

EXPANDING FAMILY PLANNING OPTIONS

**Research on the Introduction
and Transfer of Technologies
for Fertility Regulation**

AN ASSESSMENT OF THE NEED FOR CONTRACEPTIVE INTRODUCTION IN ZAMBIA



WORLD HEALTH ORGANIZATION
GENEVA

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Ministry of Health, Republic of Zambia
and WHO's Task Force on
Research on the Introduction and
Transfer of Technologies
for Fertility Regulation

"HEALTH REFORMS AT WORK"

UNDP/UNFPA/WHO/World Bank
Special Programme of Research,
Development and Research Training
in Human Reproduction

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Foreword

The improved climate in Zambia's Health Sector is the result of health reforms which came into being in 1992. Although primary health care was adopted by the Government in 1981, its impact on the standards of people's health is only now emerging. The health reforms have given rise to important practical concepts which Zambia shall use as pillars in the delivery of good quality primary health care. These concepts are decentralization of planning, budgeting and decision-making to 61 autonomous districts and health boards; integration of health services; commitment to quality care as close to the family as possible; and the concept of a community-focused health care delivery system.

Zambia's National Reproductive Health Programme is based on the recognition that access and information are basic rights of individuals and couples; and that family planning is an important tool in improving maternal and child health, and the quality of life of the family. Unfortunately, current contraceptive prevalence in Zambia remains low, being 15% overall, of which 9% represents modern methods, contributing to a high unmet need of 33%. The method mix is not rational and still contains a number of obsolete formulations.

In order to address the problems of low contraceptive prevalence and high unmet need, the National Reproductive Health Programme has adopted multiple service delivery strategies such as integrated facility-based services, community-based services, employer-based services and community social marketing. For the Programme to be effective, however, it is important that there be greater use of safe and effective modern methods; rationalization of the method mix; improved logistics and distribution, including appropriate forecasting of contraceptive requirements; and several other interventions that go beyond the scope of just contraceptive needs. Consequently, the Maternal and Child Health/Family Planning (MCH/FP) Unit of the Ministry of Health has been mandated to address policy issues and to improve quality of care through technical support to districts in the development of technical guidelines, operations research, relevant information, education and communication materials, and improved documentation, monitoring and evaluation guidelines at all levels of the health care system.

In order to address these issues, some understanding of what already exists in terms of method mix, user perspectives and available technology is important. It was with this in mind that a Contraceptive Needs Assessment was deemed necessary and initiated by the Government. The findings and recommendation are contained in this report. However, the document is holistic in that it goes beyond the issue of contraceptive technology to address policy concerns, as well as users' and providers' needs at all levels. Moreover, the process was participatory in nature and strove to involve and listen to the representatives of the various constituencies involved in

reproductive health, particularly women at the community level. The results are timely and will be incorporated into the overall Family Planning Programme and the development of Policy and Technical Guidelines.

This assessment process created a partnership among government, non-governmental organizations, women's advocacy groups, donors and international agencies. It was fully supported by the National Commission for Development Planning, the Interagency Technical Committee on Population and the Ministry of Health with the financial support and technical assistance of the UNDP/UNFPA/WHO/World Bank/Special Programme of Research, Development and Research Training in Human Reproduction, Geneva, Switzerland, in collaboration with the Regional Office of the Population Council, Nairobi, Kenya. We thank each of the bodies and trust that the findings and subsequent follow-up will improve not only the delivery of family planning but the provision of reproductive health services in general.

A handwritten signature in black ink, appearing to read 'Katele Kalumba', with a long horizontal line extending to the right above the main signature.

Dr Katele Kalumba
Deputy Minister
Ministry of Health
Lusaka, Zambia

Summary

Despite progress to date in expanding the delivery of family planning services in Zambia, the country's narrow method mix remains an issue of concern, both for its impact on the nation's low contraceptive prevalence and for its effect on achieving prevalence targets set forth in the National Family Planning Programme.

Recognizing that expanded contraceptive choice can increase acceptance and encourage greater use of more effective contraceptive methods, the Zambian Ministry of Health undertook the present Contraceptive Needs Assessment as the first stage of WHO's recently developed *Strategy for Contraceptive Introduction* (Spicehandler and Simmons, 1994). Designed to help governments broaden available contraceptive options, the Strategy is a three-staged programme to examine user's needs for contraceptive methods and the capability of the service delivery system to provide these methods with appropriate quality of care.

The present Assessment, therefore, was undertaken with the purpose of answering at least the following three questions: Is there a need to explore the introduction of a new contraceptive technology in Zambia and, if so, what is the appropriate timing for such introduction? Are there existing methods for which better utilization should be explored? Is there reason to discontinue already available methods? And finally, what needs exist for

introductory and other operations research and action?

Following the recommendations of two national workshops to plan, review and validate the Assessment's findings, the following Assessment report is divided into seven sections. These address the role of gender of service delivery, adolescent needs with regards to family planning; management and technical competence of service providers; policy environment relating to family planning service delivery; the role of non-clinic based service delivery systems; and finally, the availability and distribution of contraceptive methods.

Overall, Assessment findings reveal a strong national consensus over the need for fundamental changes in the way reproductive health services are provided within Zambia. With respect to the role of gender, there is widespread recognition that while women have been the users and principal recipients of almost every family planning method today available in Zambia, their role as decision makers in efforts to expand contraceptive choice has been notable only by its absence. Equally absent has been the incorporation of men within the service delivery system. At all levels and in all regions of the country, family planning is viewed as a woman's responsibility with the result that the provision of services has been directed exclusively towards women. The consequences of this exclusion, however, also directly affect women in

that public health sector norms still require male consent before a woman can be provided with family planning services.

Also marginalized from the current service delivery system are adolescents who, despite their high risk of STI transmission, unplanned pregnancy and clandestine abortion, remain excluded from formal service delivery and even guidance on sexuality within the home. Parents and health care providers typically underestimate levels of adolescent sexual activity, thereby obviating, in their eyes, any need to provide information that would enable youth to deal with their sexuality in a mature manner. Unfortunately, like their parents, Zambian youth also confront double standards in accessing contraceptive services and information. Foreshadowing patterns to come later in adulthood, authority to obtain contraceptive methods is vested in the boy, while responsibility for the consequences of an unplanned pregnancy rests entirely with the girl.

Given Zambia's long history of donor support for family planning services, a discouraging observation of the Assessment is the poor technical competence of service delivery personnel. The Assessment finds that, in general, knowledge of existing contraceptive technology is either lacking or outdated; the relevance of physical exams is rarely understood; client provider-interaction is largely non-participatory; and the intrusion of provider biases towards client and method selection is widespread. Though inadequate training accounts for many of these weaknesses, just as important is the low prestige of family

planning relative to other maternal and child health activities; the lack of adequate management support among the different levels of the health care system; and the absence of an operative management information and logistics system.

Zambia's reproductive health and family planning programmes represent areas in which national policy has, in some respects, remained at least one step ahead of public opinion. There already exist, for example, policies specifying abortion eligibility criteria, guaranteeing equal access to services, and allowing flexibility in the categories of provider who can offer family planning services. Within Zambia's health sector, therefore, the critical issue is less one of unmet policy need than it is of the way in which existing policy is currently applied. Regrettably, widespread lack of awareness of existing policies has created a vacuum in which the delivery of family planning services has come to reflect more the value judgements and personal biases of individual providers and health care administrators, than the reproductive health needs of the community itself.

According to recent surveys, up to half of all family planning users in Zambia rely on non-clinic based sources of family planning services such as private pharmacies, community based distributors, local healers and traditional birth attendants. Given the resource constraints facing public sector programmes and the greater accessibility and potential cost-savings of community-based services, the latter's potential for increasing contraceptive choice in Zambia is

significant indeed. It has, for example, greatly increased the availability of services to those underserved groups whose access have been restricted because of age, marital status or gender.

Since the early 1970s, Zambia has been the site for clinical and introductory trials of virtually every contraceptive method currently available on the market; yet the range of contraceptive methods currently available to the average Zambian woman is extremely narrow. Indeed, except for a limited number of urban-based hospitals or private family planning clinics, Zambians today effectively have access to only two reversible contraceptive methods: the pill and the condom.

Taking into account, therefore, the strengths and weaknesses of Zambia's current service delivery system, the sociocultural and policy context within which that system operates, and the needs of all family planning users, the Contraceptive Needs Assessment concludes that there is indeed sound justification for introducing new contraceptive technologies and for expanding utilization of existing methods. There also exists, the Assessment concludes, a need to discontinue a number of currently available methods.

In Zambia today, half of all users of a modern contraceptive method use oral contraceptives; yet the quality of services associated with their delivery appears to be extremely uneven. Field visits undertaken during the Contraceptive Needs Assessment suggest that two factors may be

responsible for this situation. One is the excessive number of pill brands currently available through the commodity distribution system; the other is inadequate technical competence of service providers at managing so wide a range of brands. The Needs Assessment recommends, therefore, that the existing duplication in method availability be eliminated and that supervision and technical support to service providers be enhanced so that they can make effective use of the oral contraceptives available to them. The Assessment also recommends, based on new findings in the contraceptive technology field, that action be taken to remove the 50µg estrogen-containing oral contraceptives and the triphasic preparations from the current range of brands provided.

After pills, condoms are the second most widely used reversible contraceptive method in Zambia - their popularity at least partially attributable to their widespread availability within and outside the formal health sector. Field visits carried out under the Assessment suggest that the present distribution system, particularly the private sector and non-clinic based components, has had a major impact on bringing family planning services within the reach of persons routinely excluded from the formal health care sector because of age and marital status. The Assessment recommends, therefore, that the lessons of this experience be examined and, where possible, applied to the delivery of other contraceptive methods, such as the pill, which could benefit considerably from increased user knowledge and accessibility.

Spermicides represent only a minor percentage of overall contraceptive use in Zambia. Nevertheless, there is demand for them, particularly foaming tablets, among users and service providers alike. To date, the principal constraint to expanded use of spermicides has been the limited supplies of them. For that reason, the Assessment recommends that efforts be made to ensure that stocks of vaginal tablets and foams are adequate to satisfy current demand levels. Moreover, it suggests that if discernible preferences do indeed exist for specific spermicidal methods, user studies should be carried out to identify and understand these preferences better so that they can be reflected in subsequent commodity procurement.

Given Zambia's limited method mix, the IUD could very well meet the contraceptive needs of many women for whom hormonal methods are not appropriate. And yet nowhere in Zambia is the IUD a widely used contraceptive method. Based on visits undertaken during the contraceptive Needs Assessment, the limited role of the IUD within Zambia's contraceptive method mix was found to be a function of strong provider biases and institutional barriers within the medical establishment. The Assessment concludes, therefore, that the IUD will only play an appropriate role within the national family planning programme through its reintroduction. This would entail more systematic training of providers in counselling, IEC, and field-based service delivery.

Provider biases in the selection of oral contraceptive brands coupled with the irregular supplies that such biases

encourage, suggest that there is also an important role to be played by longer-acting hormonal methods. To date, there are only two methods available in Zambia with the potential to satisfy this need: injectables and implants.

On field visits conducted during the Needs Assessment, demand for a longer-acting, injectable contraceptive was found to be widespread, both on the part of users and service providers. Although long-standing biases against certain injectable brands do exist, it was felt that injectables could very well play an important role in expanding contraceptive choice nationwide. The Assessment recommends, therefore, that the potential for such expansion should be explored fully and carefully through limited introductory trials.

Similarly, contraceptive implants have been available within Zambia since 1986 through clinical trials of Norplant® at Lusaka's University Teaching Hospital. Thus far, the results of the trials have been extremely positive; yet their success can be attributed in part to the level of services and infrastructure available at urban facilities. Sterile procedures can be assured; medical staff can be available for immediate implant withdrawal if requested; and follow-up can be facilitated because transport and communication facilities are present. For that reason, the Assessment cautions that if Norplant® services are to be expanded, this should be done only where access to urban facilities with appropriate follow-up procedures and trained providers can be assured.

Given the limited range of modern contraceptive options currently available in Zambia, natural family planning could have a significant impact on overall contraceptive use and, in many cases, make the difference between use and non-use of any family planning at all. Yet visits to health centres and hospitals across the country reveal that natural family planning has not been incorporated into the overall range of available family planning methods. The Assessment concludes, therefore, that successful incorporation of natural family planning with Zambia's service delivery programme will require

fundamental changes in the way such services are offered. It recommends that all providers within a given service delivery setting be trained in all methods so that natural family planning becomes merely one of any number of options to choose from. Furthermore, the range of natural family planning methods discussed by providers should be expanded to include lactational as well as other menstrual cycle-related methods. Finally, users should also be encouraged to switch methods as their reproductive health needs change or even to combine methods such as rhythm and condoms.

Introduction

This report represents the application of the first stage of WHO's strategy for contraceptive introduction in Zambia. Designed to help governments broaden available contraceptive options, the WHO strategy is a three-stage programme to assist in country-level decision making by focusing on user's needs for contraceptive methods and the capability of the service delivery system to provide those methods with appropriate quality of care.

Implementation of Stage I of the strategy, the Needs Assessment, is based on the principle that introductory research or decisions about the appropriateness of expanding the existing method mix or improving the utilization of existing methods should be preceded by an assessment of the country's method mix, its service delivery capabilities, and users perspectives. Limiting introductory efforts to settings where service delivery capabilities exist to introduce new or under-used methods with appropriate levels of quality of care ensures that contraceptive introduction increases meaningful rather than theoretical options available to men and women.

Stage II follows the selection of a method or methods for introduction with the research required on service delivery issues such as management, provider-user interaction, and factors influencing method supply. Finally, at Stage III, research findings are applied to decision making, policy formulation and strategic planning. For a more detailed discussion of the WHO

strategy on contraceptive introduction, see Spicehandler and Simmons, (1994).

As this report reveals, a Stage I Assessment is both similar to, as well as different from, Needs Assessments undertaken by other national family planning programmes. It is similar in its broad overview of both the demand (user needs) and supply (service system capabilities) factors of family planning in a given country. In this sense, it utilizes and builds upon similar assessments undertaken by other donor and/or technical assistance agencies. Unlike more programmatically oriented reviews, however, the focus of the Stage I Assessment is on a country's method mix and on improvements in the availability, accessibility and quality of care that can be achieved through the introduction of new methods, or the reintroduction of an existing technology.

