for vaccines The situation was worse in the rural areas where 42 percent of the facilities did not have written inventory for contraceptives, 18 percent for drugs, 88 percent for laboratory supplies and 15 percent for vaccines

It was observed impressively that more 90 percent of facilities stored contraceptives, drugs and vaccines according to expiration dates However, one third of the health facilities mentioned that laboratory supplies were being stored by expiry dates This not surprising because very few health facilities have laboratories In urban areas nearly all the health facilities stored contraceptives, drugs and vaccines percent according to recommended practice

Contraceptive Methods, *Table 3 4 shows the percentage of health facilities which usually provide contraceptive methods Combined pill is usually provided in 95 percent of the health facilities In urban areas almost all the health facilities (98 percent) provided combined pill compared to 93 percent in the rural areas*

Table 3 4 Percent of Health Facilities That Usually Provide Contraceptive Methods

Type of method	Urban (n=89)	Rural (n=165)	All (n=254)
Combined pill	98	93	95
Female condom	9	1	4
Female sterilization	16	6	9
Injectables	91	28	50
IUD	47	3	19
LAM	89	48	63
Male condom	99	96	97
NFP	74	41	53
Norplant	1	0	0
Vasectomy	8	9	5
Progestin only pill	85	61	70

Male condoms are provided at 97 percent of the facilities compared to female condom which are provided at only 4 percent of the facilities Female sterilization, vasectomy and IUD are provided in 9 percent, 5 percent and 19 percent of the facilities respectively, mainly at facilities in Lusaka, Southern and Copperbelt provinces Although combined contraceptive pills and male condom are provided at many health facilities, 30 percent and 12 percent experienced stock outs of contraceptive methods in the last six months before the day of the visit

Immunization, *Generally it was encouraging to observe that most of the vaccines were available at most of the health facilities Figure 3 8 provides information on the proportion of facilities that had immunization vaccines on the day of visit and those that at one time or the other had run out of stocks in the past six months*

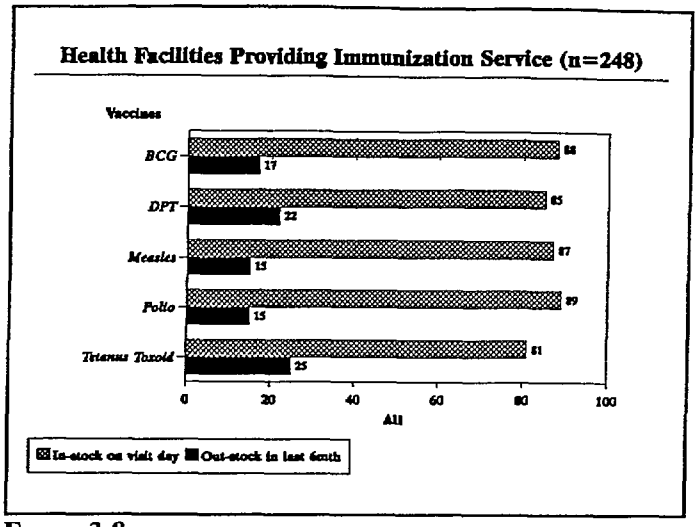

Figure 3 8

The results show that BCG was in stock on the day of visit at 88 percent of health facilities Almost all facilities (98 percent) in urban areas had the BCG vaccine compared to 83 percent in rural areas However, overall, 17 percent of the facilities had run out stock of BCG in the past 6 months The other vaccines were in stock at over 80 percent of the facilities Tetanus Toxoid had run out of stock at 33 percent of facilities in urban areas due to high demand and 20 percent in rural

3 9 RECORD KEEPING

The staff in-charge of the health facilities were asked whether service statistics reports of family planning clients, HIV/AIDS patients, MCH clients and STD patients were being sent to a supervisor Table 3 5 below shows that all facilities send the number of MCH clients to the supervisor Eighty-four percent send reports on STD and 97 percent of facilities send reports on family planning both for new and revisit clients However, only 36 percent of facilities send HIV/AIDS service statistics to the supervisor The HIV/AIDS reports include numbers of clients diagnosed HIV positive, those suffering from karposis sarcoma, hertatis and other HIV/AIDS related complexes In the hospitals included in the study, HIV is only diagnosed on a voluntary basis

Table 3 5 Percent of Facilities Sending Service Statistics Reports to Supervisor by Type of Report and Category (n=254)

Service of Statistics Report	Urban	Rural	All SDPs
FP	100	96	97
HIV / AIDS	39	34	36
MCH	100	100	100
STDs	87	82	84

About one third of the facilities submit the HIV/AIDS reports to the supervisor or higher unit.

The study further reveal that 83 percent of the health facilities also use the service statistics for program monitoring and evaluation, 23 percent for surveillance and 45 percent for purposes of ordering supplies

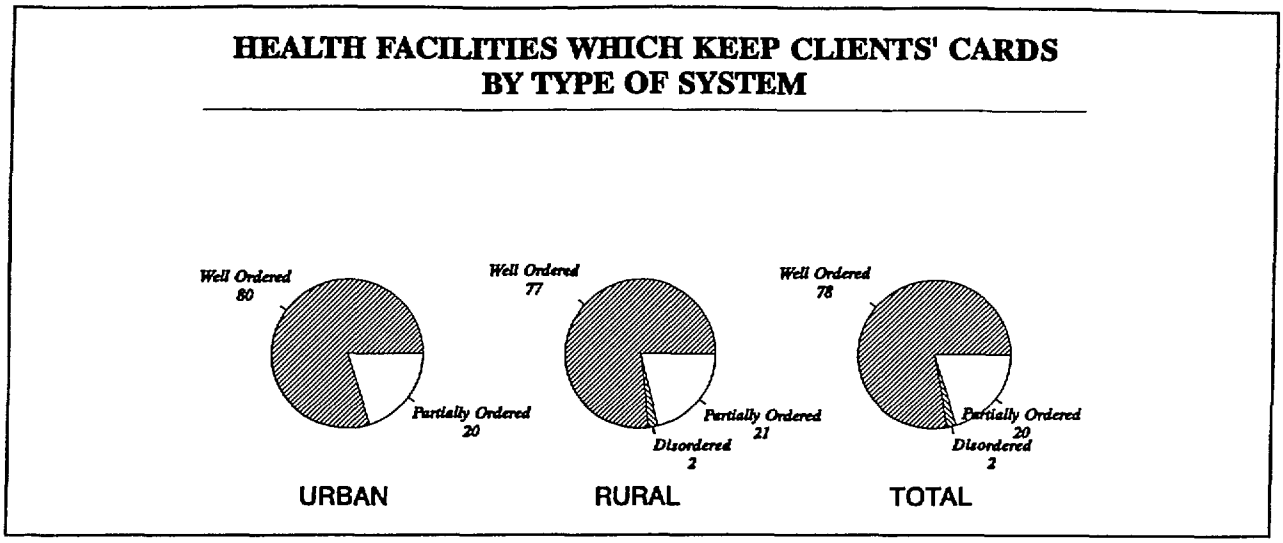

Figure 3 9

Client Records, Figure 3 9 shows the percentage of facilities which keep clients record cards in the facility by condition in which they are kept Of all the facilities in the study sample 191 reported that the record cards are kept in the facility Seventy-eight percent of those that keep cards in the facility, keep them in a well ordered system Twenty percent keep the cards partially ordered but in a useable form Only 2 percent of the facilities kept the cards in a disordered way and not easy to use In urban areas all facilities keeps the cards in some usable form

CHAPTER FOUR:

Quality of Care

4. QUALITY OF CARE

4 1 INTERPERSONAL RELATIONS

A positive perception of the service provider's attitudes by the clients is very important for continued use of the facility and the services In general, clients expressed satisfaction with the services provided by service delivery points

According to Table 4 1 below, out of the 392 family planning clients interviewed, 93 percent said they had received the information they wanted, while 74 percent felt the consultation time was enough Out of the 251 who had a medical examination conducted, 65 percent had the procedure explained to them and 64 percent had the results of the procedure explained Table 4 1 further reveals that most clients easily understood the provider during interactions, except for only 3 percent of family planning and 8 percent of MCH clients did not understand the provider easily

Privacy during interaction is very important when dealing with sensitive health issues such as family planning and STD/HIV/AIDS During both family planning and MCH consultations Privacy was not adequately provided According to Table 4 1, 68 percent of family planning and only 53 percent of MCH clients said they had enough privacy during their visit This indicates that there is till a need to improve on privacy for both family planning and MCH clients during consultations

Table 4 1 Satisfaction with services for FP and MCH clients

Satisfaction	FP clients (n=392)		MCH clients (n=1726)	
	Number	Percent	Number	Percent
Received information wanted	363	93	1460	85
Consultation time right	290	74	1094	63
Conducted medical exam	251	64	976	57
Provider explained the exam	163	65 (n=250)	561	57 (n=978)
Provider explained results	160	64 (n=250)	492	50 (n=977)
Enough privacy	267	68	909	53
Provider easy to understand	381	97	1580	92

Out of the total 1726 MCH clients who visited the facilities, Figure 4 1 shows that 90 percent of them said, they were satisfied with the service they had received This argument is well with the finding in Table 4 1, which shows that, of the total 1726 MCH clients, 92 percent of them were able to understand the provider easily, and that 85 percent said they had received the information they wanted

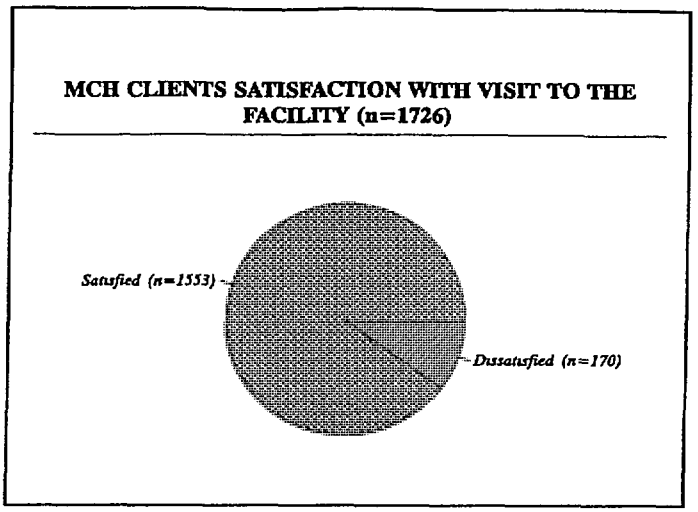

Figure 4 1

4 2 CHOICE OF METHODS

Although it is important for service delivery points to stock and provide a range of contraceptive methods, it is equally important to fully inform clients about the availability of these contraceptives The availability of methods to a client is influenced or affected by many factors, firstly, the availability of methods at the service delivery point, secondly, whether the method is mentioned to the client so that he/she is aware about its existence, and finally, provider attitudes towards providing certain methods to clients with different needs