The second distinctive feature of the Stage I Contraceptive Needs Assessment is its research orientation for contraceptive introduction. The purpose of the Assessment is not only to identify opportunities for the introduction of fertility regulation technologies, but also to identify what research is needed to ensure that such introductory efforts take into account both the demand and supply aspects of family planning in a given country. For that reason, the present Assessment does not represent an extensive in depth analysis or baseline survey. Rather, it synthesizes existing secondary data, and draws on a limited range of primary data from key

informant interviews and observations of clinic settings.

Objectives of the Needs Assessment

Despite rapid progress in expanding the delivery of family planning services in Zambia, one area of continuing concern for planners and donors alike is the limited method mix and the impact of that mix both on the nation's low contraceptive prevalence (15% total, 9% modern) and on the feasibility of achieving prevalence targets as set forth in its National Family Planning Programme (Zambia, 1992). According to the 1992 Zambia Demographic and Health Survey, 48.3 percent of all married women of reproductive age using a modern contraceptive method were using the pill, versus 20.2% and 23.6% for condom and surgical contraception respectively. Use of the IUD, injectables, diaphragm, foam and implants was virtually negligible (Gaisie et al., 1993).

Recognizing that expanding contraceptive choice and improving quality of care can increase acceptance and encourage greater use of more effective contraceptive methods, the Ministry of Health requested in 1994 that the World Health Organization, together with the Population Council, assist them in undertaking the present Stage I Contraceptive Needs Assessment. The Assessment, therefore, was undertaken with the following two broad objectives in mind:

To analyze Zambia's contraceptive method mix from the perspective of user needs, service delivery capabilities, and the feasibility of

modifying an existing service delivery system.

The present Assessment was carried out with the intent of answering at least the following three questions: Is there a need to explore the introduction of a new contraceptive technology in Zambia and, if so, what is the appropriate timing for such introduction? Are there existing methods for which better utilization should be explored? Is there reason to discontinue already available methods?

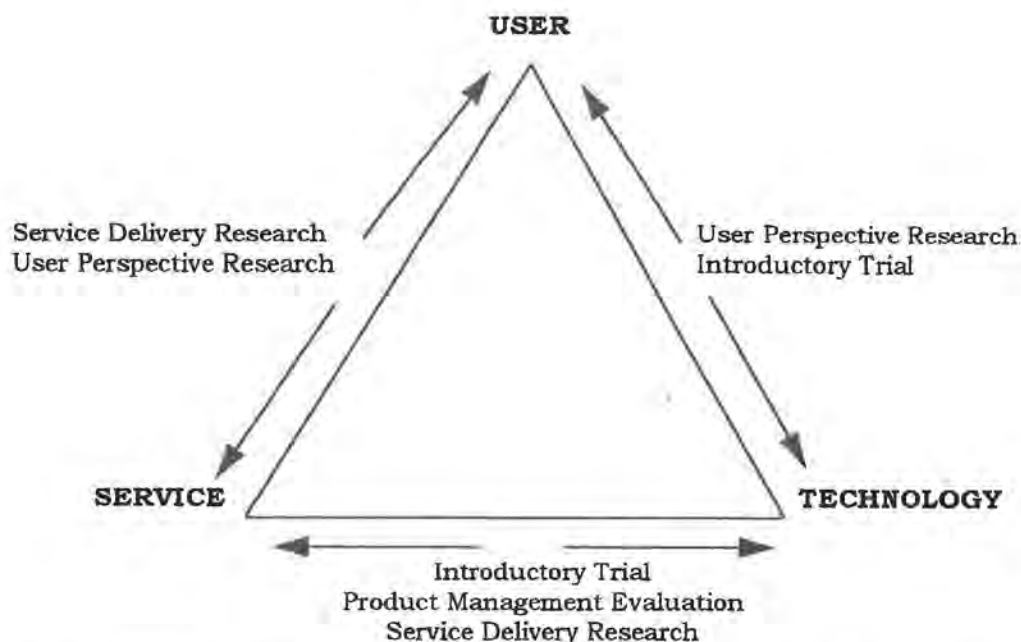
To identify needs for introductory and other operations research and action.

Introductory research under the WHO strategy is oriented towards examining the interface between the user, the service delivery system and the technology or contraceptive method. As illustrated below in Figure 1, Stage II research may entail *introductory trials* of a new contraceptive method so that service providers gain firsthand experience and confidence with the new technology. It could entail assessments of *user perspectives* that influence individual decisions to select or reject contraceptive methods. Or it may focus on *service delivery* issues such as the organizational, management and policy context within which services are provided.

In all cases, however, the research is operationally or action oriented in the sense that it is designed to "increase the efficiency, effectiveness, and quality of services delivered by providers; and the availability, accessibility, and acceptability of services desired by users" (Fisher et al., 1991).

FIGURE 1

Research Activities based on
User, Service, and Technology Interfaces



Methodology of the Needs Assessment

Background paper

Experience with implementation of the WHO's strategy in other countries has indicated that the preparation of a background paper on the national family planning environment can be a valuable tool in carrying out a Contraceptive Needs Assessment. By reviewing and synthesizing all existing research and service delivery data, the paper not only constitutes an important document in its own right, but ensures that all those involved in the assessment process have ready access to a common body of knowledge.

In January 1995, therefore, a literature review of available research findings and

service delivery data on reproductive health in Zambia was undertaken (Mbomena, 1995). The review was supplemented subsequently by interviews with private pharmacists in Lusaka, with clinic and administrative staff of the Planned Parenthood Association of Zambia (PPAZ), and with representatives of the Ministry of Health and the Young Women's Christian Association (YWCA).

Contraceptive Needs Assessment planning workshop. On 30 January 1995, the Ministry of Health MCH/FP Unit, the National Commission for Development Planning (NCDP) and the Interagency Technical Committee on Population (ITCP) sponsored a one day workshop during which plans were developed for implementation of the

Stage I Contraceptive Needs Assessment. Some 35 participants, representing the service delivery, academic, NGO and international donor communities, attended.¹

The meeting involved two sessions: the first at which the WHO strategy, a proposal for the conduct of the Assessment and the principal conclusions of the Stage I background paper were presented and discussed; and a second session during which participating members of the three ITCP Subcommittees selected members of the Contraceptive Needs Assessment Team. The participants divided into five working groups, each focusing on one of the critical theme areas targeted for study during the Assessment: service delivery (including IEC), logistics, women's advocacy, health research, and public sector policy. After identifying the key issues for review under each theme area, the working groups identified two individuals they considered qualified to address such issues as members of the Contraceptive Needs Assessment Team.

By the end of the workshop, a team of ten individuals and five alternates, had been identified. The team included representatives of the Ministries of Health (MCH/FP, Statistics and Health Reforms Divisions), Defence (Defence Medical Services), and Information

(Zambian Information Service, ZIS); Makeni Ecumenical Centre; Medical Stores Limited (MSL); Planned Parenthood Association of Zambia (PPAZ); the Institute for African Studies (IAS), and the University Teaching Hospital (UTH) of the University of Zambia; and the Young Women's Christian Association (YWCA).²

Preparation of assessment

instruments. During the week of 13 to 17 February, members of the Assessment Team convened to define the scope of the Assessment, develop survey instruments and develop a timetable and agenda for field activities. The process was participatory in nature with team members drawing on their own diverse professional backgrounds, the results of the background paper, and the recommendations made during the 30 January workshop. The design exercise identified seven major themes around which open-ended discussion guides or frameworks were designed.

The major themes identified were:

- the role of gender on service delivery and user needs
- the role of adolescent needs with regard to family planning
- the technical competence of service providers
- the current management of family planning services delivery

¹Participants to the workshop were drawn from the following organizations: Ministry of Health, National Commission for Development Planning (NCDP), Makeni Ecumenical Centre, Ministry of Labour and Social Services, Family Life Movement, Pharmaceutical Society of Zambia, Medical Stores Limited, Planned Parenthood Association of Zambia, Women in Development, Young Women's Christian Association, Law Association of Zambia, Society for Women and AIDS, Family Health Trust, University of Zambia (Institute of African Studies and the University Teaching Hospital), Central Statistical Office, Zambia Research and Development and a number of Lusaka-based donors and international organizations

²The assessment team comprised the following persons: J. Mbomena, Team Leader (Ministry of Health), R. Mulumo (YWCA), J.R. Muunyuu (Makeni Ecumenical Centre), R. Likwa (Ministry of Health), M. Luhanga (Ministry of Health), J. Puta (Defence Medical Services), C. Mutungwa (PPAZ), N. Mulikita (ZIS), E. Ndalama (Ministry of Health), D.M. Chimfwembe (Ministry of Health), H. Kaluwe (MSL), and J. Kamwanga (IAS). D. Chikantata and J. Skibiak, (the Population Council, Nairobi) and P. Hall (WHO, Geneva) provided technical assistance.

- the policy environment relating to the provision of family planning services
- the role of non-clinic based service delivery systems on the provision of family planning services
- the availability and distribution of contraceptive methods.

By the end of the five days, discussion guides had been prepared for the field teams to use with service providers, family planning users and non-users, pharmacists, the Pharmaceutical Society of Zambia and policy makers and programme managers.

Field assessment. During the period 27 February to 18 March 1995, the Assessment Team conducted individual and group interviews, focus group discussions and clinic observations in 13 districts in five provinces. These are listed in Table 1. The provinces were selected for study so that the Contraceptive Needs Assessment could include areas which gave a range of socioeconomic, demographic and health situations, such as:

- coverage/access to medical services and personnel

TABLE 1

AREAS VISITED BY CONTRACEPTIVE NEEDS ASSESSMENT TEAM

Province	District
Lusaka	Urban (both urban and periurban areas)
Western	Mongu
	Senanga
	Kaoma
Eastern	Chipata
	Lundazi
	Chadiza
Copperbelt	Ndola Urban
	Masaiti
	Kalulushi
Luapula	Mansa
	Samfya
	Mwense

- quality of service statistics
- contraceptive prevalence
- urbanization
- levels of external donor support.

During the field Assessment, three approaches were used to collect information. The first entailed *interviews* with field based service providers including clinicians, community based distributors (CBDs) and traditional birth attendants (TBAs); family planning users as well as non-users; policy makers and key administrators including the Permanent Secretary, Provincial Medical Officers, District Health Directors, and leaders of family planning organizations; representatives of women's health advocacy groups; and traditional healers

The second approach involved *focus group discussions*, particularly among representatives of women's organizations, youths, men, and non clinical service providers such as traditional healers and TBAs.

Finally, the third approach adopted involved *observation* of the delivery of family planning services, including determining the contraceptives available in health facilities; the expiry dates of these contraceptives; availability of equipment and space at service delivery sites; and the adequacy of contraceptive storage facilities.

Preparation of the draft report. Given the interactive and largely qualitative nature of the research methodology, the analysis of field data in a contraceptive needs assessment does not take place separately, after the observation period, but is an integral part of the data collection process itself. At the conclusion of each day of fieldwork, for

example, the two assessment teams met regularly amongst themselves to discuss and reflect upon each day's observations. Notes were compared, survey instruments modified and, if necessary and where feasible, interviews were rescheduled to collect further information on key issues which only became evident in the field.

Thus, by the time the two teams assembled to prepare the assessment report the most critical field observations had already been discussed at considerable length. Consequently, the five-day report writing meeting was designed to give structure to those earlier discussions as well as to ensure that the assessment report reflected what the team members felt were their most significant observations. This was critical because it effectively narrowed down the discussion to issues team members felt they could address substantively, while obviating any sense of obligation to discuss issues to which the team had only superficial exposure.³

Three sets of activities were undertaken at the meeting. The first was a consensus building exercise to prioritize field observations based on the team's own perceptions and the priorities of the previous Planning and Instruments Design Workshops. Before the initial group discussion, each team member was asked to identify the five most salient points he or she had encountered during the field exercise. Each member

³ To the extent that field observations were guided by survey instruments that themselves reflected the priorities of previous Planning and Instruments Design Workshops, there was obviously consistency between the final report and these earlier discussions. Nonetheless, the report preparation exercise was valuable in that it empowered the assessment team to decide what issues were appropriate for inclusion in the final report.

was then asked to present their five points with supporting examples and, if necessary, to lead a group discussion comparing his or her observations with those of others. By the end of the exercise, approximately 50 points had been presented and discussed at considerable length.

The second exercise involved grouping the points into categories which could then form the main headings or even chapters of the final assessment report. Since the team members were asked to identify their key observations prior to hearing those of their colleagues, the inevitable overlap simplified the grouping process by reducing the overall number of points to be clustered. Nonetheless, by the end of the second exercise, at least seven chapters or groupings of ideas had been tentatively identified.

The third and by far the most time-consuming exercise was the preparation of outlines for each chapter. Given that the team had already identified the general contents of each chapter, the challenge at this stage was deciding how to structure a coherent argument that could encompass or link the points already identified. In some cases, this led to a consolidation of previously defined headings; in others to their splitting.

Ultimately, by the end of the exercise, six chapters emerged. These included gender and the social context of method choice; technical competence of providers; management of family planning services; family planning policy; availability and distribution of contraceptive commodities; and non-clinical service delivery. Detailed outlines were prepared for each chapter,

with each team member being assigned responsibility for writing one or more sections. Over the course of the following month, member's contributions were consolidated, edited and circulated internally for additional comments.

Contraceptive Needs Assessment dissemination workshop. On 29 and 30 May 1995 a national workshop was held to disseminate and discuss the findings of the Zambia Contraceptive Needs Assessment. Chaired by the Deputy Minister of Health and the Permanent Secretary, the workshop was attended by more than 120 participants representing the service delivery, academic, NGO and international donor communities. In addition, each of the provinces and districts visited during the Assessment sent delegations comprising: administrators, policy makers, and senior health managers; hospital-based providers including district medical officers; and community based providers, including CBD workers.

Apart from disseminating the preliminary findings and recommendations of the Contraceptive Needs Assessment, the Workshop had the following three objectives:

- to serve as a forum for the exchange of ideas on contraceptive needs in Zambia
- to reach consensus among workshop participants on the accuracy and validity of the Assessment findings
- to obtain additional inputs from participants for incorporation into the final Contraceptive Needs Assessment report.

The agenda involved two-days of presentations and discussion. The first day was devoted to presentations of the

Assessment's findings and recommendations during which members of the Assessment Team discussed the seven major themes into which the draft report had been divided.