4 2 1 Methods Discussed with Clients

One measure of method availability is the number of methods that are mentioned to clients The combined pill is the most commonly mentioned method to both new and revisit clients by the providers during interaction Table 4 2 indicates that, out of the 134 new client interactions, the pill was mentioned to 86 percent of clients in both urban and rural clinics, followed by the injectable in 64 percent urban and 39 percent rural Norplant was mentioned to 21 percent in urban and only 3 percent in rural clinics, while the female condom is not mentioned at all by the rural service providers The picture is however not different for revisit clients Out of the 262 client interactions, the pill is mentioned in about 70 percent of interactions for both urban and rural clinics Norplant and female condom are not mentioned at all to revisit clients in rural clinics These findings may be attributed to the fact that new methods, Norplant and female condom are currently only being provided in urban facilities, and that a number of providers have not been trained or updated to be able to provide information on these methods adequately

Similarly, female sterilization and vasectomy are commonly mentioned to urban clients (9 percent and 5 percent respectively) than to new rural clients (5 percent) and vasectomy is not mentioned at all In general most family planning providers in urban seem to discuss a wider method mix more than providers in rural health facilities Almost all the methods were mentioned more to new clients than to revisit clients This may be due to the fact that urban providers are periodically updated, and have a wide method mix available

Table 4 2 Methods mentioned to New and Revisit Family Planning Clients During Interactions with Providers

Method Mentioned	Percent Observed											
	New Clients (n=134)				Revisit (n=262)				All Clients (n=396)			
	Urban (n=98)		Rural (n=36)		Urban (n=198)		Rural (n=64)		Urban (n=296)		Rural (n=100)	
	No	%	No	%	No	%	No	%	No	%	No	%
Combined pill	84	86	31	86	139	70	44	69	223	75	75	75
Progestin	47	48	6	17	35	18	1	2	82	28	7	7
IUD	53	54	6	16	23	12	3	5	76	26	9	9
Injectable	64	65	14	39	66	33	15	23	130	44	29	29
Norplant@	21	21	1	3	6	3	0	0	27	9	1	1
Male Condom	64	65	13	36	34	17	0	16	98	33	23	23
Female condom	22	22	0	0	12	6	0	0	34	13	0	0
Diaphragm	19	19	0	0	5	3	0	0	24	8	0	0
Spermicide	43	43	5	6	19	10	3	5	62	21	8	8
Female sterilization	20	20	2	6	7	4	3	5	27	9	5	5
Vasectomy	12	12	0	0	2	1	0	0	14	5	0	0
NFP	19	19	0	0	3	2	1	2	22	7	1	1
LAM	10	10	2	6	0	0	2	5	10	3	4	4

Even if methods are available at a facility, and clients are told about these methods, it is still possible for provider bias and restrictions to affect method choice On the other hand restrictions may exist due to policies and rules Some restrictions are necessary for medical reasons, usually they are contraindications The Zambia Family planning in Reproductive Health states that all clients should be provided with their methods of choice, without the interference of personal opinions or preconceived bias of the service providers

4 2 2 Provider recommendations for Clients with different needs

Table 4 3 describes what methods providers would recommend for family planning clients with different needs Out of the 290 providers interviewed, 92 percent would recommend the combined pill for delaying or spacing births, while 78 percent would recommend the mini pill In addition, 60 percent would recommend injectable and 75 percent will recommend the male condom The Table also shows that out of 287 providers, 91 percent and 64 percent would recommend female sterilization and vasectomy, for terminating child bearing respectively

Table 4 3 Provider recommendations for FP Clients with different needs (n=357)

Contraceptive method	Delaying or spacing			Terminate child bearing		
	Number	Percent	n	Number	Percent	n
Combined pill (COC)	267	92	284	31	11	289
Mini pill (POP)	224	78	289	18	6	286
IUD	136	47	289	48	15	288
Injectables	175	60	289	67	23	288
Norplant	80	28	289	25	9	288
Male condom	218	75	28	20	7	286
Female condom	84	29	289	8	3	287
diaphragm	60	2	289	8	3	287
Spermicide	128	44	289	19	7	286
Sterilization	20	7	289	263	91	287
vasectomy	11	4	289	184	64	287
NFP	122	42	289	14	5	287
LAM	78	27	288	6	2	286
Other	7	6	110	1	1	97
Recommend method	290	94	310	290	95	307

4 2 3 Restrictions on Method Provision

Family planning methods may be available at the facility, but unavailable to the client due to various reasons, including policies and rules that restrict the providers from prescribing and providing the method Providers were asked about barriers to provision of family planning methods based on marital status, need for spousal consent and number of children Table 4 4 reveals that out of the 312 providers, 42 percent of them felt that a client must have a child or children before they prescribe the injectable, while 32 percent place this restriction on provision of the pill, and IUD (37 percent) Only 12 percent of service providers said that they would restrict the use of the pill based on marital status, where as 25 percent will not provide female condom to unmarried clients Fifty-two percent require the client to be married before they offer sterilization, and 73 percent require spousal consent Age emerged as a major factor which service providers consider before issuing most of the methods The average age set for provision of the pill, IUD and injectable was 16, 18 and 20 years respectively Eighty-three percent of providers would not prescribe the combined pill, 65 percent and 63 percent would not prescribe the male condom and injectable to clients below a minimum age In addition 20 percent and 27 percent would not prescribe female and male condoms without a partner's consent These restrictions may have a bearing on adolescents and the use of family planning methods If so many of the providers (65 percent) are not able to provide even a condom to clients below an average age set, then most of the adolescents are being denied some of the services that they may require

The Zambia Family planning in Reproductive Health Policies and strategies published in 1997, specifies that spousal consent should not be a prerequisite or a requirement for provision of contraceptive methods including sterilization However clients should be encouraged to include

their partners in the counselling process Despite this, some providers would not provide methods without a spousal consent More than 70 percent of providers would not provide sterilization without spousal consent, while 27 percent and 20 percent would not provide male and female condoms respectively These findings indicate the need to disseminate the information in the Family planning policy document, in order to update service providers on current policy changes

Table 4 4 Providers' restrictions to Family Planning Service Provision

Contraceptive Method	Setting lower age (n=312)		Requiring children		Requiring marriage		Requiring partner's consent	
	Number	%	Number	%	Number	%	Number	%
Combined pill (COC)	260	83	99	32	38	12	112	36
Mini pill (POP)	233	75	96	31	45	14	106	34
Male condom	203	65	43	14	27	9	84	27
Female condom	90	29	27	9	78	25	61	20
IUD	158	51	116	37	103	33	109	35
Injectable	197	63	132	42	76	24	116	37
Norplant	104	33	72	23	134	43	97	31
Sterilization	176	56	189	60	162	52	227	73

4 2 4 Methods not recommended by Providers if clients has an RTI/STI

Table 4 5 reveals the methods which providers would not recommend to family planning clients with an RTI/STI Out of a total 307 providers interviewed, 273 providers said they would not recommend a particular method for a client with an STI/RTI Of the 273 providers only 19 percent mentioned that they would not recommend a male condom, while 67 percent out of 271 providers indicated that they would not recommend the IUD to clients with an STI Even though only 19 percent and 14 percent of providers would not recommend female and male condoms respectively, there is still an indication that some providers are not aware of contraindications to some methods, because both the male and female condom should be recommended to clients with STI/RTI, whereas the IUD is not the best method to recommend for the same clients This lack of awareness on the part of the provider affects the quality of information that is given to clients Out of 271 providers interviewed, 38 percent and 32 percent said they would not recommend the combined and the Mini pills respectively However according to the WHO Medical Eligibility Criteria for Initiating contraceptive methods, STI/RTI are under category 1, which has no restriction on use of these methods, but advices the use of condoms as well

Table 4 5 Methods Provider would not Recommend to FP Clients with an RTI/STI

Provider Action	Number	Percent	n
Not recommend method	273	89	307
Contraceptive Method			
Combined pill (COC)	105	38	273
Mini pill (POP)	86	32	271
IUD	181	67	271
Injectables	62	23	273
Norplant	34	12	272
Male condom	53	19	273
Female condom	38	14	273
Diaphragm	40	15	273
Spermicide	61	22	273
Sterilization	38	14	273
Vasectomy	31	11	273
NFP	34	12	272
LAM	33	12	272
Other	2	2	89

4 3 INFORMATION GIVEN TO CLIENTS

Knowledge of contraceptive options depends not only on the mention of a method, but also on the quality of the information provided On the other hand the provider is not only expected to give essential information to clients, but to gather information from clients as well With the increasing interest in providing broader Reproductive Health services in Zambia, this element will be described in terms of the information exchanged between clients and providers for both family planning and other MCH issues

Table 4 6 shows that out of the 129 new family planning clients interviewed, 87 percent were told how to use their chosen method Although most new clients (74 percent) were told how method works, only 9 percent were told about the ability of method they choose to prevent STD/HIV In this era of the HIV/AIDS pandemic, more clients need to be told about the ability of the methods they choose to prevent STD/HIV transmission Clients need to know about dual protection in order for them to make informed choices More than 60 percent of clients were told about both medical side effects and how to deal with problems, but only 31 percent were told about possibility of switching methods About half (51 percent) of the 129 new family planing clients were told about the disadvantages of the method Knowledge and understanding of all the above mentioned issues increases the continuation rate among clients, thereby contributes to increasing the contraceptive prevalence rate

Table 4 6 Information on Methods given to New Family Planning Clients during interaction (n=129)

Procedure observed	Percent Observed	
	Number	Percent
How to use method	112	87
How method works	96	74
Advantages	72	56
Disadvantages	66	51
Medical side effects	87	67
How to deal with problem	84	65
Possibility of switching	40	31
Ability of method to prevent STD/HIV	11	9

IEC materials are rarely used by providers during interaction with clients Table 4 7 reveals that overall educational materials were used more with new clients than revisit clients Contraceptive samples were the most commonly used during interaction Out of 98 urban interactions, contraceptive samples were used in 70 percent of the time, while in urban revisit clients they were used in 28 percent of 198 interactions for revisit clients While 6 percent of posters were used with new clients, only 1 percent poster was used with revisit clients Counselling cards were rarely used during interaction Only 4 percent of clients in the urban and 3 percent in the rural had the use of counselling cards during interaction One interesting observation is the non use of flip charts during interactions in rural areas This may however be attributed to the fact that only 25 percent of service delivery points were found to have flip charts during the survey and that flip charts are not readily available in rural areas In addition it seems that service providers do not see the need to use educational materials during interaction The use of these materials in addition to contraceptive samples contributes to clients better understanding of issues being discussed with the provider, therefore providers need to be encouraged to use educational materials during interaction