The second day of the workshop was designed to allow the district delegations and other workshop participants to respond to the Assessment's major findings; recommend ways for improving service delivery at the community level; and identify any other issues in reproductive health that might be addressed in the Assessment document. Four working groups were established, one for each of the professional divisions described above as well as an additional group comprising representatives of non-governmental organizations involved in community based activities and women's advocacy. The findings of the working sessions were presented and discussed during a plenary session.

By the end of the two-day workshop, consensus was reached that the Assessment's findings did indeed accurately reflect the family planning environment in Zambia. The participants called for two major modifications to the draft Assessment report. First, they recommended that

discussions on adolescent sexuality and reproductive health be expanded into a separate chapter. Second, they recommended modification and strengthening of several of the recommendations in the report and that the discussion on policy be amended to reflect the Ministry of Health's primary responsibility for providing family planning in areas served only by private facilities choosing not to provide them. Both of these changes have been incorporated into the present document.

On 31 May, a follow-on workshop was held to address specifically the Assessment's findings and recommendations relating to contraceptive commodities logistics. Sponsored by the Ministry of Health (MCH/FP) and the British Overseas Development Administration (ODA), the one-day workshop was attended by 45 participants directly involved in the management or implementation of commodities logistics systems. The discussion on logistics, therefore, has also been expanded into a separate chapter in order to encompass both the original findings of the Assessment Team and the recommendations of the logistics workshop.

The Status of Reproductive Health and Family Planning

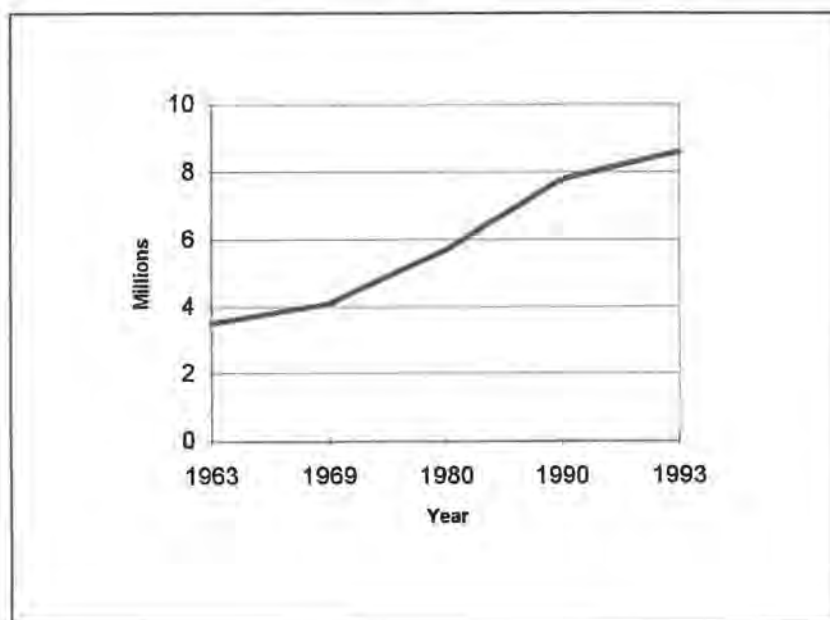
Zambia is a landlocked country in southern Africa covering a total of 752,614 square kilometres. The country shares borders with eight countries: Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Zaire, and Tanzania. It has a total population of 8.6 million people (1993 projection) with an average population density of 10.4 per square kilometre (Gaisie et al., 1993).

As illustrated in Figure 2, the population has increased rapidly over the last 30

years. Results from the last four national censuses indicate that the population increased from 3.5 million in 1963 to 4 million in 1969, 5.7 million in 1980 and to 7.8 million in 1990. Zambia's growth rate has also remained high. Between 1963 and 1969, the growth rate was 2.6 percent per annum (Gaisie et al., 1993). This increased to 3.1 percent per annum between 1969-80, and then levelled off to 2.7 percent per annum in the period 1980-1995.

FIGURE 2

ZAMBIA'S POPULATION
(1963-1993)



Fertility levels in the country have remained persistently high for several decades. The Crude Birth Rate (CBR) was approximately 50 per 1000 population per year in the 1950-55 period and has remained unchanged since then (about 49 per 1000 population in 1988).

The Crude Death Rate (per 1000) declined from 19.7 in the 1969 census to 16.7 during the quinquennium 1975-80, and then to 13.2 during 1985-1990 (Gaisie et al., 1993). This decline has also contributed significantly to the rapidly growing population. Although the infant mortality rate declined from 141 per 1000 live births in 1969 to 97 in 1989, the 1992 Demographic and Health Survey showed that infant mortality rate had again risen to 107.2 per 1000 live births (Gaisie et al., 1993).

Zambia remains sparsely settled. Nonetheless its population density has increased since 1969 from 5.3 to 10.4 people per kilometre in 1990. There are however, substantial provincial variations, with densities ranging from as high as 55.2 and 50.4 persons per square kilometre in Lusaka and Copperbelt provinces, respectively, to as low as 3.0 persons per square kilometre in North Western province. The population is also very unevenly

distributed among the provinces, with Copperbelt and Lusaka Provinces accounting for 35.7 percent of the country's total population in 1990, yet covering only 7.1 percent of the total land area (Gaisie et al., 1993).

In 1980, 20 percent of Zambia's population was under 5 years of age and 49 percent was under the age of 20 years. Although the National Population Policy seeks to reduce the nation's total fertility rate from 7.2 to 6 by the year 2000, the youthfulness of the population implies that the momentum for future population growth will be high even if fertility levels decline in the immediate future.

Despite increased knowledge about family planning and positive attitudes towards it among both the general public and policy makers, utilization rates of contraceptives have remained fairly static over time. The reasons for this are many but principal among them are inadequate supplies, restricted method mix, poor logistics and information systems and inadequate technical capacity on the part of service providers. Table 2 illustrates family planning knowledge and utilization rates as reported in the 1992 Zambia Demographic and Health Survey (Gaisie et al., 1993).

TABLE 2**KNOWLEDGE AND USE OF FAMILY PLANNING METHODS**
All Women of Child Bearing Age, 1992

METHOD	KNOWLEDGE	UTILIZATION
Any method	89.4%	11.6%
Modern method	87.1%	7.0%
Oral contraceptives	78.1%	3.5%
IUD	43.0%	0.4%
Injectable contraceptives	38.1%	0.1%
Female Sterilization	63.6%	1.5%
Male Sterilization	17.9%	0.0%
Foam/jelly/diaphragm	23.8%	0.1%
Condom	72.0%	1.4%

Source: (Gaisie et al., 1993)

Gender and the Social Context of Contraceptive Method Choice

Women are the users and principal recipients of family planning in Zambia, yet the role of women in efforts to expand contraceptive choice has been notable by its absence. Women's involvement in contraceptive introduction, if considered at all, has been restricted almost exclusively to that of clinical subject. Sadly, but not surprisingly, the consequences of this exclusion are visible today in the nation's limited method options, low contraceptive prevalence, and high levels of clandestine abortion and maternal mortality.

Reproductive decision-making is as much a function of ones' economic and cultural position within society as it is of the biological exigencies of ones' sex. This chapter, therefore, examines the impact of gender on four major variables involved in reproductive decision-making. These are: empowerment and decision-making within the home; perceptions of risk relative to reproductive health; social status; and access to family planning services and information. In no way does this section purport to be a comprehensive analysis of the relationship between gender and reproductive health in Zambia; rather it highlights a number of variables identified by the Assessment Team as being particularly influential in determining reproductive need, access to services, and ultimately, contraceptive method choice.

Empowerment and Decision-making within the Home

In Zambia, research on the sociocultural determinants of fertility has tended to emphasize the societal pressures encouraging higher fertility in general, rather than the degree to which these pressures impact men and women differently. Yet based on observations and interviews carried out during the Assessment, men and women clearly do confront quite distinct constraints, both in setting their own reproductive goals and in accessing the services that would facilitate obtaining them.

For women, reproductive decision-making is strongly influenced by their empowerment and right to influence decisions regarding children. Much has been written about Zambia's traditional lineage systems and specifically the impact such systems have on rights over children, decision-making and power relations within the household. However, based on the interviews carried out during the Assessment, the relationship between these systems and women's empowerment is neither as clear nor as direct as might be assumed. It has been argued for example, that among matrilineal groups, women are typically surrounded by supportive kin and, as such, benefit from direct access to economic resources such as land and

labour. In such societies, particularly where matrilineal residence is involved, husbands traditionally hold a subordinated position towards their in-laws which in turn bears heavily on resource allocation and decision making within the home.

In patrilineal societies by contrast, women have been described in the literature as detached from their patrilineal kin and, therefore, far more dependent on their husbands and in-laws for access to resources. Traditionally, patrilineal marriages are seen to be more "stable" than matrilineal ones since men can work to accumulate an estate which their sons will inherit, rather than being torn under a matrilineal system between the conflicting demands of one's nuclear family and those of one's matrikin..." (Geisler et al., 1985).

During the Assessment, field visits and interviews were carried out amongst groups representing the full range of lineage systems in Zambia, including the Lozi of Western Province where descent is traced bilaterally. What emerged from these discussions was a pattern in which, regardless of lineage system, women's influence over decisions regarding children is subordinated to men, whether it be to their husbands, to their male matrikin, or to both. What differs from one lineage system to another is not so much the relative autonomy or empowerment of women, but the institutions through which the subordination of women's control over children is expressed or institutionalized.

Among patrilineal groups, this subordination is typified through the institution of *lobola* or brideprice,

whereby a woman's reproductive rights - and ultimately control of her children - are effectively purchased by the husband. Under matrilineal systems, marriage payments or *chimalo* are also made, through it has been argued that such payments serve more as a tokens of reciprocity to a woman's matrikin, since rights over the wife's fertility, remain fully vested with the matrikin itself, specifically by the mother's brother. Ironically, however, women's authority over children and reproductive rights may even be more precarious under a matrilineal system, insofar as it obliges women to effectively serve "two lords" - her husband and brother. (See Drews, 1992 for a wider discussion on the cultural significance of *chimalo* payments in Kunda society.)

The inequality between husband and wife under *lobola* or between mother and male kin group under *chimalo* is widely recognized in the literature and is often described in terms suggestive of the value associated with fertility and the control men exercise over it. It is said that "a woman should either be pregnant or breast-feeding", implying that marriage without children is meaningless. Interviews from across the country repeat the theme of male ownership of children:

Abene balefwaya umwana [Bemba]
Bo muna luna babata mbututu [Lozi]
Ba dada ba khumbaso mwana munyake [Tumbuka]

With few exceptions, therefore, male involvement in reproductive decision making is a fact that women at all social and cultural levels must confront and address. Moreover, it is an involvement that women in focus groups and

interviews across the country showed no overwhelming desire to eradicate - either for themselves or for others.

Unfortunately, formal efforts to incorporate men in the decision-making process have all too often done so at the expense of women's reproductive rights: by requiring spousal approval to obtain family planning services, or by the refusal to provide services to young or unmarried women.

Recommendations:

A concerted effort should be undertaken to involve men directly in programmes dealing with fertility regulation, while at the same time respecting women's reproductive rights.

Perceptions of Reproductive Risk

There is general consensus among men and women that it is women who are most exposed to the risks of illnesses or poor health associated with reproduction and sexuality. Repeated child birth is widely perceived as weakening the uterus and rendering the body susceptible to dizziness, anaemia and abdominal pains. There is also consensus that women are at a higher risk of contracting sexually transmitted infections, including HIV/AIDs. Finally, menstrual blood loss is seen as detrimental to a women's health - "during menstruation, women perceive that a wound is forced where the blood comes from so that infections such as AIDs can enter easily".

Regrettably, however, such widespread recognition of women's reproductive health risks has not translated into any broad-based sense of responsibility across sexes. On the contrary, it appears that the association of reproductive risk with women has given rise to a view that men are somehow totally peripheral to the problem. At all levels and in all regions of the country, family planning is viewed as a woman's responsibility. This perception is even present in the case of traditional contraceptives, where knowledge is not only restricted to women, but carefully guarded from men "to ensure its efficacy".

In Zambia, forty percent of all family planning users use some form of non-modern method. Yet of these methods, only a small percentage consists of what is normally considered to be effective naturally family planning such as periodic abstinence, lactational amenorrhea (LAM), cervical mucus, etc. According to the 1992 DHS, 82 percent of currently married women using non-modern methods practice either withdrawal or employ folk methods such as beads or herbs around the waist, or herbal teas (Gaisie et al., 1993).

Interestingly, such distancing of men's involvement in traditional contraception stands in sharp contrast with much of the anthropological literature on the topic. Munachonga (1989), for example, argues that within traditional society, responsibility for preventing pregnancy was stressed and observed by both husband and wife. Moreover, research suggests that the connection between birth spacing and child survival was widely recognized and attributed great

importance. Expectant mothers were sent away to their parents until the child was able to walk, while breastfeeding mothers abstained from sex under the belief that pregnancy would spoil her milk and endanger the life of the baby. Indeed, in many cases, extramarital relations on the part of either parent were seen as equally detrimental to the baby.

Whatever the realities of traditional society may have been, observations made during the Assessment left little doubt as to the exclusive association of fertility regulation with women. During field discussions, for example, men consistently shunned responsibility for use of contraception, particularly modern methods, on the grounds that it was not they who were "producers of children": "Why should I be sterilized when I don't produce? The one who gets pregnant and goes through labour should be the one to be sterilized".

Economic Independence and Reproductive Rights

International Women's Day (8 March), took place during the Assessment's field component and provided the Team with numerous opportunities to interview representatives of women's advocacy groups from across the country. Given the direct participation of representatives of urban-based women's advocacy groups in the Assessment, an unexpected observation was the degree to which support for women's control over reproductive rights was voiced so strongly by rural women - often more strongly than by urban women.

Rural women, for example, frequently supported the right of a woman to determine, independently of her husband, whether to have an abortion or to practice contraception. Urban women, by contrast, were more inclined to argue that such decisions should be arrived at jointly by the couple or even, on occasion, by the husband alone. Ironically, urban women typically justified their more equivocal positions on the basis of what they perceived to be "traditional" Zambian values.

Such responses appear counter-intuitive, particularly given the greater literacy and western exposure of urban society in general. Yet in many respects, the pattern is consistent with the fact that rural women, despite their greater exposure to the cultural constraints described previously, often exhibit in their daily lives far greater economic and even social independence than their urban counterparts. Indeed, many rural women, particularly those in polygamous marriages, maintain full responsibility for food production and income generation as well as child rearing.