Table 4 7 Use of IEC materials with Family Planning Clients during interaction

IEC Materials	New clients (n=134)				Revisit (n=262)				All clients (n=396)			
	Urban n=98		Rural n=36		Urban n=198		Rural n=64		Urban n=295		Rural n=100	
	No	%	No	%	No	%	No	%	No	%	No	%
Flip chart	37	38	0	0	14	7	0	0	51	17	0	0
Brochure	3	3	2	6	2	1	1	2	5	2	3	3
Contraceptive samples	69	70	15	42	56	28	20	31	125	42	35	35
Posters	6	6	0	0	1	1	0	0	7	2	0	0
Counselling cards	4	4	1	3	5	3	0	0	9	3	1	1
other	6	6	4	11	1	1	0	0	7	2	4	4
none	15	15	19	53	134	69	44	69	150	51	63	63

In order to provide more information, it is useful when clients are given more materials to take home The purpose of these take home materials is to give the client an opportunity to read and understand

the issues better, and to share with their spouse and friends According to Table 4 8, out of 17 family planning clients who were asked on what materials they were given to take home, most of them (88 percent) said they received family planning materials, and only 12 percent received MCH materials On the other hand, no other materials were given to these clients These findings may be due to the fact that materials are not always readily available at most facilities

Table 4 8 Family Planning Clients given Educational Materials to take Home by Subject of the Material

Subject	Family Planning Clients	
	Number	Percent
MCH	2	12
FP	15	88
STDs	0	0
HIV/AIDS	0	0
Other	0	0

On method specific knowledge, pill and injectable users were asked to name problems that women taking these methods may experience For both of these methods, the knowledge was found to be low Table 4 9 shows that, of the total 254 pill users, 54 percent mentioned mild headache, 3 percent mentioned nausea, 27 percent mentioned spotting/bleeding as problems which these clients may experience Only 3 percent mentioned cancer and infertility, which is an indication that the myths and misconceptions about the pill causing cancer and infertility are slowly being cleared The above information indicates the inadequate method specific knowledge on the part of providers, which may be attributed to either lack of training or refresher training, which in turn affects the quality of information that clients are given by providers during their previous visits

Table 4 9 Reported problems that women taking pills may be experience (Family Planning Pill Users' Perception (n=254)

Problems experienced	Number	Percent
Nausea	78	31
Mild Headache	138	54
Spotting/bleeding	68	27
Weight Gain/loss	17	7
Cancer	7	3
Infertility	7	3

4 4 TECHNICAL COMPETENCE

Table 4 10 indicates the medical examinations performed as observed during client provider interactions In general, examinations and tests are performed more in new clients than in revisit clients It is notable that although 46 percent of 134 new clients had a general physical examination done, this was

done with only 9 percent of the 262 revisit clients Although it is important to perform a general physical examination on new clients, in order to rule out contra-indications before initiating any method of family planning, revisit clients also require to have a general physical examination periodically or whenever need arises Pap smear test was not performed or requested by any client This may be due to the fact that at the moment Pap smear test is only performed at the one institution - UTH, and therefore many centres do not do it as they do not have the facilities

The findings also show that symptomatic analysis for STDs is rarely done for both new and revisit clients Only 2 percent of all clients had a history of STD symptoms done This information is very important as it impacts on contraceptive use, and these are missed opportunities that can be utilised to assess and manage clients holistically

NOTE *The information in Table 4 10 does not indicate the competence with which these clinical procedures were performed It only indicates that the procedure was performed, but not how they were performed*

Table 4 10 Technical competence in Clinical Procedures

Procedure taken	New Clients (n=134)		Revisit (n=262)		All Clients (n=396)	
	Number	%	Number	%	Number	%
Take Weight	105	78	209	80	314	79
Take BP	112	84	231	88	343	87
Test for pregnancy	3	2	0	0	3	1
General Physical Exam	61	46	23	9	84	21
Blood Test	1	1	0	0	1	0
Breast Exam	52	39	15	6	67	17
Pap Smear	0	0	0	0	0	0
Pelvic Exam	25	19	9	3	34	9
Syndromic Analysis for STD	7	5	0	0	7	2
None	14	10	26	10	40	10

4 5 MECHANISMS TO ENCOURAGE CONTINUITY

Results in Table 4 11 shows that 96 percent of the 129 new family planning clients were told when to return for resupply or follow up, and where to go for resupply Out of another 124 new clients, 60 percent were given written reminder The picture is similar for revisit client Out of 53 revisit clients, more than 85 percent were told when to return and where to go, while out of 47 percent revisit clients, 64 percent were given a written reminder The findings in Table 4 11 contribute to good interpersonal relations observed which are also very important in encouraging continuity

Table 4 11 Percent of FP Clients by characteristics of Continuity

Characteristics of continuity	New Client			Revisit			All		
	No	%	n	No	%	n	No	%	n
Client told when to return for resupply or follow up	124	96	129	47	89	53	171	94	182
Gave written reminder when to return for resupply	75	60	124	30	64	47	105	61	171
Told where to go for resupply	124	96	129	48	91	53	172	94	182

4 6 CONSTELLATION OF SERVICES

As earlier mentioned, there is increasing interest in providing broader Reproductive Health services by looking beyond family planning, to issues such as STD/HIV/AIDS, infertility, and abortion care Table 4 12 shows how rarely other health issues other than the one the client seeks services for are discussed In almost all the group talks conducted for family planning clients, other health issues apart from family planning were only mentioned in less than 20 percent of the times The information in Table 15 indicates that there is still a need to offer more comprehensive Reproductive Health information and services in order to meet people's needs in a more holistic approach, and therefore contribute to the reduction of mortalities such as maternal and infant This also indicates the lack of integration of not only services but information as well Table 4 13 Shows that out of all the clients interviewed for receiving other health services other than the purpose of their visits, 23 percent reported child growth monitoring, followed by child immunization and Antenatal Only 1 percent mentioned having received services for management of abortion, and 3 percent mentioned management of HIV/AIDS It is also clear from these findings that many opportunities to reach out to clients with other important health issues are missed by service providers

Table 4 12 Percent of family planning clients by topics covered in group talks

Topic covered	New clients			Revisit clients			All clients		
	Number	%	n	Number	%	n	Number	%	n
Antenatal care	0	0	41	1	2	44	1	1	85
Delivery service	0	0	38	0	0	40	0	0	78
Postnatal care	1	3	38	1	3	40	2	3	78
HIV/AIDS management	3	7	41	0	0	44	3	4	85
STD management	8	21	38	5	12	40	13	17	78
Child immunization	2	5	38	5	12	40	7	9	78
Child growth monitoring	1	2	41	9	20	45	10	12	86
ORT	1	3	38	1	2	41	2	3	79
Management of abortion	0	0	38	0	0	41	0	0	79
Nutrition services	3	8	38	7	17	41	10	13	79
curative services	1	3	37	2	5	41	3	4	78
Family planning	37	88	42	33	79	42	70	83	84
Breastfeeding	2	5	38	5	12	42	7	9	80

Table 4 13 MCH Clients who received other Health Services other than the Purpose of Visit

Health Services	MCH Clients		Sample Size (n)
	Number	percent	
Antenatal	273	16	1703
Child Growth Monitoring	387	23	1686
Child Immunization	272	16	1690
Curative Services Child	207	12	1699
Curative Services Clients	188	11	1703
Delivery Services	44	3	1710
HIV/AIDS Management	3	0	1709
Infertility	12	1	1706
Management of Abortion	9	1	1709
Nutrition Services	55	3	1710
ORT	31	2	1708
Other	147	9	1691

CHAPTER FIVE:

Integration of Family Planning with Other Health Issues

5. INTEGRATION OF FAMILY PLANNING WITH OTHER HEALTH ISSUES

5 1 HEALTH ISSUES DISCUSSED WITH FAMILY PLANNING CLIENTS

While 40 percent of the new family planning (FP) clients discussed STDs in addition to the family planning issues, only 12 percent of the revisit clients did so Similarly, while 18 percent of the new clients discussed HIV/AIDS, only 4 percent of the revisit clients did the same as shown in Table 5 1 Sexual relations and Breastfeeding accounted for 34 percent and 30 percent, respectively, of the issues new FP clients talked about, compared to 18 percent and 12 percent, respectively, of the issues revisit clients discussed Partner communication was an issue discussed by 19 percent of new FP clients and 10 percent by revisit clients In general, revisit clients tended to discuss other health issues besides family planning less frequently than new clients, a fact that probably signified that almost only new clients were approached by the providers on issues other than FP, and few clients were approached for an update or additional discussion

When both new and revisit clients are considered together, the main issues discussed other than FP, were sexual relations (24 percent) and STDs (21 percent), with HIV/AIDS representing only 9 percent On the other hand, breastfeeding, which has been under a systematic promotion in the country, represented 18 percent of the discussion issues, double that of HIV/AIDS Since the first FP visit tended to be critical for establishing contact with the client, a systematic and guided plan of integrated approach should be put in place so that every FP client be approached on health issues in addition to family planning, particularly STDs, HIV/AIDS and sexual relations The issue of HIV/AIDS in particular, which was discussed by only a small percentage (18 percent) of new clients, should be emphasized in the integrated approach

Table 5 1 Other Health Issues Discussed with FP Clients

Other Issues Discussed	New Clients (n=134)		Revisit Clients (n=262)		All Clients (n=396)	
	Number	%	Number	%	Number	%
HIV\AIDS	24	18	10	4	34	9
STDs	54	40	30	12	84	21
Immunization	0	0	6	2	6	6
Growth Monitoring	5	4	8	3	13	3
Infertility	12	9	11	4	23	6
ORT	0	0	0	0	0	0
Abortion	4	3	1	0	5	1
Nutrition	11	8	15	6	26	7
Breastfeeding	40	30	30	12	70	18
Sexual Relations	46	34	48	18	94	24
Socia economic Factors	15	11	13	5	28	7
Pregnancy testing	10	8	4	2	14	4
Partner Communication	25	19	27	10	52	13
Anaemia	8	6	4	2	12	3