Studies have shown that greater economic independence enhances women's knowledge and use of modern contraception while diminishing the importance of children for status or social security reasons. What the present Assessment has shown, therefore, is that economic independence and recognition of reproductive rights are not exclusively urban phenomena. Consequently, in expanding family planning service delivery or contraceptive method choice, rural women must not be excluded from the process on the assumption that their more "traditional

sociocultural patterns" will either run contrary to or constrain their demand for contraceptive services.

Access to Family Planning Services and Information

Visits to service delivery points across the country leave little doubt that the provision of family planning services, at least within public sector facilities, is strongly biased towards women. This is evidenced by the incorporation of family planning services within Maternal and Child Health (MCH) programmes; the fact that most providers are women; and the limited range of contraceptive methods available to men.

Equally biased is the content and dissemination of information, education and communication (IEC) on family planning. Indeed, IEC on family planning has been targeted almost exclusively to women, while materials targeted towards males have tended to concentrate on condom use and protection for sexually transmitted infections.

While there is a strong argument to be made for structuring service delivery in a way that is acceptable and accessible to those with primary responsibility for ensuring reproductive health, a serious consequence of gender biases at the service delivery level is that it has effectively excluded from the decision-making process those whose authority is needed to access modern family planning services, namely men. At the service delivery level, this exclusion has become especially detrimental since in the past,

public health sector norms have required male consent before a woman could be provided family planning services. Although current Ministry policy prohibits this, it continues to be applied by service providers - largely to protect themselves from what is perceived as the potential wrath of annoyed and uninformed male spouses.

In short, the current delivery of public sector family planning services foments gender-biases in contraceptive information and services, while simultaneously prohibiting those it "favours" to act upon the information and services they are provided.

Recommendations:

Explicit gender policies should be established, disseminated and enforced by the Ministry of Health at all service delivery points.

Systematic research is needed to assess the trade-offs of gender biases at the service delivery level, relative to the public health benefits of increasing accessibility to services by those most likely to use them. The outcomes of this research could point towards greater integration of services for men and women or, alternatively, towards differentiation of services along gender lines.

A review of policy guidelines for family planning service providers should be undertaken at the national level but should include involvement of a broad spectrum of constituencies.

Adolescence and the Socialization Process

Data gathered during the 1992 Demographic Health Survey (ZDHS) reveal that initiation of sexual activity and childbearing in Zambia begins at an early age. By 17 years, nearly one-third of all women have either been pregnant or already had a first child; by age 19, the proportion of childbearing women jumps to a dramatic two-thirds (Gaisie et al., 1993). Other data, however, point to the alarming health consequences of such early pregnancy. A recent study carried out in four districts of Western Province, for example, found that twelve percent of all women in the age group 15-19 had undergone a clandestine abortion, most without the assistance of anyone else. Moreover, of the total number of recorded abortion-related deaths since 1970, (56%) occurred among school girls (Koster, 1995).

It was figures such as these that attracted the attention of the Assessment Team towards the needs and attitudes of young people on reproductive health and sexuality. What emerged from the Assessment was an alarming realization of the extent to which adolescents, despite their high risk of STI transmission, unplanned pregnancy and clandestine abortion, remain excluded from existing family planning services and even guidance on sexuality within the home. This exclusion was felt to be so serious a problem by the participants at the Assessment Dissemination Workshop, that this chapter has been expanded, at their request, to encompass the full range of field observations reported by the Assessment Team.

Parental Responsibility for Sexual Education

Traditionally, sex education is not considered either the role or responsibility of parents, but rather one delegated to grandparents, aunts or other distant relatives. Yet it is clear that increasing urbanization and fragmentation of the extended family is making the reliance on distant relatives less and less viable and the taboos on parental involvement less practical.

During the Assessment, focus groups were held with secondary school students nationwide to understand better their sources of information on sexuality and contraception as well as their views on reproductive health issues in general. What emerged from the discussions was a clear sense of frustration: frustration at not being able to discuss sex with either parents or teachers; frustration at having to resort to alternative sources of information (such as pharmacies or traditional healers), the reliability of which could not be assured; and frustration at not having access to public health care services.

The desire for greater communication with parents is a complex issue insofar as adolescents themselves admitted to feeling uneasy at discussing sexual matters with their parents. Indeed, the fear of encountering parents at a public health centre or of obtaining their consent before receiving contraceptive services were viewed as being as much a

disincentive to using such facilities as the potential disapproval of the health care providers themselves. It would appear, therefore, that adolescent complaints about not being able discuss sexual matters with their parents was less a function of being unable to approach them for advice directly, than it was of concerns that their parents, by being uninformed themselves, would be more likely to oppose the availability of contraceptive information and services in general.

For their part, parents expressed the same concerns as parents anywhere else. On the one hand, they wished to see their children protected from unwanted pregnancies and STIs; but on the other, fear that discussing such matters might either "put new ideas into their children's heads" or be interpreted as a sign of parental approval. Enough has already been written on this thorny issue, however, it was apparent nationwide that parents and even health care providers grossly underestimate levels of adolescent sexual activity, thereby obviating in their eyes any need to equip their children with the knowledge needed to deal with their sexuality in a mature manner. Instead, considerable faith is placed in the effectiveness of negative sanctions at deterring sexual activity. Indeed, one of the most startling discoveries to be revealed during interviews with adults and adolescent males was the degree to which factors such as expulsion of pregnant girls from school, the absence of effective contraception and the consequent risk of an unsafe abortion were viewed *positively* as effective deterrents to sexual activity. Sadly, the values underlying these concerns extend into other areas of life so that health care providers, being

parents themselves, adopt the same attitudes towards their adolescent clients.

Institutionalization of Sex Education

By and large, most youth obtain information on sexuality from their friends and peers. They are the ones to whom an adolescent turns first for general information; as well as the ones to whom he or she runs when suspecting a problem, such as pregnancy. The difficulty with such an arrangement, youth argue, is the unreliability of the information and the fact that there is no one else to turn to for back-up.

To date, there have been limited attempts at formal school-based programmes for sex education. For example, since 1983, UNFPA has sponsored a number of pilot "population education programs" that explicitly address the issue of sexuality and human reproduction in Zambia's secondary schools. All of these programmes, however, were located in schools falling outside the areas visited by the Assessment Team, so their impact was not assessed directly. In the schools visited by the Assessment Team, the issue of sexuality was restricted almost exclusively to the activities of Anti-AIDs clubs and other programmes promoting STI awareness. In these programmes, however, discussions on the relationship between STIs, sexuality and human reproduction were explicitly avoided out of fear by parents and teachers that such information will only encourage sexual activity among the students. However, the fact is that sexual activity among adolescents is already extremely high. A recent study on unplanned pregnancies

in Western Province, for example, found that by grade 12, 62% of secondary-school girls had had sexual contacts with men (Koster, 1995). Sadly, however, the Assessment Team repeatedly encountered stories of improper contraceptive use: of girlfriends sharing the same cycle of pills or taking pills only on their fertile days. Clearly, if avoidance of sexual matters within the schools has accomplished anything it has been to keep adolescents at high risk of pregnancy and abortion.

Gender Biases among Adolescents

It is a truism that gender biases begin at birth. Yet it is society and the socialization process that ultimately determine where and to what extent such biases will manifest themselves in everyday life. A critical finding to emerge from the present Assessment was the degree to which boys and girls confront double standards in accessing contraceptive services and information, as well as in addressing the consequences of an unplanned pregnancy. Foreshadowing patterns to come later in adulthood, authority to obtain contraceptive methods is vested in the boy, while responsibility for the consequences of an unplanned pregnancy rests entirely with the girl. Indeed, health care providers across the country were open in acknowledging that boys could freely obtain condoms or even pills if they wished, while girls would be required to show evidence of parental consent. And yet, when pregnancy occurs, it is the girl who is penalized. For it is she, not the boy, who is criticized for promiscuity; it is she, not the boy, who is expelled permanently from school; and it is she who must

confront the dangers of a clandestine abortion should the decision be taken to terminate the pregnancy.

The consequences of this double standard, though especially onerous for women, are also detrimental to adolescent males since, as noted previously, the formal health care sector is not really structured in a way that men can easily be incorporated within it. As a result, youths typically seek out alternative sources of information to suit their needs. One consequence of these informal information sources, however, is that youths are exposed to limited, often incorrect, information on contraceptive method options. Among adolescent boys, for example, contraception is viewed primarily as a means to avoid STIs, with the result that male (and ultimately female) knowledge of non-barrier methods is relatively minimal. Predictably, many youths admitted to dropping contraception altogether when it became clear that risk of STI transmission was perceived as minimal.

Recommendations:

Research is needed to determine the reproductive health needs of adolescents both in school and out of school. On the basis of this research, pilot programmes should be developed and compared in terms of cost, efficacy, and utilization. Programmes should explore the range of potential sponsoring institutions such as churches, schools, public health care facilities, and sports clubs.

The Ministries of Health and Education should develop appropriate policies jointly to deal with the issue of schoolgirl pregnancies.

Ministry of Health policies should be formulated, guaranteeing all adolescents, regardless of sex,

confidential access to quality reproductive health information and services.

Technical Competence of Family Planning Service Providers

For nearly a decade and a half, Zambia has enjoyed extensive donor support and technical assistance in the training of health personnel in family planning service delivery. Starting in 1981, with the launching of an in-service training programme for enrolled nurses and midwives, hundreds of health personnel have since been trained in family planning at the Mwachisompola training centre. Donor funding has also enabled cadres of registered nurses to attend technology updates and training at Lusaka's University Teaching Hospital (UTH) as well as travel to clinical programmes in Mauritius, Zimbabwe and the USA.

Given this long history of training activities, one of the most surprising observations to emerge from the Assessment, was the inadequate technical competence of service delivery personnel. While some notable exceptions do certainly exist, the Team found that overall, knowledge of existing contraceptive technology was either lacking or outdated; the relevance of physical exams was rarely understood; client provider-interaction was largely non-participatory; and the intrusion of provider biases towards clients and method selection was widespread. Though introduced here, some of these issues will be discussed again elsewhere in other chapters of the report, particularly insofar as they can be related to broader concerns such as management of services, policy and contraceptive technology.

Understanding of Available Technology

Training: Despite the large numbers of health personnel trained thus far in family planning, field visits to service delivery points nationwide revealed that most providers assigned to family planning duties actually have little if any family planning training. The reasons for this situation are numerous and, as we shall see in the following chapter, also relate very much to the management and incentive structure of the health care delivery system in general. One factor of major importance, however, is the low prestige of family planning itself. It is widely believed among many health care professionals that the limited range of family planning methods available at the community level (oral contraceptives and occasionally spermicides) simply does not warrant or require specialized training. In the view of many health care providers, family planning is simply an activity that can be learned adequately "on the job".

The results of such "on the job training" were evident in the poor quality of family planning services, such as the widespread lack of familiarity with the recommendations for selection and use of oral contraceptives. Few providers, for example, could even identify the hormonal composition of the pills they had in stock, let alone explain the significance of those differences. Indeed, many providers were completely unaware that combined oral contraceptives were not appropriate for breastfeeding women.

Physical examinations: The results of a rapid evaluation of MCH/FP services conducted in 1989 revealed that pelvic and/or physical examinations were performed on less than 19 percent of family planning clients (Mbomena, 1995). Observations by the Assessment Team suggest that even that figure may be an overestimation. Clearly, the relevance of physical and pelvic examinations is not widely understood, with the result that these tasks are rarely performed. Moreover, few of the service providers interviewed even considered themselves competent to perform pelvic examinations, either because they lacked adequate training or because they had never been able to use the training they had once received in the past. Under such circumstances, there is a greater risk that inappropriate contraceptives will be prescribed and that conditions requiring treatment prior to contraceptive utilization, such as sexually transmitted infections (STIs), will be missed.

Even in the rare cases where routine physical examinations were performed, however, service providers were often not able to interpret the findings or use them to recommend appropriate contraceptive method options. The implications of this finding for the use of contraceptives such as the IUD are serious, particularly given the association of sexually transmitted infections with pelvic inflammatory disease (PID).

Contributing towards the lack of adequate STI screening and treatment is the widespread under-utilization of existing resources - human and physical - at many health centres. At a number of centres, for example, high quality microscopes which could be used for diagnostic procedures were left lying idle

either because no one knew how to use them or there were no reagents available. These observations are consistent with the results of a 1990 MCH/FP equipment survey which reported the existence of one microscope and VDRL kit for every three of the 959 health facilities visited (Mbomena, 1995). Obviously, such ratios cannot be considered ideal; but neither can they justify entirely the degree to which STI screening and treatment is lacking.

Client/Provider Interaction

A third major weakness evident during the field interviews, was the lack of adequate provider skills in counselling. Inadequate facilities and staffing levels mean that many health facilities, by being crowded and noisy, allow few opportunities for meaningful interaction between providers and clients. One consequence of this is that health care personnel feel obliged to get as many clients through the system as quickly as possible. Indeed, the 1989 rapid evaluation of MCH/FP services found that actual staff-client contact time averaged only one to two minutes per family planning acceptor (Mbomena, 1995)! Obviously, under these conditions, clients have little opportunity to seek clarification on the methods offered or engage in any meaningful interaction with the provider.

There was also a noticeable absence of any information, education and communication (IEC) materials on family planning. Even at suburban clinics outside Lusaka, where facilities are generally better than the rest of the country, there were no instructional materials for use either in the health

centre or for distribution to family planning users.

Provider Biases

Strong provider biases were evident both in terms of client selection and method choice. In the case of the former, this has led to a virtual exclusion from the health care system of large numbers of potential family planning users. In some areas, especially mission institutions, contraceptives were only provided to married couples or to women with letters of consent from their husbands. Even in public sector institutions, however, where consent requirements have theoretically been dropped, divorcees, widows and single women are routinely denied family planning services. Similarly, adolescent girls were denied services unless they came with consent letters from their parents. By contrast, no consent was required before a man or adolescent boy was given any condoms.

Provider bias was also very evident in the case of method choice. In almost all health institutions, the most popular oral contraceptive is Microgynon. Because providers believe it produces less side-effects than other brands, it is routinely and widely given - even to breast-feeding mothers and clients with known hypertension. By contrast, progestogen-only pills, being not well understood by providers, are hardly provided at all.