5 2 PROVIDER'S ACTIONS

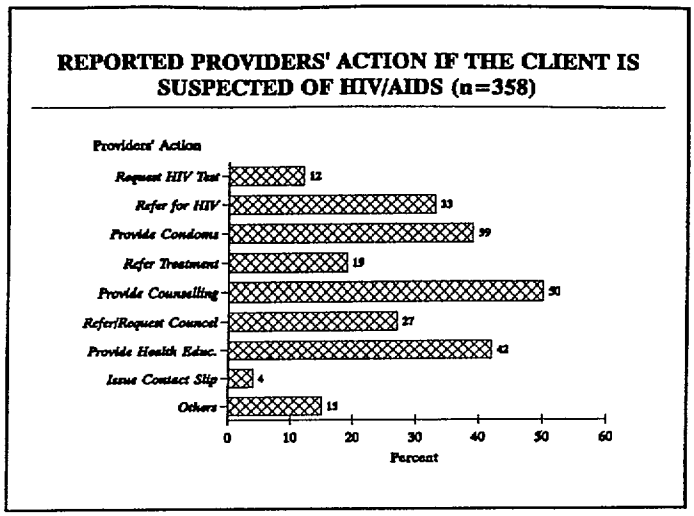

Figure 5 1

Figure 5 1 shows the reported providers asking if the client is suspected of HIV/AIDS In half of the cases (50 percent) when a client was suspected of HIV/AIDS, the provider's action was to provide counselling, while in an additional 27 percent of the cases the provider referred the client to, or made a request for counselling In 42 percent of the cases, the provider provided health education In 39 percent of the cases the provider supplied the client suspected of HIV/AIDS with condoms, while in 33 percent of the cases the provider referred the client for HIV Nineteen percent of the cases consisted of provision of, or referral for treatment, and only 12 percent were a request for HIV test

Counselling and health education seemed to cover about half of all the cases where the FP client was suspected of HIV/AIDS It would appear that within the context of confidentiality and the prevailing care system in the country, request for HIV test together with referral for HIV, as well as supplying the client with condoms, should be taken with every client suspected of HIV Moreover, a systematic approach should be designed to be undertaken by the provider in each case a client was suspected of HIV/AIDS Clients should be placed under observation and followed-up, with measures preventing spread of the infection (such as supply of condoms and health education) being applied immediately and to every suspected case

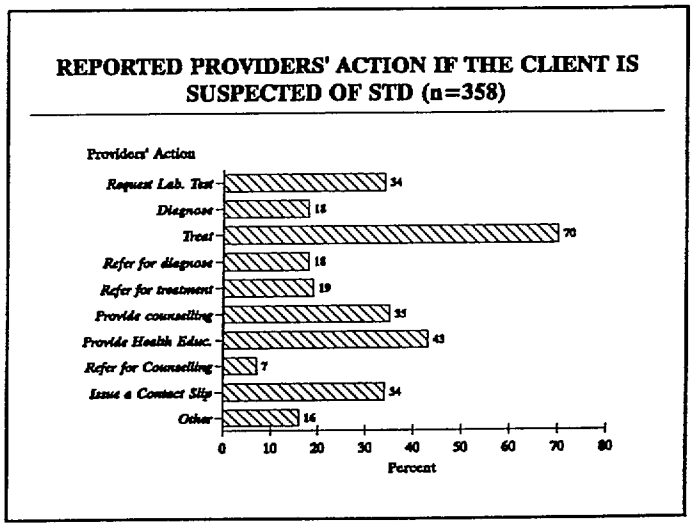

Figure 5 2

Regarding provider's action when the client was suspected of STD, Figure 5 2 shows that in almost all the cases treatment was administered (70 percent, plus 19 percent referral for treatment) Request for laboratory tests and diagnosis/referral for diagnosis were used in 34 percent, 18 percent and 18 percent, respectively Counselling, health education and referral for counselling accounted for 35, 43 and 7 percent, respectively, of the cases suspected of STDs There were, however, only 18 percent of the cases in which an explicit mention by the health provider was made that the condom protected against STDs and HIV/AIDS

Unlike the cases of clients suspected of HIV/AIDS, the actions taken when FP clients were suspected of STDs tended to cover the majority of clients (70 percent) in terms of treatment, and almost half of the clients were provided with health education and counselling Requests for laboratory tests were made only in a third of the suspected cases, a situation which may need to be improved upon, particularly in areas where laboratory facilities were available, in order to maximize effectiveness of treatment In addition, the number of contact slips issued (34 percent), compared to the number of contact slips issued to clients suspected of HIV/AIDS (4 percent), also indicated that FP providers were more prepared to deal with STD cases than HIV/AIDS cases among the FP clients because STD cases had a cure or treatment available

However, there was still room for improvement in the provider's action when having clients suspected of STDs, regarding the provision of both counselling and health education, as well as applying measures (such as supply of condoms to the clients) for the prevention of further spread of the infection

When FP clients were suspected of TB, the most common provider's action was to request or refer for a TB test (32 percent and 59 percent, respectively), tending to have all the suspected clients tested as shown in Figure 5 3 Provision of counselling and referral/request for counselling accounted for 42 percent and 21 percent respectively Provision or referral for treatment accounted for almost half (47 percent) of the suspected cases

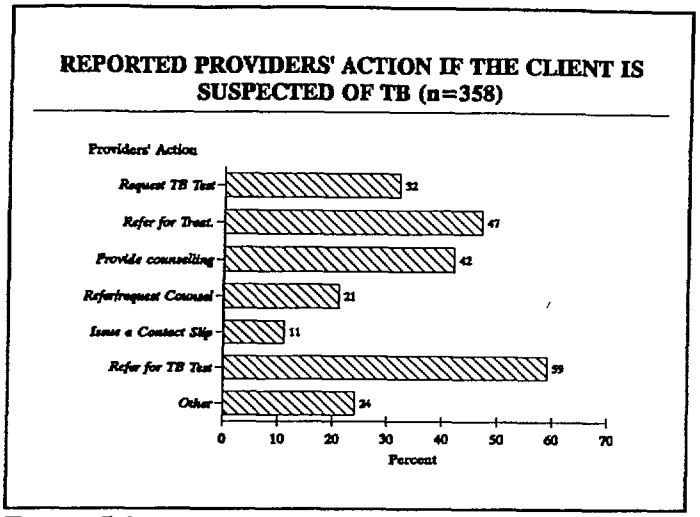

Figure 5 3

The number of contact slips issued (11 percent) indicated that FP providers tended to be more prepared to deal with suspected cases of TB than suspected cases of HIV/AIDS, but less prepared than in suspected cases of STDs The area of testing for TB and of counselling and health education provided to suspected patients, should expand, to cover all suspected clients and probably other members of their families, too FP providers should be prepared to also deal with TB as an AIDS-related disease

5 3 PROVIDER'S PREPAREDNESS

The distribution of FP provider's status of comfortability in discussing STD and HIV/AIDS is given in Figure 5 4 The majority of family planning providers (81 percent) reported to be comfortable in discussing STDs and HIV/AIDS with their clients, of which about half (34 percent) reported being very comfortable

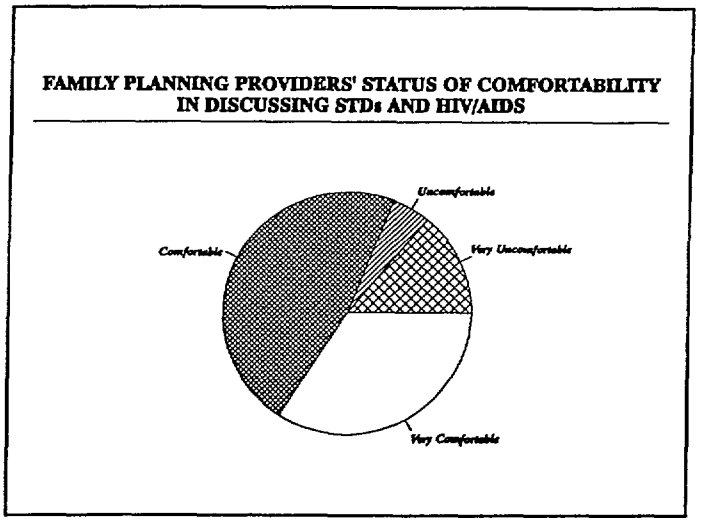

Figure 5 4

On the other hand, 5 percent of the family planning providers reported being uncomfortable in discussing issues of STDs and HIV/AIDS with clients, while 14 percent reported being very uncomfortable doing so This finding indicated an incomplete state of preparedness of family planning providers in order for them to carry out family planning integrated with other critical health issues

Adequate preparedness of the family planning providers together with their training in carrying out a systematic approach to all their clients, and particularly those suspected of STDs and HIV/AIDS, should be absolutely critical for the success of integrated family planning

5 4 CLIENTS' KNOWLEDGE ON STDS

Common signs or symptoms of STD known by clients are shown in Table 5 3 The most common signs of symptoms of STD known by Maternal Child Health (MCH) clients were lesions or sores (68 percent), loss of weight (42 percent), abnormal vaginal discharge (33 percent), and lower abdominal pain (30 percent)

Among the Family Planning clients, the most commonly known signs of symptoms of STD were lesions or sores (66 percent), painful urination (33 percent), loss of weight (32 percent), abnormal vaginal discharge (29 percent), and lower abdominal pain (27 percent)

Basically, both MCH and FP clients shared similar knowledge of the common signs of STDs Their knowledge of the potential symptoms of STDs, however, needed to be expanded

Table 5 3 Common Signs or Symptom of STD Known by Clients

Sexual Transmitted Diseases	Percent	
	MCH	FP
Abnormal Vaginal Discharge	33	29
Abnormal Vaginal Bleeding	7	4
Genital Itching	21	12
Lesions/Sores	68	66
Lower Abdominal Pain	30	27
Pain during Intercourse	5	4
Painful Urination	20	33
Abnormal growth in Genital (warts)	9	9
Urethral Discharge	23	22
Loss of Weight	42	32
Diarrhoea of long Duration	26	19
Swollen lymph of Groins	23	
Other	23	28

Table 5 4 shows the reported source of information on STD signs by MCH clients The most frequently used source of information to MCH clients on STD, was reported to be friends or relatives, in both urban and rural areas (70 percent and 74 percent, respectively), and especially so in the rural areas The second most frequent source of such information was reported to be health providers in both urban and rural areas (44 percent and 48 percent, respectively), and especially so in the rural areas TV/radios and poster/brochure accounted for only 19 percent and 12 percent, respectively, of the sources used for information on STD by urban clients, and for 15 percent and 12 percent, respectively, of the sources used by rural clients While the impact radio and TV had on disseminating information on STD was more pronounced among urban than rural clients because of their availability, the impact relevant poster/brochures had, was recorded to be the same in both urban and rural areas Finally, newspapers, given their restricted availability, were found to have had small impact on both urban and rural clients' knowledge on STD (8 percent and 6 percent, respectively)