Clearly, the message coming through all these descriptions of poor client interaction and provider biases is that the concept of "informed choice" is not well understood and, therefore, is not widely or systematically applied by service providers. During the

Assessment Dissemination Workshop, for example, many participants (which included hospital as well as community-based service providers) had difficulty distinguishing between "provider biases" and what they defined as "user biases", that is to say "clients' insistence that they be provided with inappropriate methods".

As is the case worldwide, providers are often convinced that they are the ones best equipped to judge the most appropriate method for a client and that, therefore, they must bear ultimate responsibility for whatever method is finally chosen. However well intentioned such an attitude may be, it inevitably leads to patterns of provider-client interaction in which information tends to be withheld, opportunities for clarification and discussion obstructed and involvement of the client in the final method choice ultimately discouraged. This in turn, leaves the client with less of a personal stake in either the selection or continuation of the method with which they have been provided.

Absence of Service Delivery Guidelines

The concept of "informed choice" is predicated on the assumption that service providers, as well as their clients, have adequate knowledge to discuss and choose from the full range of contraceptive options available. Unfortunately, as noted previously, a frequent observation of the Assessment Team was that provider knowledge of existing contraceptive technology, if not lacking, was certainly outdated. A major factor contributing to this situation has been the absence of any consistent effort to update service providers on contraceptive technology, either through

refresher courses or through the regular publication of technology updates. Numerous examples were observed, for example, where the most recent training or technical update received by service providers was 10 to 20 years ago.

In 1994, an attempt was made to remedy the lack of updated information at Ministry of Health facilities by the formulation of a draft *Family Planning Policy Guidelines and Standards*. This publication, prepared by health professionals and the Ministry's MCH/FP division, was developed to ensure "that service providers at all levels, particularly at District and community level, are fully aware of the method mix and are able to deliver services to clients according to their needs".

Delays in the Guidelines' publication have meant that many of the policy directives and contraceptive technology issues addressed in the present Assessment report have not yet been disseminated to the field. However, the document is in its final stages of preparation and is expected to be published early in 1996.

Recommendations:

In order to raise the quality and prestige of family planning, all service providers must receive training appropriate to the level of services they are charged with providing.

Service provision guidelines must be published and disseminated to all service providers. The guidelines should be written in a user-friendly manner and mechanisms should be developed to ensure that such guidelines are understood and used at all levels of service delivery.

The training curricula used in all health care training institutions such as in nursing, midwifery, and clinical officer's colleges as well as in medical schools should be reviewed. The content of such training should be consistent, yet appropriate to the level of service delivery each category of health personnel is responsible for providing.

Government policies on family planning should be disseminated to all service personnel in government, mission, and other private institutions and all service providers should be encouraged to follow such policies.

Management and Service Delivery

In 1992 the Government of Zambia published its *National Health Policies and Strategies*, a key programmatic document outlining the Government's vision for an ambitious reform of its national health care system (Ref.). Designed to improve management, accountability and quality of service, the reform calls for decentralization of service delivery and decision making authority to the country's 61 health districts, and within those districts to health service providers and communities.

Under the reforms, at least three major levels of responsibility have been defined. At the central level, Ministry headquarters is charged with coordinating national policies, guidelines and goals, as well as for providing support in the areas of financial accountability, research, information management and donor coordination. At the district level, the Health Reforms have established autonomous District Health Boards (DHB) which plan and manage health care services as well as set goals and develop budgets for their respective districts. Finally, at the community level, Area Health Boards will strengthen linkages between health centres and communities they serve; develop more effective community-based health activities; and enable communities and districts to act more rapidly and appropriately in promoting their own health (Zambia, 1994a). In addition to these three levels, the Health Reforms also call for the establishment of Regional Health Advisors at the provincial level (which

will only retain training, audit and bulk storage functions); and for the creation of Hospital Management Boards, charged with overseeing the management and operations of individual hospitals.

A major objective of the Assessment was to gauge whether current management under the Reforms is adequate to assure the quality of family planning services and, more specifically, the feasibility of modifying the current contraceptive method mix. As this chapter indicates, the efficient delivery of family planning services in Zambia is hindered by at least two major factors. The first is the low prestige of family planning relative to other maternal and child health (MCH) activities; the second is the lack of adequate management support among the different levels of the health care system.

Low Prestige of Family Planning

Training in family planning: A major finding of the Assessment is that, relative to other MCH activities, family planning enjoys low prestige. Earlier it was argued that this imbalance was at least partly attributable to the widespread perception among health care personnel that the delivery of family planning services requires minimal training. But there is another, perhaps even more important factor, namely, an incentive structure within the health care system that simply does not reward such

training in the same way it does specialization in other fields such as midwifery or community health. Under current norms and policies, specialized training is remunerated only in cases where the training programme itself is of more than twelve month's duration; a requirement that would clearly preclude the Ministry's 14-week in-service training course in family planning. Unlike other specialized short-term training programmes such as UCI (universal child immunization), family planning providers are not provided additional remuneration for field activities; nor is there a special designation for family planning nurses as there is, for example, in the case of UCI coordinators. Based on interviews with health care service delivery staff nationwide, discrepancies such as these send a clear signal to all health personnel that family planning is of less importance than other MCH components.

Integration of services: Given the lower prestige of family planning relative to other MCH services, it is no surprise that little emphasis has to date been placed on taking advantage of general MCH outreach sessions to identify potential family planning users. At one rural health centre in Western Province, for example, the nurse in charge reported regular monthly attendance of several hundred women of reproductive age at MCH talks. Of these, however, only six were family planning users.

A key implementation strategy of the national family planning programme has been the integration of family planning and MCH services through what has come to be known as a "supermarket approach". By offering women and their families the option to choose during any

clinic visit, a full range of both preventative and curative MCH/FP services, this approach has proven extremely effective at enhancing the convenience, accessibility and acceptability of both MCH and family planning services. And yet, just as little effort has been spent on incorporating family planning into outreach activities, so too has relatively little progress been made at using the supermarket approach to integrate family planning and MCH activities. Service providers mentioned lack of adequate space as the reason for not conducting integrated services and, worse still, for not providing family planning services on a regular basis. Unfortunately, based on conversations with health care staff, it is clear that the "space" argument is based on a misunderstanding of what the supermarket approach is. For many community-based providers, it implies a single room staffed with multiple health care providers, each one providing information on only one single MCH/FP topic. It is not understood that anyone may request any MCH/FP service from any service provider during any visit.

Even at centres that do provide family planning services, this is often done on inconvenient days and times. At one large hospital in Eastern Province, family planning was provided for only two hours on Sunday mornings and during the week at lunch time.

Management information systems: The family planning information system has been a source of concern for some time insofar as it has been difficult, if not impossible, to produce reliable family planning service delivery statistics. One of the major reasons for this has been the lack of efficient, standardized

reporting formats. Shortages of stationary are also a problem. But while one would expect such shortages to affect all areas of the health statistics reporting system, the Assessment revealed the reporting of family planning statistics to have suffered disproportionately.

Nowhere did the Assessment Team find information that would lead to the estimation of family planning needs; this is in sharp contrast to immunization where most centres have calculated targets for children to be covered during the year. Most service providers interviewed admitted that they did not know how to estimate commodity requirements for family planning clients.

Lack of Management Support at all Levels

The examples cited above - the low prestige of family planning; the failure to make better use of outreach activities; and the failure to communicate and apply the "supermarket" approach - reflect primary absence of effective managerial and technical support among the various levels of the health care delivery system. Interviews and observations carried out by the Assessment Team suggest that at least three factors contribute to this situation:

- Limited managerial and technical skills at the district level coupled with confusion over the roles of the provincial and central levels,
- Poor communication among all administrative and service delivery levels, and
- Low priority attached to family planning by district planners.

Lack of skills at district level: As noted previously, a key component of the Health Reforms is the decentralization of authority for service delivery to the country's 61 health districts. Yet it is clear, based on visits to 13 of those districts, that the managerial and technical skills needed to support such services are simply not there. In the case of family planning, for example, community-based field staff typically rely on technical support provided during periodic visits by the district public health nurses. These, individuals, despite their considerable overall experience, often have little training in the specific skills needed to ensure an efficient family planning programme namely, information management, logistics, IEC, as well as service delivery. Indeed, visits to community health centres revealed that in many cases, it was the public health nurse who, because of inadequate or outdated family planning training, was the principal source of rumours and fears about various contraceptive methods. Clearly, a concerted effort must be made to identify the range of responsibilities appropriate for family planning supervisors and the kinds of skills needed to carry them out.

Even though the supervisory nurses may not have had the requisite skill, service providers often expressed gratitude in having at least someone to whom they could turn for back-up. In some of the districts visited, staff positions with responsibility for contraceptive commodity management not only went unfilled but there were no contingency plans put into effect to avoid disruption of commodity distribution. A major hospital in Eastern Province, for example, had been waiting several

months to receive a stock of IUDs, even though Medical Stores Limited (MSL), the parastatal charged with the distribution of contraceptive commodities, reported having an abundance of them in their Lusaka warehouse. Eventually, it was discovered that the delay was attributable to the district (through which the hospital's commodities were ordered) never having ordered them. In another district, supplies were never received because district personnel had submitted the wrong forms to MSL. Once again, service providers see these mishaps as simply further examples of the relatively low prestige family planning holds, relative to other activities. Whereas the responsibility for other MCH-related activities, such as UCI, are assigned to an officially designated UCI nurse, there is no such designation for family planning activities.

Finally, a corollary of the districts' inability to provide adequate support and management, is the increasing confusion by service providers as to whom to turn to for back up. As noted earlier, providers have shown little hesitation in obtaining contraceptive commodities from central level facilities when district systems fail to operate.

Poor communication: Communication is vital for the proper management of any service delivery system. To function efficiently, health centre staff require technical and material support through regular visits by district personnel. Yet health centre staff frequently complained about inadequate communication between them and their district supervisors. Indeed, staff at several rural health centres stated that the public health nurse had not visited the centre in the last six months. For many

health centre staff, the only time they come into contact with district personnel is when they travel to the district office to collect commodities. Such visits cannot be expected to provide a forum through which health centre problems can be discussed in detail.

The lack of articulation between health centres and the district also manifests itself in the widespread absence of any effective referral system. Because rural health centres in many parts of the country do not have access to radio transmitters or receivers, it is often impossible to refer emergencies quickly to district hospitals for proper attention. Even when word of an emergency is received by the district hospital, staff at one rural health centre reported being told that the district vehicle could not be sent to retrieve the patient, because there was no money for fuel.

A major rationale behind the Health Reform's decentralization of authority to the districts is that it "will enable Zambians to take control over the planning and management of their health services [so that they] become more responsive to local needs" (Zambia, 1994a). This will not occur, however, if the same isolation that once characterized relations between the district and central levels, now divides the district and community.

Low priority attached to family planning: A recurrent theme in discussions and interviews among providers nationwide is that family planning does not receive the priority it deserves in district planning activities. It is not a regular item on the agenda of planning sessions; family planning indicators are not always included in

district action plans; and it maintains a relatively low-profile with respect to district-sponsored campaigns or workshops. Unfortunately, while there is broad-based agreement that this situation should be changed, there is little consensus on how that change might best be brought about. During the Dissemination Workshop, suggestions varied widely. Among service providers, it was felt strongly that family planning would get the attention it deserved only if it were included as a regular, obligatory item on the agenda of monthly district planning meetings. Managers and policy makers, on the other hand, felt that such a requirement would be too restrictive, particularly if the focus of a meeting on any given month was dedicated to an unrelated topic. Instead, managers felt a more appropriate approach would be to include family planning indicators in district action plans as well as the sponsorship of special workshops or training sessions on family planning for district staff.

Recommendations:

Technical and managerial support can only be as good as the training received by those in supervisory positions. To strengthen support at the service delivery level, management needs and skills must be identified

and incorporated within the training curriculum for all supervisory personnel.

By assigning supervisory responsibilities for different family planning activities (service delivery, logistics, IEC, etc.) to separate persons, the cohesion and effectiveness of the district family planning programme as a whole is jeopardized. Districts should explore the feasibility of establishing a single supervisory position with overall responsibility for family planning activities in much the same way as UCI activities are currently coordinated by a single person.

More frequent supervisory visits should be made to health centres. In addition, monthly activity reports on family planning should be compiled by the district public health nurse and regularly discussed with health centre staff.

Family planning must be made a district priority. Operationally, this may entail making family planning a regular agenda item at monthly planning meetings or attracting attention to it through other means, such as incorporating family planning indicators or the sponsoring special family planning-related events.

Family Planning Policy

Zambia's reproductive health programmes represent areas in which national policy has, in some respects, remained a step ahead of public opinion. While there are many who continue to view unsafe abortion and limited contraceptive choice as useful deterrents to "promiscuity and sexual misconduct", the Termination of Pregnancy Act is one of the few within Africa to expand the conditions under which legal abortions may be performed. Though the service is not easily accessible, nevertheless it can be performed on mental as well as health grounds. It requires the prior authorization of three physicians, one of whom must be a psychiatrist. Similarly, whilst many health care providers still insist on spousal or parental consent before providing women with contraceptive services, the Ministry of Health some time ago established formal policies guaranteeing the reproductive rights of everyone, regardless of sex or age.

Within Zambia today, therefore, the critical issue is less one of unmet policy needs than it is of the way in which existing policy is currently being applied. Regrettably, widespread lack of awareness of existing policies has created a vacuum in which the delivery of family planning services has come to reflect more the value judgements and personal biases of individual providers and health care administrators, than the reproductive health needs of the community itself. This chapter explores the some of consequences of this

vacuum on the delivery of family planning services.

Lack of Awareness about Legislation and Policy

Interviews with policy makers, service providers, and even health sector administrators revealed that very few people are aware of existing policies relating to reproductive health. Clinic based providers, for example, often expressed surprise at learning that spousal or parental consent was no longer required before clients could receive contraceptive services. Similarly, group discussions with women and adolescent girls revealed that very few of them had even heard of the Termination of Pregnancy Act, let alone any of its provisions for legal abortion services.

Such lack of awareness can be attributed to a number of factors. One of the most important is the lack of management supervision and support among levels of the formal health sector. In the previous chapter, poor communication was identified as a major constraint to effective delivery of family planning services. The same is true of policy dissemination. As long as the relationships between headquarters and district or district and communities remain poorly articulated, policy changes, however beneficial they may be in theory, will have little impact at the service delivery level.