These findings indicated that health providers played a critical role in disseminating complete and correct information to almost half of the MCH clients This service was particularly important in the light of the finding that most respondents had as their source of information on STD friends or

relatives who may be frequently misinformed, and thus causing additional damage The role health providers could have, as the reliable and always available counterpart to non-authoritative information, was therefore, invaluable This was further augmented in the rural areas, where people relied almost exclusively on friends/relatives and health providers for education, as accessibility to the media was less frequent than in the urban areas

Posters/brochures could also play an even more significant role, as the findings indicated that people tended to pay attention to them equally in the urban and rural areas, and their availability could accommodate for cultural problems and personal reservation in dealing with other people on such sensitive issues as STD

Table 5 4 Reported Source of Information on STD Signs by MCH Clients

Source	Urban			Rural			All		
	Number	%	n	Number	%	n	Number	%	n
TV/Radios	111	19	573	106	15	716	219	17	1293
Newspaper	47	8	573	41	6	716	88	7	1293
Health Provider	254	44	573	345	48	714	601	46	1293
Friend/relative	401	70	573	526	74	715	931	72	1292
Poster/Brochure	70	12	574	83	12	715	153	12	1293
Other	117	21	549	114	16	714	231	18	1266

5 5 CLIENTS' KNOWLEDGE ON HIV/AIDS

Ways of getting HIV/AID known by clients are shown in Table 5 5 MCH and FP clients shared a similar understanding of the ways of getting HIV/AIDS The most frequently mentioned way, almost by every one respondent was sexual intercourse (95 percent for MCH and 98 percent for FP clients, respectively) This finding was consistent with that of the Zambia Demographic Health Survey (ZDHS, 1996) which indicated that limiting one's sexual partners was the most commonly given reason why respondents believed themselves to be at low risk of getting AIDS The majority of women and men mentioned faithfulness to one partner (49 percent for both women and men) and condom use (38 percent of women compared to 49 percent of men) Sharing needles/razors was reported to be the second most frequent way of getting HIV/AIDS (40 percent for MCH and 41 percent for FP clients, respectively), followed by blood transfusion (17 percent for MCH and 16 percent for FP clients, respectively)

Mother to-baby way of getting HIV/AIDS (4 percent) was not perceived to be a significant way of getting HIV/AIDS by any of the two groups of clients This finding contrasted with that of the ZDHS, which indicated that over 80 percent of the respondents knew that AIDS can be transmitted from mother to newborn baby A higher percentage of women than men was aware of this type of HIV/AIDS transmission The results from ZDHS also indicated that knowledge on HIV/AIDS was nearly universal among respondents (just under 100 percent) Although the sources of knowledge between men and women varied, there was no significant difference between the two groups regarding the level of their knowledge on HIV/AIDS

The level of knowledge on acquiring HIV/AIDS among MCH and FP clients was significantly high and correct, especially regarding sexual intercourse However, there was still a need for its improvement and expansion, so that complete and correct knowledge was obtained by all the MCH/FP clients on these critical issues

Table 5 5 Ways of getting HIV/AIDS known by Clients

Ways of acquiring HIV	Percent					
	MCH			FP		
	Number	Percent	n	Number	Percent	n
Sexual Intercourse	1545	95	1630	378	98	386
Blood Transfusion	281	17	1628	61	16	386
Sharing Razor/Needles	648	40	1627	159	41	386
Mother to baby	74	4	1628	9	2	386
Other	133	8	1596	30	8	386

Sexual intercourse is perceived as the major way acquiring HIV/AIDS

Regarding ways of protection from acquiring HIV/AIDS in Table 5 6, staying faithful was the main effective way reported by more than 80 percent of both MCH and FP clients Encouraging partner to be faithful tended to be perceived as a way of protection more by MCH clients (22 percent) than by FP clients (12 percent) Abstinence, on the other hand, tended to be perceived as a way of preventing HIV/AIDS only by MCH clients (20 percent) Use of condoms was the second most frequently perceived method of protection, more strongly perceived to be so for the FP clients (61 percent) than the MCH clients (45 percent), while avoiding sharing of needles or razors followed with 20 percent of the FP and 24 percent of the MCH clients

These findings indicates the existence of a lot of room for improvement in the knowledge of FP and MCH clients on ways of protecting themselves from HIV/AIDS, and especially use of condoms (only 45 percent and 61 percent knew that), avoiding sharing razors and needles (only 20 percent and 24 percent knew that), even having one sexual partner (only 83 percent and 82 percent reported that)

Integrated family planning could educate FP clients so that each one of them was quite aware of all the main methods of protection against HIV/AIDS and why they worked FP clients could serve as a very effective way of disseminating information not only on HIV/AIDS, but also on STDs, and all the other critical health issues family planning was concerned with, since it was found that the main source of information and knowledge on such sensitive issues was friends and relatives, particularly in the rural areas Integrated family planning model, therefore, could have a significant impact on the population's health which can also go beyond FP clients

Table 5 6 Percent of Clients by Ways of Protection from acquiring HIV/AIDS

Ways of Protection	Percent					
	MCH			FP		
	Number	%	n	Number	%	n
Stay faithful	1162	82	1422	295	83	355
Abstinence	283	20	1419			
Encourage partner to be faithful	311	22	1420	42	12	355
Use Condoms	636	45	1420	216	61	355
Avoid sharing razor or needles	341	24	1422	71	20	355
Other	57	4	1388	16	5	355

Staying faithful to a partner was perceived as the best way of protection from HIV/AIDS while under 23 percent of clients thought that encouraging the partner to be faithful would be a good thing

CHAPTER SIX:

Child Health Services

CHILD HEALTH SERVICES

More than 70 percent of childhood deaths in the developing world are attributed to only five conditions pneumonia, diarrhoea, malaria, measles and malnutrition Appropriate management of these diseases may drastically reduce the childhood mortality rates of the developing countries The World Health Organization (WHO) and UNICEF has developed a programme called Integrated Management of Childhood Illnesses (IMCI) in late 1995 IMCI simply integrates previous vertical programmes (e g , ARI, CDD, malaria) in such a way that one health worker would be able to assess, classify, treat and counsel all above five conditions in a single visit to the health facility

Zambia is one of the few countries in Africa that decided to implement IMCI Consequently, the BASICS Project took the lead in supporting the government during the early implementation phase of IMCI Prior to the introduction of IMCI in the country, MoH and BASICS have conducted a baseline Health Facility Survey (HFS) in limited focus districts, i e , Lusaka Urban, Kafue, Chongwe, Kitwe, etc However, the MoH and CBOH indicated that IMCI implementation should be nationwide and therefore should go to scale

The Situation Analysis Study became the most logical way to get a representative nationwide baseline information on the current status and the quality of child health services in the country Most of the districts which are included in the study have not had any IMCI training However, few, districts such as Lusaka Urban and Kitwe have had IMCI training for some of their health centre staff before the Situation Analysis Study Therefore, this initial report of the study will not provide IMCI - stratified analysis, but will provide provincial distribution of key indicators

The guiding principal of the data interpretation and recommendation is based on the Zambia-adapted IMCI guidelines In IMCI, trained health providers are expected to assess, classify, treat and counsel caretakers of sick children about six major symptoms or conditions namely cough or difficult breathing, diarrhoea, fever, ear problem and malnutrition (including anaemia and growth faltering) Moreover, these health providers need to assess the existence of general danger signs and thus refer urgently all sick children with life-threatening conditions

The IMCI guidelines underline the importance of caretaker counseling in the integrated management of childhood illnesses IMCI trained health providers are expected to explain and counsel the caretakers of sick children on proper feeding such as exclusive breastfeeding, when to return immediately to the clinic, when to return for follow-up or for next immunisation and etc

Few front-line health providers in about 10 percent of the target districts have had IMCI training prior to the situation analysis study Such an early introduction of IMCI in few districts may contribute to certain degree the variation in the results of the study

6 1 HEALTH PROVIDERS' PERFORMANCE IN THE MANAGEMENT OF CHILDHOOD ILLNESSES

Performance of health providers is examined using various observable indicators Specifically health providers' skills at performing selected procedures, such as taking the temperature and weight, recognitions of danger signs, assessment and management of children with common illnesses were assessed during observations

In addition to the clinical management of childhood illnesses, the data collector (nurses) observed the ability of health providers to communicate and counsel the caretakers of sick children Improving the counseling and communication techniques of health providers plays an important role in the integrated management of childhood illnesses

6 1 1 Pre-assessment Procedures

Usually someone in each health centre is expected to the take the body temperature and the weight of every sick child before the actual consultation begins Table 6 9 indicates selected procedures conducted by health providers as part of the routine pre-assessment procedures According to data presented on this Table, the health providers managed to ask almost all caretakers (99 percent) of sick children about the main reason of bringing their children to the health facility On the other hand, they asked 64 percent of the caretakers if they brought their children's under-five cards on the day of the study Since providers have asked as few as 38 percent of the caretakers whether the sick child's visit is initial or follow-up, it seems such practice is not very common among the health providers surveyed during this study

In addition, the result of the study reveals that taking the weight of sick children is not a routine practice in most of the health centres The study found out that health providers weighed only one fifth of the sick children during the day of the survey The main explanation of this observation could be the fact that prior to IMCI training, weighing of sick as part of case management was not a common practice Routine weighing of children less than five years of age is commonly done during well child clinic days However, taking the body temperature of sick children is more common The health providers in this study measured the body temperature of about half of the sick children with a thermometer Others may have felt how hot is the sick child during the physical examination In IMCI, trained health providers are allowed to diagnose fever by touching

Table 6 1 Frequency of General Pre-assessment Procedures for Sick Children

Procedures	Yes		Total (n)
	Number	Percent	
Measurement of the body temperature	835	50	1 678
Measurement of weight	313	19	1 657
Initial versus follow up visit enquiry	625	38	1 665
Under five card enquiry	1,055	64	1 646
Main reason for bringing the child to the facility enquiry	1,650	99	1 674

6 1 2 Assessment of General Danger Signs

The assessment and management of general danger signs are an essential part of the integrated management of childhood illnesses In IMCI, general danger signs are present if a child is not able to feed or vomits every thing or has had convulsions or is lethargic or unconscious Therefore, it is the first step that health providers are expected to do when managing sick children