Family Planning Guidelines and Policies

In 1994, an attempt was made to remedy the lack of updated policy information at Ministry of Health facilities by the formulation of a *Family Planning Policy Guidelines and Standards*. Delays in the Guidelines' publication, however, have meant that a number of important policy directives have not yet been disseminated to the field. These included the abolition of consent requirements, the eligibility of adolescents to receive reproductive health care services and the provision of certain contraceptive methods, such as the IUD, by paramedical personnel. However, as mentioned previously, the Guidelines have been developed at the central level. There has been no input of, or testing by, district and community level providers. As such, providers' comprehension and interpretation of the Guideline is not known nor has there been any attempt to make them "provider friendly". This was stressed by participants at the Needs Assessment Dissemination Workshop.

Far more serious than the delay in publication of the Family Planning Guidelines is the fact that there does not appear to be an effective or at least operative system in place for communicating policy to the field. The publication of Guidelines and Standards in Family Planning is not a routine event and certainly not one that can be depended on to channel all new policy decisions to the field. Like technical expertise, policy implementation depends on effective management and support among the various levels in the public health care sector. Until this issue is resolved, policy is likely to remain out of line with public opinion.

Recommendation:

Greater efforts must be placed on identifying appropriate mechanisms and systems for communicating policy in a timely and on-going manner to all health personnel; systems should also be identified to communicate policy to the community at large in a manner that is not dependent solely on providers.

In developing standards and policy guidelines, input from the field should be encouraged to ensure that the guidelines are user-friendly and understood by everyone expected to apply them.

Policies Require Legal Backing

Publication of the *Family Planning Policy Guidelines and Standards* is likely to surprise many in the health field in that it authorizes a number of practices which, until now, have not been routinely applied in the delivery of family planning services. As noted above, these changes include the abolishment of consent requirements, the eligibility of adolescents to receive reproductive health care services and the provision of contraceptive methods, such as the IUD, by paramedical personnel.

A concern voiced by many participants at the Dissemination Workshop was the legal implications of implementing new policy changes while other existing statutory restrictions continued to prohibit them. The new policies, for example, would allow appropriately trained nurses to insert IUDs even through General Nursing Council regulations do not. Similarly, Ministry policies permit community based

distributors (CBDs) to distribute oral contraceptives, even though the Medical Services Act would appear to prohibit all but physicians and pharmacists from doing so. Finally, the Ministry has indicated that it would support the social marketing and public promotion of various contraceptive methods, even though current laws permit advertising of only non-prescriptive products.

Naturally, it was the service providers who felt most vulnerable to the inconsistencies in policies and existing legal and regulatory requirements, insofar as it is they who would be responsible for actually implementing the reforms.

Recommendations:

During the course of policy formulation, the Ministry of Health should review existing legislation to ensure that health personnel are not put at risk, legally or otherwise, by implementing policy changes. Where potential conflicts exist, efforts should be made to amend either the proposed policy change or the existing legislation. Meanwhile, the Ministry should make it clear to all health care providers that it will provide backing and assume full legal responsibility for anyone implementing or acting in compliance with Ministry policy.

The government should consider allowing the advertisement of methods of family planning requiring prescription so that the community is fully aware of their existence.

Mission Facilities and Family Planning

In large parts of the country, mission hospitals provide the only source of health care services available to the local population. What is more, many of these facilities derive a sizeable part of their operating and personnel costs through government subsidies. Yet precisely because of their religious affiliation, many of these institutions exercise considerable latitude in determining which services they will and will not offer. Among the services to suffer most from this latitude is the provision of reproductive health care, especially family planning services. In Eastern Province, for example, the Assessment Team visited a Catholic rural health centre where the policy was to offer no family planning services whatsoever. A nearby facility run by Seventh Day Adventists did provide services, but restricted them to married couples. In other areas, alternative service delivery points do not exist even for married couples. Current government policy on this issue is not clear, with the result that many citizens are effectively being barred from receiving adequate reproductive health care.

Recommendation:

All service delivery facilities receiving government funds should be encouraged to respect national policies that entitle citizens to basic health care services, including family planning. In areas where no family planning services are offered, the Ministry of Health should assume responsibility for seeing that alternative service delivery arrangements are made.

Health Financing and Utilization of Local Revenues

At present, fee-for-service schemes being implemented through the National Health Reform Programme are poorly understood at the service delivery level. This ambiguity has given rise to a number of problems that affect, either directly or indirectly, the delivery of family planning services.

One problem directly affecting service delivery sites is the lack of access to locally generated funds. Most clinic-based personnel believed that they are, at least in theory, entitled to use locally generated funds. But none of them could explain how to go about doing that. Instead, revenues were simply turned over to the district. One rural health centre in Eastern Province, for example, had collected and turned over to the district over half a million Kwacha since 1994. The clinic officer at the health centre had been informed that the centre was entitled to the funds, but was sceptical that this would ever happen. In fact, contrary to Ministry procedures, the officer was never even given receipts that would document the centre's level of entitlement.

The impact that access to such resources might have on improving quality care is immeasurable. Infrastructure could be expanded so that the crowded and impersonal conditions, typical of virtually every health centre visited, could be improved. Access to local resources would also allow health centres to meet community needs independently of outside resources. Ironically, the example cited previously of a health centre being refused use of the district vehicle because of the lack of fuel,

involved the same centre that generated half a million Kwacha in user fees! Finally, local revenues might be a solution to the lack of sustainability among community-based programmes such as those involving contraceptive commodity distribution or traditional birth attendants. As described below in Chapter 8, Zambia's CBD programmes are highly donor dependent and would benefit greatly from local financial support. Such support is implicit in Zambia's Health Reforms Policy, which specified that: "Linkages between health centres and communities must be strengthened to ensure that health services better respond to community health problems and needs. Health centres will be encouraged, in consultation with community leaders, to develop more and more effective community based health activities" (Zambia, 1994a).

A second problem directly affecting the delivery of family planning services, is the implementation of the Health Reform's prepayment scheme. Under the Health Reforms, certain services such as antenatal care and family planning are exempt from fees of any kind. At a number of public health care facilities piloting the prepayment scheme, however, accessing services of any kind requires registration for which a fee is paid. Visits by the Assessment Team suggest that these fees vary considerably from area to area. In some areas, they are relatively low (250 Kwacha per adult). In others, however, they would be excessive if one's only intention was to obtain family planning services. In one major hospital, where fees were being charged for ante-natal care and delivery, the staff insisted that they were allowed to charge such fees.

Recommendation:

Misunderstandings over access to locally generated revenues are less a function of unmet policy needs than of the inappropriate way in which existing policy has been

communicated and applied. For this reason, the Ministry of Health should issue and disseminate written policy guidelines on user fees as well as on access to and utilization of and revenue generated at service delivery points.

Non-Clinical Service Delivery

Thus far, the analysis of contraceptive choice in Zambia has focused on the delivery of family planning services through the nation's formal health sector - either through public hospitals and health centres or through comparable facilities operated by religious missions and family planning NGOs. Yet, as the 1992 DHS revealed, up to half of all family planning users in Zambia actually rely on non-clinic sources of family planning services and information (Gaisie et al., 1993). These sources include private pharmacies, community-based distributors, local healers and traditional birth attendants.

Given the resource constraints facing public sector programmes and the potential cost-savings and accessibility of community-based services, the potential of the latter for increasing contraceptive choice in Zambia is significant. This chapter, therefore, examines the strengths and weaknesses of non-clinic based services and their potential role in the national family planning programme.

Private Sector Pharmacies

A major consequence of Zambia's social marketing programme for condoms has been the expansion of family planning service delivery beyond the confines of the formal health sector. This expansion has significantly increased the availability of family planning services, particularly to those underserved groups for whom access has been restricted because of age, marital status or gender.

Young people, for example, find that pharmacies offer an anonymity that formal health care facilities generally lack. Men also represent important pharmacy clients, especially as purchasers of socially marketed as well as commercial brands of condoms. As noted earlier, many men report feeling uncomfortable or "out of place" obtaining contraceptives through public sector programmes insofar as these typically offer family planning within the context of women-oriented maternal and child health services.

The advantages of expanding commodity distribution channels are many. Firstly, by increasing accessibility to a broader range of people, the national family planning programme as a whole benefits. Secondly, by allowing for alternative service delivery outlets, public sector facilities are themselves freed up to address the needs of those whose health needs can only be met through a formal health sector facility, be it a hospital or community health centre. Finally, pharmacies can serve as a vital back-up supply of contraceptive commodities when public sector facilities experience shortages or stockouts.

Although interviews carried out in Eastern and Western Provinces showed private pharmacies to be important sources of family planning information and methods, their full contribution to the national family planning programme remains largely underutilized. There continue to exist, for example, numerous regulatory barriers that prevent the

private sector from playing a more important role in the delivery of family planning information and services. For example, in the Eastern Province capital of Chipata, there are no oral contraceptives sold through pharmacies, not because merchants feel there is no profit in it, but because of legal barriers that prevent them from doing so. Sales of condoms, they report, are good; and many merchants report that women often come, either seeking to purchase oral contraceptives or enquiring how to take what they were given at the Provincial hospital.

It is the understanding of many chemists and sellers of non-prescription drugs (aspirin, vitamins, etc.) that contraceptive pills are pharmaceutical products and, therefore, can only be legally sold in establishments with a registered pharmacist. Because Zambia has no university degree programme in pharmacy, any merchant wishing to employ a pharmacist must either entice someone who has been trained abroad to come to a provincial capital or look overseas for a foreign pharmacist - neither of which is financially attractive to the pharmacist or the merchant. However, numerous opportunities do exist for collaboration between the public and private sectors that would ultimately serve the interests of both. At Chipata Hospital, for example, there is a full-time registered pharmacist whose services could be called upon to provide local merchants with guidance or technical support. If such support and/or technical oversight were sufficient to enable local chemists to market contraceptives, the cost/benefit ratio of such a collaborative effort would be very high indeed.

Recommendations:

Regulations governing the commercial sale of oral contraceptives, barrier methods, and spermicidal contraceptives should be reviewed to ascertain what restrictions exist. If there are no restrictions, this information should be disseminated nationally, and chemists should be encouraged to market these products following appropriate training. If there are, efforts should be made to modify them.

The role of the private sector in family planning should be expanded. In the meantime, efforts should be made to identify areas in which Ministry resources could be called upon to assist private chemists in complying with existing regulations.

Community-Based Distribution

Community-based distribution of contraceptives has been, in many countries, an effective means for disseminating family planning information and services. The closer user/provider interaction, privacy, and the convenience of locally-based services have enabled many individuals, particularly those in rural and peri-urban areas, to access family planning information and services easily.

The last few years have seen increased interest and support for community-based distribution (CBD) programmes by Zambia's major family planning donor agencies. Yet Zambia's CBD programmes remain marginalized, both programmatically and geographically. Currently there are only four limited project areas providing CBD services;

these are in Copperbelt, Luapula, Eastern Province and Lusaka.

Because most Zambian CBD programmes are still in their infancy, donor attention has thus far focused, for obvious reasons, on such basic issues as training, commodity distribution and service delivery reporting. As these programmes become increasingly established, however, and efforts get underway to expand existing distribution networks, the issue of sustainability is likely to grow in importance. At present, all of Zambia's CBD programmes are completely donor-dependent: financially, programmatically, and logistically; the consequences of which on their long-term stability are far-reaching.

At the level of contraceptive method supplies, there exists a parallel distribution system. Because the CBD programmes are outside the public sector network, commodities distributed by them ultimately come from stocks purchased and imported by the programme's principal donor agency. This independent procurement system not only adds to the overall number of contraceptive brands in circulation; it also places CBD programmes at a distinct disadvantage when commodity stock-outs occur. At the time of the Assessment visit to Eastern Province, for example, the Pathfinder-funded CBD programme at Mwami Hospital had completely run out of vaginal tablets and was quickly exhausting its supply of oral contraceptives. Unlike public sector services, which are always able to access supplies from MSL, the Mwami programme was totally dependent on Pathfinder stocks.

At the field level, independence can translate into programmatic isolation. In Luapula province, for example, the CBD programme supported through PPAZ and the Flying Doctor Service, received no support from the local district health authority. Despite the programme's resounding success at reaching rural acceptors, district authority staff showed no interest in supporting or collaborating with the distribution programme because it was considered to have significant external support, something which was not true. Fortunately, such indifference is not universal. In Eastern Province district health staff were extremely supportive of the Mwami CBD programme. Many distributors even used the nearby Champande Rural Health Centre as a local contact point for dropping off and receiving service statistics reports as well as commodities. Where CBD programmes encompass large rural areas, the ability to work in tandem with existing MOH facilities is a major advantage, likely to result in greater efficiency and cost-effectiveness for both Ministry and CBD programmes.

Remuneration of CBD workers is another problem area, remuneration schemes varying widely. In Eastern Province, for example, CBD programmes depend almost entirely on the goodwill of the distributors: none are paid, nor do they derive any income from distribution activities. Elsewhere, in the Copperbelt and Luapula, some distributors do get a small payment; while others receive incentives such as bicycles or clothing. Whatever the arrangement, the lack of any personal gain from distributing contraceptives or the absence of any reward scheme to encourage higher distribution levels places the full burden for motivation and programme

continuation on the donor or the implementing agency. If supply stocks dry up, there is no incentive for distributors to independently seek out alternative stocks. If the source of funding dries up, there is no incentive, except goodwill, for the distributor to keep working.

Recommendations:

Greater efforts should be made to coordinate the operation of CBD programmes with MOH facilities and staff. Collaboration could include such things as shared logistics systems, joint communication and reporting, etc. Ultimately, CBD programmes should build upon and not work in isolation from ongoing Ministry health care delivery programmes.

Alternative remuneration schemes for CBD distributors should be explored to reduce the complete donor dependence of the programmes themselves. One option might be to allow distributors to sell contraceptives while maintaining a slight profit margin for themselves; other options also exist however that would not represent a direct cost to the family planning user. Efforts could be undertaken, for example, to explore the feasibility of using the fee-for-service revenues generated at community health centres to subsidize distributors working in the centre's catchment area.

Traditional Birth Attendants

Traditional birth attendants (TBAs), both trained and untrained, offer valuable reproductive health care to women, particularly in rural areas where formal health sector facilities are either lacking or perceived as culturally inaccessible.

Given their acceptance as respected members of the community, TBAs have a potentially important role to play in a national family planning or reproductive health programme.