Almost one half of the sick children (49 percent) observed during the study, health providers were able to ask at least one of the above general danger signs However, they managed to ask about all three general danger signs in only about 2 percent of the sick children Unless trained in IMCI, health providers are less likely to ask and look for all general danger signs within the context of IMCI Depending on the nature of the illness, it is more probable that health providers ask at least one danger sign associated with that illness However, in most instants, health providers failed to ask the caretakers of sick children whether their children have had any convulsions during that particular illness The table (6 2) describes proportion of sick children by danger signs assessed

Table 6 2 Observed Procedures in Assessing General Danger Signs

Questions asked by health providers to assess the presence or absence of general danger signs	Yes		Total (n)
	Number	Percent	
Whether the child is able to drink or eat or breastfeed?	*604*	*36*	*1 656*
Whether the child is vomiting everything?	*516*	*31*	*1 654*
Whether the child had convulsions during illness?	*87*	*5*	*1 641*
All above danger signs	*39*	*2*	1 622
At least one of the above general danger signs	*794*	*49*	1 622

6 1 3 Assessment of Children with Cough or Difficult Breathing

Based on the principal of "integrated" management of childhood illnesses, it is the primary responsibility of the health provider to ask and look for major symptoms which are not reported by the caretakers of sick children For example, if a caretaker complains about diarrhoea only, the health provider is expected to ask for the presence of other major symptoms such as cough and fever However, such practice is not common as health provider in the study managed to ask that question in only one quarter of the sick children who came to the health centres for reasons other than cough or difficult breathing

The study uses respiratory rate count and undressing children to look for chest indrawing when judging the assessment procedures for cough or difficult The respiratory rates count of a child with cough or difficult breathing is an important discriminating tool between a pneumonia and common cold Out of 673 children with a cough or difficult breathing, health providers succeeded in measuring the respiratory rate of only 10 percent of them However, the use of a stethoscope to diagnose acute respiratory infections among frontline health providers is still common During the study health providers examined almost half (321/673) of the children with cough or difficult breathing by using a stethoscope The IMCI guidelines

encourage frontline health providers not to use stethoscopes to differentiate illnesses that cause acute respiratory infections in children

One of the important diagnostic tools for the severity of pneumonia is the presence of chest indrawing The nearest "observable" indicator for assessing chest indrawing is the ability of the health provider to pull up the clothing to inspect the child's chest In this study, providers pulled the shirt or the dress of half (53 percent) the children with a cough or difficult breathing to look for chest indrawing The study assumes that health providers are looking for chest indrawing if they lift the shirt or the dress of a child with cough or difficult breathing

On the day of visit, the health providers diagnosed 264 cases of pneumonia and 675 cases of common cold by using various diagnostic tools However, the study did not validate these findings, but it observed the use of antibiotics for the management of a pneumonia and common cold The health providers treated almost equal proportions of pneumonia and common cold cases (55/264 and 126/675) with antibiotics Such a treatment decision is too low for pneumonia cases and too high for common cold cases

Table 6 3 Procedures used by Health Providers to Assess and Manage Cough or Difficult Breathing

Procedures performed by health providers	Yes		Total (n) of children
	Number	%	
Asked caretaker whether the child has cough or difficult breathing,	192	25	767
Measured the child s respiratory rate with a watch or a timer	69	10	686
Pulled up the clothing to inspect the child s chest.	357	51	686
Listened to the child s chest with a stethoscope	322	45	686
Prescribed antibiotic for pneumonia	55	21	264
Prescribed antibiotic for common colds	126	19	675

6 1 4 Assessment of Diarrhoea and Dehydration

Since diarrhoea is another major disease, health providers are always expected to ask caretakers especially those who come for other reasons, whether their children have diarrhoea Health providers asked this question in 27 percent (3312/1,207) of the caretakers Of those children who had diarrhoea (351), they asked 37 percent of the caretakers whether there is blood in the stool of their sick children Blood in the stool often indicates the presence of dysentery which needs an appropriate antibiotic The use of antibiotics in diarrhoeal diseases should be warranted for dysentery and cholera cases ONLY

The basis of effective diarrhoea case management is the ability to assess the level of dehydration and to decide an appropriate rehydration plan Although there are several procedures to assess the level of dehydration, this study identifies the ability of health providers to assess whether children with diarrhoea are thirsty or are able to drink and whether they perform a skin turgor test They have to offer some fluids to the children with diarrhoea in order to decide if they are able to drink or whether they are thirsty

For a total of 351 children with diarrhoea, the providers offered fluids to almost a quarter (24 percent) of them The skin turgor test is much more common procedure since health providers performed it to 43 percent (151/351) of children with diarrhoea

Table 6 4 Procedures used by Health Providers to Assess and Manage Diarrhoea

Procedures	Yes		Total (n)
	Number	Percent	
Asked caretaker whether the child has diarrhoea	331	27	1 207
Asked if there is blood in the stool	128	37	351
Checked if the child is thirsty or is able to drink fluids	83	24	351
Pinched the skin of the child	151	42	351

6 1 5 Assessment and Management of Fever

The study assessed the ability of frontline health providers to probe the caretakers of sick children who came for other reasons whether they have fever The presence of fever within the context of IMCI, indicates malaria, measles or other serious diseases (such as meningitis) In addition, the study assessed the health providers' ability to check the presence of a stiff neck in children with fever Neck stiffness indicates the presence of complicated malaria (cerebral) or meningitis Moreover, the study observed the ability of health providers to check for the generalised rash of measles by undressing all children with fever

Out of 683 sick children with complaints other than fever, the frontline health providers asked 45 percent (304/683) of the caretakers whether they had fever within the past twenty four hours Of those who had fever (765) either by history or feels hot or by temperature, the they checked for a stiff neck in only 7 percent of them Undressing children to look for generalised rash of measles seems slightly more common since health providers advised 16 percent of the caretaker to undress their children

Since malaria transmission in Zambia occurs throughout the year, IMCI guidelines recommend the administration of oral antimalarial (chloroquine) for all uncomplicated febrile cases However, only one-third (349/992) of children with fever have received chloroquine treatment

Table 6 5 Assessment or Management of Fever in Sick Children by Health Providers

Procedures	Yes		Total (n) of children
	Number	Percent	
Asked caretaker whether the child has fever	304	45	683
Looked for stiff neck	50	7	765
Undressed the child to look for generalized rash for measles	121	16	765
Prescribed chloroquine for fever	349	35	992

6 1 6 Assessment of Malnutrition and Anaemia

In IMCI, frontline health providers are expected to assess and classify malnutrition and anaemia in all sick children under five years of age The data collectors observed whether the health providers did the following

- *Checked for visible severe wasting by undressing the child completely*
- *Checked palmar pallor*
- *Checked the eyes for pallor*
- *Determined and recorded the weight for age of the child*

However, health providers undressed only 22 percent (372/1689) of the sick children to look for visible severe wasting Likewise, they checked 23 percent of sick children for palmar pallor The IMCI guidelines discourage them to use conjunctival pallor for anaemia assessment procedures However, the study reveals that they looked at the lower eyelid of almost half of the sick children (774/1,626) to check whether they are anaemic Therefore, the most common diagnostic tool for anaemia is conjunctival pallor

The weight-for-age determination is usually done during the well child clinic days Therefore, during the study, the surveyed health providers determined the weight-for-age status of only 16 percent (253/1,636) of the sick children

Table 6 6 Procedure used by Health Providers to assess malnutrition and anaemia (n=1689)

Procedures done by the health providers	Yes		Total (n) children
	Number	Percent	
Undressed the child to assess nutritional status	368	22	1650
Checked the child s palms for pallor	381	24	1621
Checked the child s eyes for pallor	774	48	1626
Recorded the weight on child health card to determine weight for age	253	16	1636

6 1 7 Feeding Assessment

This is another new entity to the clinical care of sick children The well-child clinic is designated to assess how well are children fed during growth monitoring and promotion sessions The IMCI guidelines introduce the task to the health providers who are managing sick children Providers are expected to assess feeding habits of all children who are malnourished or those below two years of age

The study reveals that out of a total of 1,139 sick children, the health providers asked one third (377) of their caretakers whether the children are on breast milk In Zambia, all children below six months of age should be exclusively breastfed At six months, the caretakers have to start feeding their children with complementary foods However, they asked only 16 percent (180/1,112) of the caretakers whether they give any complementary foods to their sick children

Of those caretakers who give complementary foods to the sick children, health providers asked 30 percent (53/180) of them about the number of meals of complementary foods they give to their children per day

The IMCI guidelines advise health providers to discourage the caretakers to use bottle feeding Out of 218 caretakers who started giving complementary foods to their children, health providers asked only 5 percent of them whether they use bottles or cups and plates Therefore, bottle feeding counseling is not a common practice among the health providers who manage childhood illnesses

Table 6 7 Procedures used to Assess Feeding in Children Under Two Years

Caretakers were asked	Yes		Total (n)
	Number	Percents	
Whether their children are on breast milk	446	28	1589
Frequency of breastfeeding in 24 hours	62	14	435
Whether their children get other foods (milk family foods)	244	15	1590
Whether their children are on bottle feeding	12	5	226
Number of meals (other foods) the child get per day	73	31	233
Whether their children get their own portion of other foods or share with other children	37	16	229

6 1 8 Ear Problem Assessment

Of 1,511 caretakers who brought their sick children to the various health facilities for other reasons, the health providers succeeded in asking only 7 percent (111) of them whether their children have an ear problem Out of the 50 children who were reported to have some sort of ear problems, they asked about the presence of pain in 84 percent and looked for discharge in 86 percent of them

Table 6 8 Assessment procedures for an Ear Problem

Ear problem assessment	Yes		Total (n)
	Number	Percent	
Asked caretaker whether the child has an ear problem	111	7	1 511
Asked caretaker whether the child has an ear pain	42	84	50
Looked whether the child has an ear discharge	43	86	50

6 1 9 Health Worker and Caretaker Interactions

The interviewees observed the frequency and the quality of health provider and caretaker interaction Health providers need to have basic communications skills to get across key messages which are essential in case management at home Table 8 16 describes the type and

the frequency distribution of the key messages given to the caretakers of the sick children during the study

Out of 1,675 caretakers, health providers informed 43 percent of caretakers about the type of illness their children have The first most common message which health providers at various health facilities give is the explanations regarding how to give oral medications at home The proportion of caretakers who received this key message is 84 percent (1,242/1,478) while 10 percent of caretakers were told when to bring their children for routine immunizations However, 77 percent of the caretakers were explained how to give the prescribed medicines at home Likewise, the health providers explained to 43 percent of the caretakers to return immediately to the designated health facilities if their children do not get better

The health providers under this study, managed to explain to almost one-quarter of the caretakers on a feeding and fluid intake, to return if fever develops or persists and when to return for a follow-up visit Table 6 16 describes the frequency distributions for individual questions regarding health provider and caretaker interactions

The least common messages which health providers give, are when to bring the child back for immunizations (10 percent), to ask checking questions whether the caretaker has understood all instructions (11 percent) and to return immediately if the child is not able to eat or breastfeed (12 percent)

Table 6 9 Key Messages Given by health providers to the caretakers (n = 1689)

Key messages given by the Health Providers	Caretakers		
	Number	%	total (n)
What illness does the child has	716	43	1,675
How to give the prescribed oral medicine(s) at home	1 242	84	1 478
To return immediately if the child is not able to eat	194	12	1 615
Basic instructions on feeding and fluids for the child	340	21	1 643
To return with the child if fever develops or persists	302	19	1,608
When to return for follow up	310	19	1 614
To return immediately if the child is not getting better	700	44	1,611
Asked to repeat the instructions given	177	11	1 606
When to bring the child back for immunizations	157	10	1,591
Asked if she/he has any questions	95	6	1 678

6 1 10 Referral Services

Out of the 1,688 sick children observed during the study, the health providers decided to refer only 79 (about 5 percent) of them to a higher level health facility, such as district hospitals About one quarter of these children were referred because of complicated malaria (24 percent) This was followed by severe pneumonia (9 percent), anaemia (8 percent) and diarrhoea with some dehydration (6 percent) The Table 6 10 (below) describes the main reasons for referring sick children

Before referring sick children to other higher institutions, health providers are expected to provide any necessary pre-referral treatments Pre-referral treatments could be infusions, injectable antibiotics, breastfeeding, and etc Of all 79 children who are referred, almost 60 percent have received a pre-referral treatment before leaving the health centres

Table 6 10 Main Reasons for Referring Sick Child to Another Facility

Reasons for referring sick children	Yes	
	Number	Percent
Complicated malaria	16	20
Severe pneumonia	8	10
Diarrhoea	4	5
Measles	1	1
Anaemia	5	6
Malnutrition	4	5
Other	41	52
Total	79	100

6 2 HEALTH WORKER INTERVIEWS

During the study, the data collectors interviewed 467 health providers who manage childhood illnesses in various districts and health centres The interview comprised on background information on type of training and frequency of support visits by a supervisor, as well as their knowledge on how to assess and manage common childhood illnesses

6 2 1 Training and Supervision of Sick Child Health Providers

Training and supervision contribute significantly to the quality of care delivered by health providers Training is an important factor in improving the quality of care sick children receive at health facilities Through training health providers learn new knowledge and skills to improve their work performance This survey therefore, explored different types of training sick child's providers received in sampled health facilities

According to Table 6 11 below, slightly over a half (54 percent) of the 467 health providers in the survey received training in diarrhoea The proportions of health providers who received training in immunizations, malaria management, acute respiratory diseases were 48, 45 and 41 percent respectively Table 6 11 further reveals that in rural areas over 60 percent or more health providers received training in various areas compared to 40 percent or less in urban area

The emphasis placed on in-service training for rural health providers is in line with the PHC principal, which promotes fair distribution of resources between urban and rural areas

Table 6 11 Percent of Sick Child Providers by Training Attended (n=467)

Type of Training	Urban		Rural		Total (467)	
	No	%	No	%	No	%
Diarrhoea	91	*36*	159	*64*	250	54
Immunization	74	*33*	148	*67*	222	48
Malaria Management	83	*40*	127	*60*	210	45
Acute Respiratory Disease	70	*36*	122	*64*	192	41
Essential Drug Management	59	*36*	107	*64*	166	36

Supervision is also an important element in improving health providers' performance Supervision reinforces new knowledge and skills by providing technical and other support required by health providers To assess supervision, health providers in the survey were asked whether they are supervised and those who were supervised were also asked for the frequency of supervision Results of this study presented on Table 6 12 show that almost all the health providers in the survey (97 percent) of the 462 reported that they are supervised Of the 447 them who reported that they are supervised, a third 33 percent are supervised monthly while about another third (31 percent) and about a fifth (19 percent) are supervised daily and quarterly respectively Supervision is reported to be more common and frequent in rural health centres than in urban centres Out of the 447 them who reported that they are supervised, more than 63 percent were from rural areas, compared to only 37 percent in urban areas

Table 6 12 Percent of Supervisory Visits as Reported by Providers

Supervisory Visit	Rural		Urban		Total (n=462)	
	No	%	No	%	No	%
Total Supervised	280	63	167	37	447	97
Daily	74	54	63	46	137	31
Weekly	7	27	19	73	26	6
Monthly	101	69	46	31	147	33
Quarterly	68	79	18	21	86	19
Rarely	29	58	21	42	50	11

Equally important is what the supervisor do during the support visit Most of the health providers (75 percent) reported that their supervisors do not observe them while managing sick children About one third told the surveyors that their supervisors come to conduct teaching sessions The following Figure (6 13) describes what the health providers reported their supervisors do when they come for support visits

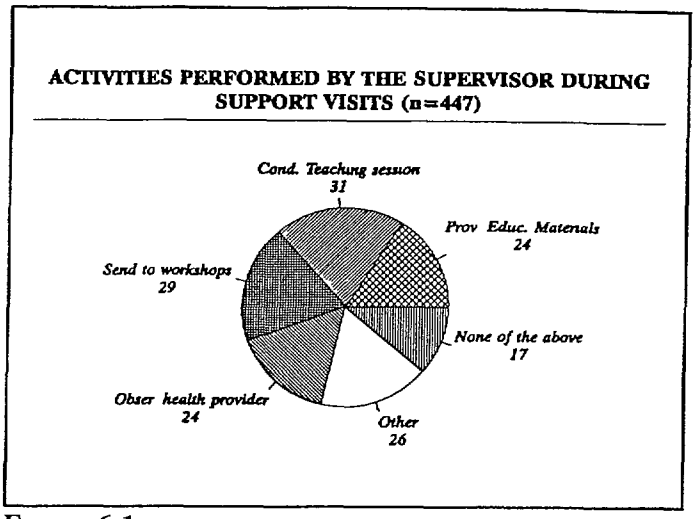

Figure 6 1

6 2 2 Important messages Given to Caretakers of Sick Children

To assess health provider and caretaker interactions, sick child health providers in the Situation Analysis Study were asked what kind of important information they give to caretakers Knowledge is a key factor in facilitating adoption of positive practices such as seeking early treatment for children Therefore, the study examined what kind of important health messages do health providers give to caretakers Table 6 3 show that about two- thirds (64 percent) of interviewed health providers claim to tell caretakers how to give oral medicines at home, while slightly over half, 54 percent and 51 percent tell caretakers how to feed the sick child and when to bring the sick child back to the health facility According to Table 6 14, information about danger signs is the least message to be given to caretakers, with only one third (29 percent) of the health providers reporting that they would give such information

Table 713 Health providers knowledge on key important messages to give to Caretakers of Sick Children by Providers (n=466)

Type of messages	Frequency	
	Number	Percent
When to bring child back to health facility	238	51
Danger signs	137	29
When child is due for immunization	153	33
How to feed child	250	54
How to give medicine	296	64
How to prevent illness	206	44

6 2 3 *Health Providers' Knowledge on Danger Signs that Need Referral*

More than 80 percent (376/446) of the health providers interviewed during the study, considered respiratory distress to be a serious sign that would require urgent referral to another higher facility The second most common sign which providers considered to be a danger sign is lethargy or unconscious (65 percent)

In addition, 46 percent of health providers reported severe anaemia or pallor to be one of the danger signs that require referral to hospitals or higher institutions However, less than one-fifth (16 percent) of the health providers would refer a child who is vomiting everything to a hospital Table 6 15 describes the frequency distribution of danger signs from the health providers' perspective

Table 6 14 Assessing the Knowledge of Health Providers to Refer Children with Danger Signs (n=446)

Danger Signs	Proportion of Health Providers who would refer urgently if the sign is present	
	Number	Percent
Respiratory distress	376	84
Lethargy or unconsciousness	289	65
Severe pallor or anaemia	207	46
Fits or seizures	164	37
Not eating/drinking	156	34
Vomits everything	71	15

6 2 4 *Health Providers' Knowledge on Assessment of Cough or Difficult Breathing*

Out of a total of 447 health providers who responded to the questionnaire, 80 percent and 70 percent indicated that they would count the respiratory rate and check for chest indrawing in children with a cough or difficult breathing - respectively On the other hand, 47 percent of the providers would listen to the chest of the children with a stethoscope Figure 6 2 describes the various responses of the health providers

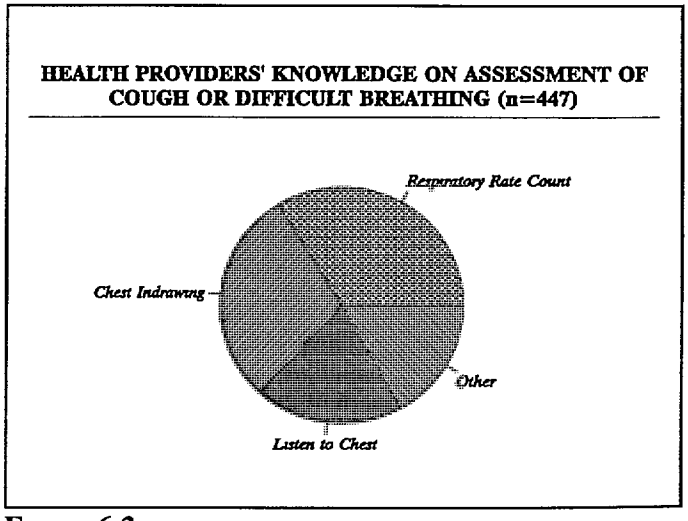

Figure 6 2

6 2 5 *Health Providers' Knowledge on Assessment of Dehydration*

More than 90 percent of the health providers who were interviewed during the study, reported that they would do the skin turgor test (skin pinch) when assessing the level of dehydration in children with diarrhoea Similar proportion of the health providers would look for sunken eyes when assessing the degree of dehydration