Based on interviews carried out across the country, TBAs appear to be acutely aware of the problems associated with childbirth; but also recognize their own limitations in dealing with them. In the case of delivery-related cervical and vaginal tears, for example, TBAs report having to adopt traditional remedies if formal health care facilities are too distant. On the other hand, in cases of excessive bleeding or incomplete expulsion of the placenta, when possible women are referred to clinic based-services. TBAs do counsel women on family planning and many were conversant with methods such as the pill, injections and sterilization.

A major problem facing TBAs today, however, is their ambiguous position within the health care sector. Formerly, TBAs were seen as community-based health providers with no link whatsoever to the formal health sector. In return for their services, TBAs were often paid by community members, if not in cash, then at least in kind. Unfortunately, recent efforts by the health care sector to train TBAs and equip them with basic supplies has altered their perceived status within the community to the point that they are now being viewed incorrectly as extension agents of the public health system. One consequence of this is that community members have become increasingly reluctant to pay or compensate TBAs for their services. Quite naturally, this situation is greatly resented by TBAs, especially since, apart from their initial training, they receive no

remuneration or even ongoing support from the public sector.

Recommendations:

Interviews with traditional birth attendants show that if TBAs are to provide quality services at the community level, there will need to be a review of the conditions under which they work and, specifically, a reassessment of their affiliation with public health staff and facilities.

As in the case of CBD workers, alternative remuneration or re-supply schemes for TBAs should be explored. One possibility could be to use revenues collected at rural health centres to purchase supplies needed by them.

Traditional Medicine and Reproductive Health

As providers of reproductive health care services, community based distributors and traditional birth attendants may be viewed in large part as filling a vacuum created by limited formal health sector facilities. In rural, and even in periurban settings, men and women turn to these individuals for services and advice that, elsewhere, might very well be provided by trained clinic staff.

Traditional healers, on the other hand, occupy a markedly different role. Rather than filling a vacuum, healers represent an alternative, and to many, an attractive alternative, to the formal health care sector. Indeed, in the areas visited by the Assessment Team, traditional healers were found to be operating within a stone's throw of pharmacies, health centres and even District hospitals. During a visit by the Assessment Team

to a district hospital in Western Province, one of the hospital's custodial staff was approached while on duty by a group of five teenage boys seeking treatment for STIs. The employee, it turned out, was a respected traditional healer in the area.

Historically, traditional healers have been called upon to address a wide range of reproductive health concerns including contraception, treatment for STIs, impotence, and infertility. Moreover, in many of the areas visited, traditional healers were the main providers of clandestine abortions. One healer, for example, admitted to having performed 15 abortions between January and March alone.

There is much debate within the health sector as to the role and ultimate contribution of traditional healers to the health, safety and well-being of the community. What is not debatable, however, is that traditional healers are widely respected, and their advice actively sought by many Zambians at all social levels. Ignoring them or marginalizing them from efforts to improve the reproductive health of Zambian society, not only is futile, but possibly even counterproductive insofar as the healers' resentment towards the formal health sector could effectively encourage rejection of medical services by their clients.

As noted in previously, 82% of users of non-modern methods (currently married women) practice either withdrawal or employ folk methods such as waist bands, knotted fibres (*kaumbu*) or *matepo a chamba* (cannabis leaves). Field visits by the Assessment Team found that although

most users of non-modern contraceptives in Zambia adopt some kind of folk method (versus more effective natural family planning), women by and large have little faith in the efficacy of such methods. Indeed, focus group discussions on traditional contraception almost invariably ended up as discussions of method failure and the reasons for it. There is a demand for effective contraception, even among those who may have little demand for the formal health sector. Traditional healers could play a potentially important role in bridging this gap, by counselling, providing guidance, making referrals and

perhaps even in dispensing certain modern contraceptives.

Recommendations:

Research should be undertaken to define the potential role that traditional healers might play in promoting the objectives of the national reproductive health programme. Such research should not only determine changes expected of traditional healers, but also those required of the formal health sector so that healers can be incorporated in national family planning efforts with respect and dignity.

Logistics and Commodity Distribution

Much has been written about the weaknesses and inconsistencies of Zambia's current logistics and commodity distribution system: of the lack of an adequate MIS, of the inability to project or calculate contraceptive requirements, or simply of the difficulties in maintaining SDP stocks up to date. Many of these weaknesses were very much in evidence during the Assessment Team's visits to the field and were documented in the draft report distributed to participants of the Assessment Dissemination Workshop.

Given the relatively specialized nature of logistics management, however, it was felt that an appropriate review of Assessment findings could only be achieved through a separate one-day meeting, focused specifically on logistics and commodity distribution. Its purpose was to exchange information on other commodities logistics systems currently in use in Zambia and to agree on a strategy for developing a new system for the national family planning programme. Sponsored by the Ministry of Health (MCH/FP) and the British Overseas Development Administration (ODA), the one-day workshop was held immediately after the Assessment Dissemination Workshop and was attended by 45 participants involved in the management or implementation of commodities logistics. The present chapter, therefore, encompasses both the original findings of the Assessment Team as well as the recommendations of the Dissemination and Logistics Workshops.

Existing Logistics Systems

In Zambia today, there are several logistics and management information systems in use by the Ministry of Health and/or its collaborating agencies. A number of these were described at the Logistics Workshop by representatives of Medical Stores Limited (MSL), the Planned Parenthood Association of Zambia (PPAZ) and the Ministry's immunization (EPI) and essential drug (EDP) programmes. While no attempt was made to compare the true effectiveness of the different systems at managing medical commodities, the review of the systems provided insight into the key factors influencing their effectiveness.

Distribution channels. With respect to distribution itself, the delivery of both contraceptive commodities and essential drugs is handled by MSL using virtually the same distribution channels and intermediaries. Commodities are delivered directly to the districts which in turn distribute them to rural health centres and ultimately, community health workers. By contrast, the immunization programme delivers only to the provinces which in turn, distribute to the districts and below.

"Push" vs. "pull" systems. A second point of comparison relates to the ordering of the commodities themselves. Though designed to reflect actual needs and usage, the essential drug programme in fact operates under a push system, whereby fixed quantities of

drugs are delivered to health centres and community health workers, not on the basis of actual usage, but rather as a function of the number of clients seen. Health centres, for example, receive one kit for every 1,000 first attendees, while community health workers receive their kits once a month. Judging from visits by the Assessment Team, the EDP system, though potentially wasteful, appears to function well in that it keeps providers in stock with relatively little effort required on their part. Except for a limited number of condoms, contraceptives are not included with the EDP's essential drug kits.

The immunization and contraceptive commodities systems on the other hand, are designed to operate more on a "pull" basis, with health centres receiving only stocks requested by them. Judging from participant comments at the Logistics Workshop, the EPI programme appears to be functioning well; however, judging from the findings of the Assessment Team, the contraceptive commodities system does not. Three factors contribute to this.

First of all, the effectiveness of any "pull system", regardless of the commodities involved, depends on the providers' ability to know *what* to order as well as *how* to order it. In the case of EPI, district-level staff know how to calculate coverage rates; and they know how to estimate commodity needs, taking into account both targets and wastage rates. Equally important, to help them in this effort, there exist written guidelines as well as skilled staff at the district level dedicated exclusively to immunization activities. Moreover, immunization enjoys what has been described earlier as a relatively prestigious position within

the overall MCH field, a prestige which makes it worthwhile for staff to give time and effort towards it.

The distribution of contraceptive commodities, by contrast, functions poorly because district family planning programmes enjoy few of the prerequisites required for an efficient "pull" system such as skilled supervisory and support staff, written guidelines or relative prestige at the primary health care level. Service providers were not familiar with the range of contraceptive commodities currently in stock at the district level; moreover, the Assessment Team found no evidence of efforts by the districts to routinely inform SDPs of currently available contraceptive stocks, let alone provide training on how to estimate commodity needs and how to order them. The reality is that the distribution of contraceptive commodities is largely ad-hoc in most parts of the country, with little or no application of what could be termed a logistics system. Indeed, most service providers interviewed admitted that they did not know how to estimate family planning commodity requirements.

Secondly, many SDPs have become accustomed to an exclusively one-way flow of information. Service statistics and other health care data are reported to the district on a monthly or quarterly basis with little expectation of any acknowledgement or comment from the district as to the data's content or appropriateness. As noted earlier, nowhere did the Assessment Team find information that would lead to estimation of family planning needs.

Finally, at most health centres there is a lack of supervisory visits from district

authorities. One of the major reasons for the lack of proper monitoring of district-level family planning activities is that no one at the district has exclusive responsibility for it. In contrast to immunization programmes, for example, which benefit from the presence of a UCI coordinator, no such position exists under district level family planning programmes.

Distribution at National Level

In addition to inefficiencies in the distribution of commodities at the district level, the Assessment also identified a series of factors affecting the distribution and availability of contraceptives at a national level. These include:

- the capacity and role of Medical Stores Limited;
- the capacity of the Management Information System Working Group (MISWG); and
- the parallel distribution systems used by the Ministry of Health through Medical Stores Limited and by the Planned Parenthood Association of Zambia (PPAZ)

Medical Stores Limited. Overall, the Assessment showed that Medical Stores Limited has the capacity to continue distributing contraceptives nationwide. Warehouse facilities are adequate even if an expansion of the method mix were to take place. Contraceptives are recorded on bin cards and the function of managing contraceptives has been integrated in the overall Medical Stores Limited system. Transport would not be a problem either. Currently, 20 percent of truck space is reserved for contraceptives; in most cases this space is not utilized.

Nevertheless, serious communication problems exist between Medical Stores Limited and both the districts and health centres. The Assessment discovered, for example, that MSL must often phone districts to ask them for their contraceptive requirements. The initiative is rarely made by the district except when stocks suddenly run out.

Management Information System Working Group. The Management Information System Working Group (MISWG) was established in 1989 and consists of representatives of the Ministry of Health (MCH/FP), Medical Stores Limited and the Planned Parenthood Association of Zambia. The Working Group's main functions are first, to forecast contraceptive requirements for districts and advise the Logistics Management Unit of Medical Stores Limited so that distribution can be effected; and second, to monitor utilization patterns of contraceptives so as to estimate acceptance rates.

During the Assessment, it was discovered that the working group has not been active for a long time. Indeed, it had met only once during the past two years. One problem has been a lack of support from the Ministry of Health, PPAZ and districts. In 1994, for example, only seven districts sent reports to Medical Stores Limited. In the absence of reliable orders, stocks are being sent out on the basis of Ministry of Health estimates.

PPAZ distribution systems. When Medical Stores Limited (MSL) was designated as the sole distributor of contraceptives, it was agreed that contraceptives received by the Planned Parenthood Association of Zambia (PPAZ)

would also be delivered to MSL for distribution. This worked for a limited period but because of perceived limitations in the system, PPAZ has re-established distribution of contraceptives to its regional centres. This parallel distribution system has made it difficult to reconcile PPAZ and the Ministry of Health's service statistics, thereby exacerbating the forecasting and logistics problems described above.

Recommendations:

Given the ineffectual determination of contraceptive requirements; the lack of coordination of supplies at the district level; and the continuous flow and exchange of contraceptive commodities from programme to programme and/or from sector to sector, commodity procurement and logistics management must be planned comprehensively at national level. This implies a greater degree of coordination among donor agencies,

which are responsible for the bulk of commodity purchases and selection.

Opportunities should be explored for facilitating the delivery of contraceptive commodities to service delivery points, particularly at times where linkages break down (even if only temporarily) in the normal distribution system. This will require assessment and reorganization of commodity distribution at the district level.

A "pull" system for ordering and supplying contraceptive commodities must be built into the health information system whereby districts monitor and evaluate all supply and equipment requirements of each of their health centres and other service delivery points.

The districts meantime should notify Medical Stores Limited of their contraceptive requirements on a regular basis. At the same time, Medical Stores Limited should provide regular information to the districts on what commodities are available.

Availability and Distribution of Contraceptive Methods

Since the early 1970s, Zambia has been the site for clinical and introductory trials of virtually every contraceptive method currently available on the market. Norplant® has been available since 1986 at Lusaka's University Teaching Hospital (UTH); the injectable Noristerat® has been a routine part of PPAZ's (Planned Parenthood Association of Zambia) service delivery programme since 1991; and the diaphragm underwent introductory trials during the last decade. Moreover, UTH has participated in the development of a variety of methods, including IUDs, vaginal rings and mifepristone as part of its role as a WHO Collaborating Centre for Research in Human Reproduction.

Despite this exposure of the major academic centre to a wide range of contraceptive methods, other than through a very small number of urban-based hospitals or private family planning clinics, Zambians today effectively have access to only two contraceptive methods: the pill and the condom. This narrow range was documented in the most recent ZDHS (Gaisie et al., 1993) and was very much in evidence during the field observations undertaken as part of the Contraceptive Needs Assessment.

The Assessment Team's observations lead to the conclusion that limited contraceptive choice in Zambia is a function of providers' biases as well as of users' lack of information about method options; of inadequate provider training and of poor commodity distribution.

This chapter, therefore, examines each of these factors and their consequences with respect to the availability and quality of services associated with each method type. Where specific recommendations are made by the Assessment Team for the introduction, re-introduction, or withdrawal of particular contraceptive methods or specific products, these are found after the discussion of each method.

Oral Contraceptives

According to the 1992 ZDHS, half of all current users of a modern contraceptive method use the pill - which is not surprising given that nationwide, the pill is the only contraceptive method available at every level of the public and private sector service delivery programme. What is surprising, however, is that the quality of services associated with the delivery of oral contraceptives should be so uneven. Visits undertaken during the Contraceptive Needs Assessment suggest that two factors in particular are responsible for this situation. One is the excessive number of pill brands currently available through the commodity distribution system; the other is inadequate technical competence of many service providers at managing so wide a range of brands.