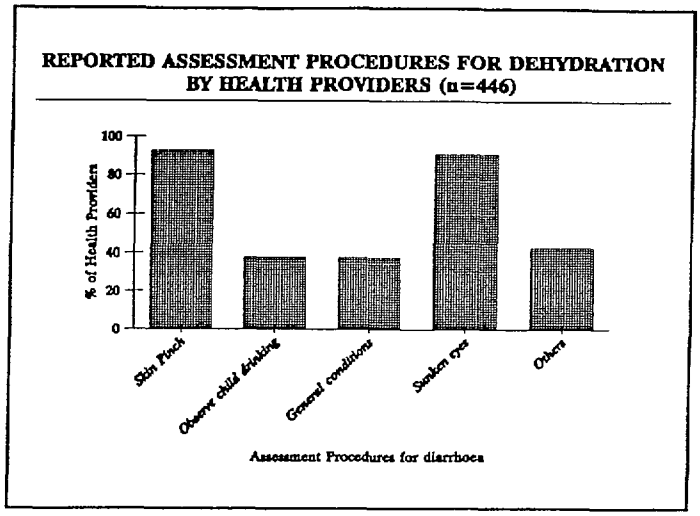

Figure 6 3

Checking the general condition of the child with diarrhoea or whether the child is able to drink or is thirsty seems to be less frequent knowledge, since about a third of the health providers said they would do so

6 3 EXIT INTERVIEWS WITH CARETAKERS OF SICK CHILDREN

6 3 1 Messages Received from Health Providers

The IMCI guidelines encourage health providers to enhance their communication skills with the caretakers of sick children Besides other important counseling messages, they are expected to inform the caretakers about the disease (diagnosis), how to give the medicines at home and when to come back for follow-up

Results of this study reveal that in general caretakers received most of the key messages from health providers Table 6 15 indicates that 97 percent of the caretakers were told by health providers how to give oral drugs at home while 83 percent were told the diagnosis or what was wrong with their child at the time of seeking care Table 6 18 also underscores that less than half (46 percent) were told when to return for follow up

Table 6 15 Frequency Distributions of Key Messages Given by Health Providers as Reported by Caretakers

Key messages	Caretakers		
	# yes	%	Total (n)
Told what the illness does the child has	1338	83	1621
Told how to give oral drugs at home	1483	97	1523
Told when to return for follow up	744	46	1603

6 3 2 *Home Treatment*

Results of this study are consistent with other studies which show that home treatment is common in the treatment of sick children in Zambia (Baume and Macwan'gi, 1997)

Table 6 16 shows that slightly over half (52 percent) gave herbs to their children before seeking care from health centers Table 6 19 also shows that about a third (34 percent) and 9 percent of caretakers gave their sick children antipyretics (paracetamol and aspirin respectively) while a fifth (20 percent) gave chloroquine The prevalence of antipyretics and chloroquine suggests that most of the sick children had fever The finding that over half gave herbal medicines to their children is worthy noting because the efficacy of these herbs is not yet known Further since most caretakers give various medicines before coming to health centers, the importance of correct dosage and early treatment seeking should be emphasized in IMCI training

Table 6 16 indicates that about a third (3 percent) and 10 percent of caretakers give antipyretics, paracetamol and aspirin respectively while about a fifth (19 percent) give chloroquine

Table 6 16 Percent of Sick Child Caretakers who gave Medicine to Children before coming to the facility

Home treatments before coming to the clinic	Caretakers		Total (n)
	Number	Percent	
one or more medicines	321	20	1 617
Chloroquine	63	20	321
Paracetamol	108	34	321
Aspirin	30	9	321
Can not remember	8	2	321
Herbs/others	166	52	321

6 3 3 *Administration of Oral Medicines at Home*

The treatments of the most common childhood illnesses require a compliance and accurate intake of the medicines at home First, someone in the health facility should clearly explain to the caretaker how to give the oral medicines at home Furthermore, health providers should check whether the caretaker could repeat the instruction accurately before leaving the facility If the caretaker has to give many medicines for the child's illness and she appears not to remember them all, the health provider should concentrate on the explanation of the most important medicine(s) Therefore, the following section of the study analyses the caretakers' ability to remember how to give the prescribed oral medicines at home

Table 6 17 shows that out of 1,002 caretakers whose children were put on chloroquine treatment, only 65 percent of them could accurately tell how to give the drug at home during the exit interviews All of these caretakers have reported that the health providers explained to them how to give the drug at home

Cotrimoxazole is the second best drug which almost half of the caretakers explained with accuracy how they will give it to the child at home However, note that in general very small proportions were giving vitamins correctly Only 15 percent and 23 percent of caretakers gave correct doses of vitamin A and ferrous sulphate respectively

This finding reminds the health worker who is managing the sick child the importance of thorough explanation to the caretaker on how to give specific oral drug(s) and checking whether she understood all important instructions before leaving the health facility

Table 6 17 Knowledge on How to Give Selected Oral Medicines at Home

Type of Medicine	# of correct responses	% correct	Total (n)
chloroquine	649	65	1002
Cotrimoxazole	267	46	580
amoxycillin	52	16	336
penicillin	213	42	505
vitamin A	50	15	330
ferrous sulfate	86	23	371
Others	1134	75	1522

6 3 4 Caretakers' Knowledge on How to Prepare ORS Solution

Despite enormous training for both health providers and caretakers on oral rehydration therapy, there is still a significant number of caretakers who do not know how to prepare ORS solution Table 6 18 indicates that more than one half of the caretakers (54 percent) interviewed during the exit interviews, knew how to mix ORS correctly Of those who did not know how to miss ORS, the most common mistake was to mix ORS in less water For example, Table 6 19 indicates that 41 percent mixed less water in one sachet Forty two percent did not even attempt to mix ORS while being observed they said that did not know how to mix ORS Findings on ORS reveal very low levels of caretakers knowledge

Table 6 18 Caretakers' Skills in Preparing ORS Solution

Outcome	What Caretakers did	# who performed	%
Correct	Mixed 1 litre of water in 1 sachet of ORS	876	54
Incorrect	Other than above	737	46
Total		1 613	100

Table 6 19 Common Mistakes Made by Caretakers When Preparing ORS Solutions

Type of Mistake	Number	%
Mixed 1 litre of water in more than 1 sachet	18	2
Mixed less than 1 litre of water in 1 sachet	300	41
Mixed more than 1 litre of water in 1 sachet	69	9
Other than above	40	6
Do not know	310	42
Total	737	100

6 3 5 Caretakers Perceptions About Consultation and Waiting Time

Another factor by which health facility users judge the quality of care they receive is the time that they spend with health providers during consultation and the time they spend waiting at health facilities for services Table 6 20 indicates that although 17 percent and 36 percent of the caretakers perceived time during consultation and waiting time at the facility as long, over 50 percent reported the consultation and general waiting time as satisfactory

Table 6 20 Percent of caretakers by Perception of Time spent by the health worker during consultation and at the facility(n=1628)

Perception of time	During consultation		At the facility	
	Number	Percent	Number	Percent
Too long	278	17	580	36
Too short	237	15	154	10
Satisfactory	1113	68	894	54

6 3 6 Sick Children Immunization

IMCI training emphasizes immunization of sick children Vaccinations given to sick children are as effective and safe as when given to well children Almost all sick children who visit health centres can be immunized without any preoccupations about serious adverse reactions

Table 6 21 shows that most of the sick children seeking care from health centers miss opportunities to be vaccinated, as only 12 percent of 386 sick children who were due for immunizations on the day of the visit were immunized Table 6 24 further shows that some provinces had higher immunization rates of sick children For example in Eastern, Southern and Central provinces the proportions of children who were immunized on the day of the visit were 38 percent, 28 percent and 21 percent compared to only 4 percent in Luapula, North Western and Western provinces

It is very clear from above figures, that IMCI training is not a factor in these provincial variations on sick children immunization practice Both Lusaka and Copperbelt provinces have a lower coverage rates than Luapula which has no IMCI trained health worker

Table 6 21 Proportion of Sick Children Who Were Immunized During the visit by Province

Province	# Due for Immunization on the day of the visit	# Immunized on the day of the visit	percent Vaccinated
All Provinces	386	46	12
Central	24	5	21
Copperbelt	58	4	7
Eastern	29	11	38
Luapula	84	3	4
Lusaka	52	3	6
Northern	42	5	12
North Western	25	1	4
Southern	47	13	28
Western	25	1	4

ANNEX 1

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ANNEX 2

(a) Physical infrastructure

Percent of health facilities with available physical and communication facilities on the day of visit (n=254)

Physical facility type	Central (n=20)	Copperbelt (n=34)	Eastern (n=27)	Luapula (n=28)	Lusaka (n=39)	Northern (n=27)	North Western (n=12)	Southern (n=36)	Western (n=30)	Urban (n=90)	Rural (n=164)	All (n=254)
Piped running water	45	74	22	19	62	22	46	58	33	82	23	44
Electricity/Solar power	80	82	56	50	76	56	46	92	87	99	57	72
Working toilets/Latrines available for clients	95	91	92	96	82	85	92	94	87	91	90	90
Sufficient seating available for clients	50	74	52	41	64	56	54	94	90	82	587	66
protected well/borehole	55	38	39	26	39	22	54	39	50	30	44	39
incinerator	40	12	15	0	13	11	23	28	17	30	9	17
Available and functioning												
Telephone	30	41	26	11	23	19	15	53	20	63	9	28
Radio	50	18	15	18	62	0	8	14	20	33	14	21
Fax	0	6	11	4	0	4	0	14	3	11	2	5
Vehicle	25	18	19	14	23	19	23	33	23	36	15	22
Motor bike	25	9	30	29	23	37	31	42	37	23	32	29
Bicycle	65	56	79	86	44	56	39	69	37	54	62	59

Generally over 90 percent of visited health facilities have working toilets and only 22 percent have vehicles

ANNEX 3

Percent of facilities with certain type of equipment available

Type of Equipment	Central (n=20)	Copperbelt (n=34)	Eastern (n=27)	Lusaka (n=28)	Lusaka (n=39)	Northern (n=27)	North Western (n=13	Southern (n=36)	Western (n=30)	Urban (n=90)	Rural (n=164)	Zambia (n=254)
Adult Scale	100	85	100	96	92	96	100	97	100	96	96	96
BP Machine	100	97	85	89	97	96	92	94	97	99	92	95
Examining Couch	95	97	89	96	97	89	85	97	90	98	91	98
Kidney Dishes	100	97	100	96	97	93	100	100	100	11	98	98
Scissors	75	94	89	79	95	89	77	97	86	93	86	89
Sterilization Equipment	95	68	100	43	95	96	92	94	93	84	87	86
Stethoscope	100	100	100	89	97	100	100	100	100	100	98	98
Disinfectant	70	775	74	75	74	63	62	81	76	81	69	74
Fridge	95	91	93	89	92	82	92	94	97	98	88	92
Antiseptic Lotion	75	77	78	71	80	63	69	64	79	76	72	73