With respect to the oral contraceptives currently distributed, the Assessment Team encountered a total of no less than eight different brands in stock at

TABLE 3

ORAL CONTRACEPTIVES FOUND DURING
FIELD VISITS

NAME	COMPANY	PROGESTOGEN (µg)	ESTROGEN (µg)
Microgynon	Schering	Levonorgestrel-150	EE-30
Nordette	Wyeth	Levonorgestrel-150	EE-30
Lo-Femenal	Wyeth	Norgestrel-300	EE-30
Neogynon	Schering	Levonorgestrel-250	EE-50
Eugynon	Wyeth	Norgestrel-500	EE-50
Logynon	Schering	Triphasic-levonorgestrel/EE	
Microlut	Schering	Levonorgestrel-30	
Microval	Wyeth	Levonorgestrel-30	

hospitals, health posts, and community distribution programmes across the country. As shown in Table 3, these include the combined oral contraceptives Logynon, Neogynon, Microgynon, Eugynon, Nordette and LoFemenal; and the progestogen-only contraceptives, Microlut and Microval. Field research carried out in the preparation of the Assessment's background paper indicated that even this figure may underestimate the total number of oral contraceptives currently available in Zambia. Mbomena (1995) reports, for example, having encountered in pharmacies and service delivery points in Lusaka at least four additional brands (Exluton, Marvelon, Conova, and Ovrette) not included in Table 3.

Part of the reason for this profusion in pill brands and formulations is that many service delivery points (SDPs) - particularly at the community level, draw their stocks from a variety of sources: the Ministry of Health (through Medical Stores Limited); PPAZ; and through a number of community based distribution (CBD) programmes supported by Pathfinder. When one source dries up, as they all periodically do, the SDPs simply turn to another. As a result, it is not uncommon to find some SDP stores with different brands of identical hormonal composition while other pill types, such as progestogen-only pills, are lacking altogether.

While it is difficult to generalize across all the levels of SDP visited, there was nevertheless enough evidence to suggest that for many service providers, coping with the large number of oral contraceptive brands has become a serious problem.

At many SDPs, provider knowledge of oral contraceptives remains very much brand-specific. Few providers, especially at the community health centre level, could identify the hormonal composition of pills currently in stock or even describe the contraindications associated with them. Microgynon, for example, is currently the "hands-down favourite" among providers nationwide because it is viewed as having the least side-effects of any pill currently available. Yet few providers could state its hormonal composition or even, in case of a stock-out, identify an alternative brand of the same composition (eg. Nordette). Indeed, this lack of familiarity with the hormonal composition or side-effect profile of different oral contraceptives was one of the most striking observations to be drawn from the Assessment's field visits.

Contrary to what might be expected, the current profusion of pill types has not meant an expansion of contraceptive choice for users. Rather, it has prompted providers to cope with the overload by selecting one or two brands they recognize and promoting them universally at the expense of others. Obviously, the consequences of this practice affect all aspects of service delivery. With respect to logistics, over-dependence on a single brand means more frequent stock-outs of that brand, while the remaining brands sit idly in the store room. Indeed, at many health centres, an alternative is often provided

only when the preferred stock has been exhausted. In some cases, these "alternative brands" have already developed a reputation among both users and providers as being inferior. As a result, pill-users with strong brand loyalty are far more likely to cease contracepting during stock-outs than accept an alternative product. Indeed, such stock-outs may account in part for the high discrepancy reported in the 1992 ZDHS (Gaisie et al., 1993) between "ever-use" levels for the pill of 15.5 percent of all women as compared with "current use" levels of only 3.5 percent.

Another consequence of brand-specific biases is that, by failing to understand the significance of different hormonal compositions, many providers either recommend brands inappropriately or have no rational basis for identifying alternatives, should users encounter side-effects with their first choice.

Few providers, for example, were aware that combined oral contraceptives should not be given to breast-feeding women during the first six months post-partum. Most providers were unaware that this was why they were provided with progestogen-only pills. In addition, it was repeatedly stated that women did not like the side-effects or the different treatment regimen of the progestogen-only pills in comparison to the combined oral contraceptives but this assessment was always based on use outside any period of breast-feeding. Not recognizing the significance of hormonal compositions also makes it difficult for providers to understand or even apply the findings of new research in the contraceptive technology field. WHO has recently recommended that the use of oral contraceptives containing greater

than 35µg of ethinyl estradiol be strongly discouraged. In Zambia, two such brands are currently available: Neogynon and Eugynon. Other studies, meanwhile, suggest that the triphasic preparations such as Logynon have no advantages over low-dose monophasic preparations, such as Microgynon and may, in fact, have poorer cycle control.

Recommendations:

Efforts should be undertaken to rationalize and eliminate unnecessary duplication in method availability, specifically in the case of oral contraceptives, where the current plethora of brands has overwhelmed both providers and users alike.

Action should be taken to remove the 50µg estrogen-containing oral contraceptives and the triphasic preparations from the current range of brands provided.

Adequate supervision and technical support is required to ensure that service providers are able to make effective use of the oral contraceptives available to them. In addition, service providers should be kept informed by their district as to changes in the availability of stocks and to the appropriate use of them.

Service providers clearly require more systematic training in contraceptive technology, particularly for hormonal methods. In particular, the use of combined oral contraceptives during breast-feeding must be discouraged. Given the inevitable changes in contraceptive stocks and formulations, long-term reliance on brand name recognition (versus an understanding of hormonal composition) will only perpetuate the influence of unfounded

beliefs and provider biases on service delivery.

Practical, norms and guidelines, including technology updates, are needed to ensure that all service providers have ready access to appropriate reference materials for counselling on the full range of contraceptive options (hormonal and otherwise) available to family planning users, as well as for resolving questions or queries that may arise during normal service delivery activities.

Barrier Methods

Condoms. Following the pill, condoms are the most widely used reversible contraceptive method in Zambia. Their popularity is undoubtedly a function of their effectiveness at STI prevention, but also of their widespread availability within and outside the formal health sector. Field visits by the Assessment Team suggest that the present broad-based distribution system, particularly the private sector and social marketing components, has had a major impact on bringing family planning services within the reach of persons routinely excluded from the formal health care sector because of age or marital status.

An active social marketing campaign by PSI/PSZ has ensured that *Maximum* brand condoms are available cheaply at pharmacies, shops and other retail outlets nationwide. In fact, this brand is now the usual brand of choice for most condom users. Even within the public sector, however, condoms appear less susceptible to stock outs than other contraceptive methods. This may be a result of the fact that condoms are the only contraceptive method included

within the essential drug kits sent out to all public sector hospitals and health posts every month, albeit that the numbers included are small.

The popularity of condoms can also be attributed, however, to their exposure via the mass media and to the success of IEC campaigns by the National STD/AIDS Programme. Not only are condoms easily accessible throughout Zambia, Zambians appear to know a lot about them. In supermarkets, pharmacies, schools, and on radio, television, and billboards, people are continuously exposed to materials promoting awareness of HIV/AIDS and its prevention through the use of condoms. This is in sharp contrast to the comparatively restrictive norms governing the distribution and dissemination of information on other contraceptive methods. It is particularly ironic in the case of young people, for whom, as noted earlier, access to family planning information and services in schools is widely rejected out of fears that such exposure would only encourage further sexual activity.

Zambia's increasing levels of condom awareness and use are a critical element in the fight against HIV/AIDS. However, for contraceptive purposes the method is seen as having high discontinuation and failure rates. To the extent that the success of Zambia's condom programme is the outcome of a lack of other contraceptive method options, the appropriate role of condoms in family planning will only be achieved once a more balanced method mix is realized.

Recommendations:

The distribution of condoms through private sector and social marketing

programmes has generated a significant increase in information dissemination and accessibility but particularly to underserved sectors. The lessons of this experience should be examined and, where possible, applied to the delivery of other contraceptive methods which could benefit considerably from increased user knowledge and accessibility.

Spermicides. Spermicides represent only a minor percentage of overall contraceptive use in Zambia. Nevertheless, there is a limited demand for them, particularly foaming tablets, among users and service providers alike. Based on provider interviews at service delivery sites, users show a marked and consistent preference for vaginal tablets (especially Neo-Sampoon®) over foams (eg. Delfen®). It is unlikely that coital dependent methods such as vaginal foams or tablets will ever represent a major component of Zambia's overall method mix. Nevertheless, both users and providers considered that spermicides have already established themselves as a recognized method option with a more important role to play in the national family planning programme.

To date, the principal constraint to expanded use of spermicides has been the limited supplies of them. Not part of the Ministry of Health's contraceptive distribution programme, vaginal tablets are currently available only through PPAZ and Pathfinder. And although sporadic "seepage" from these sources do allow a small percentage of spermicides to enter the public sector health care system, these amounts are completely inadequate to meet current demand levels. Indeed, contraceptive stock inventories revealed that for 1994, PPAZ

had available only 3,000 tubes of the vaginal tablet Neo-Sampoon and 4,104 cans of the vaginal foam, Delfen. It might be noted that the selection of spermicidal products is driven in large part by what donor agencies are allowed to purchase, rather than by client's preferences. Because USAID funds apparently cannot be used to purchase Neo-Sampoon, USAID funding recipients have been providing Conceptrol, a product which is less accepted by users. Whether this is a "brand-loyalty" or another reason is not known.

The Assessment Team concluded that where there is an existing demand for spermicides, clinics should be ensured adequate stocks of appropriate brands for distribution to clients. However, given their more difficult administration, limited acceptability and high failure rates, any major effort to target spermicides for re-introduction to encourage more wide-spread use, would probably not be warranted.

Recommendations:

Efforts should be made to ensure that stocks of vaginal tablets and foams are adequate to satisfy current demand levels.

If discernible preferences do indeed exist for specific spermicidal methods, user studies should be carried out to identify and understand these preferences better so that they can be reflected in subsequent commodity procurement. Given the difficulties identified earlier with respect to multiple pill brands, similar redundancy among less widely used spermicides is likely to yield even

greater logistics and service delivery problems.

Intrauterine Device (IUD)

Given the limited method mix, the IUD could very well meet the contraceptive needs of many women for whom hormonal methods - whether because of age, hypertension, breastfeeding or simply inconvenience - would not be appropriate. And yet nowhere in Zambia is the IUD a widely used contraceptive method. In urban areas, it is used by only one percent of married women; in rural areas, usage is virtually non-existent.

Based on visits undertaken during the Needs Assessment, the limited role of the IUD within Zambia's contraceptive method mix was found to be a function - not of opposition to the method by potential users - but rather, of institutional barriers within the medical establishment and of biases on the part of service providers themselves. Three factors, in particular, were seen as limiting the potential role of the IUD.

First, interviews with clinic staff suggest that many service providers, including physicians, simply do not recognize or attach adequate importance to the contraindications of hormonal contraception. Indeed, during a number of Assessment Team interviews, staff frequently reported women being provided an oral contraceptive, despite preliminary physical exams revealing high blood pressure or severe headaches. This would suggest that for many service providers, the need for an effective, non-hormonal, reversible alternative is not recognized as an important component of informed choice.

A second factor limiting the potential role of the IUD is the view among many service providers, particularly physicians, that the high prevalence of STIs preclude its use, especially in rural areas where adequate STI detection procedures are lacking. While WHO Guidelines exclude IUD use in women with current or a recent history (< 3 months) of a sexually transmitted infection or of pelvic inflammatory disease (PID), simply dismissing the method as inappropriate for all rural women is not an adequate approach. The Assessment Team observed that current STI diagnosis and treatment procedures are inadequate and that immediate steps ought to be undertaken to ensure that they are in place. However, with proper screening and adequate counselling, the best judge of risk to STI infection is the client herself. The Assessment Team considered that down-playing or disparaging the IUD as a contraceptive method in the expectation that it will not be selected should not serve as an alternative to proper counselling and an informed choice of methods.

The third factor limiting the role of the IUD within the contraceptive method mix, is the limited number of health professionals trained and authorized to insert them. Although the proposed Ministry Standards and Guidelines (Zambia, 1994b) permit medical personnel other than physicians to insert IUDs, the policy has yet to be implemented. Moreover, there appears to be opposition by physicians as well as liability concerns resulting from continued absence of General Nursing Council norms explicitly authorizing IUD insertions. The Assessment Team encountered reports of physicians

discouraging women from using the IUD, on the grounds they did not have the time to perform the insertion. Visits to remote rural districts, revealed midwives who had been trained to insert IUDs at UTH in Lusaka, but who had never been allowed to use this skill. There is a willingness on the part of many nurses to learn IUD insertion techniques. However little effort has been devoted thus far to this activity, despite numerous studies having clearly shown that properly trained paramedical staff can safely provide a broad range of reproductive health care services, including IUD insertion. Many of these studies also suggest that when such personnel are able to provide these services, client follow-up is enhanced, the loss of potential family planning users is reduced, and a more balanced distribution of methods is ensured.

In some of the clinics in which IUDs were in stock (but which were not necessarily available to clients) the Assessment Team found the Lippes loop. WHO recommended some years ago that this product should be removed from family planning programmes and that the modern copper devices be used. Should there be a reintroduction of an IUD into the family planning programme, a single copper IUD should be selected to minimize problems relating to the need for training in more than one insertion technique.

Recommendations:

The IUD is an underutilized contraceptive method which will only play an appropriate, however limited, role within the national family planning programme through its reintroduction. This would entail more systematic training of providers

(paramedical as well as medical) in counselling, IEC and field-based service delivery (particularly pelvic exams and STI diagnosis). It must be stressed, however, that expanding access to IUDs must not be undertaken in isolation from the provision of appropriate approaches to STI diagnosis and treatment.

Existing medical norms and legislation should be amended to allow properly trained paramedical staff, including nurses, to insert IUDs without the supervision of a physician.

Practical systems for STI detection and treatment should be identified, particularly in rural areas where such systems are lacking. Efforts should focus on the expanded and more efficient use of existing human resources, equipment and infrastructure.

Long-Acting Hormonal Methods: Injectable Contraceptives and Implants

Injectable contraceptives. For many years, the injectable contraceptive, DepoProvera (depot medroxy progesterone acetate, DMPA) was a popular and widely available contraceptive method in Zambia. Apparent abuse of this product in South Africa and Zimbabwe, however, gave rise in 1984 to a political backlash in Zambia that eventually resulted in the complete withdrawal of DMPA from public sector SDPs. Targeted by brand name, DepoProvera became the focus of considerable derision within the Zambian medical establishment, derision that often included exaggerated side effects for which there was no medical justification. Currently, it is only

available through certain private sector and mission facilities.

An alternative injectable contraceptive Noristerat (norethisterone enanthate, NET-EN) is available on a limited basis through PPAZ. Noristerat has a shorter duration of action than DMPA, however, it has proven so popular with users that, after less than three years of availability, its use at PPAZ's Lusaka clinic currently exceeds that of oral contraceptives. According to service providers at the clinic, women prefer the relative convenience of bimonthly injections and do not seem unduly disturbed by the secondary effects of irregular menstrual bleeding or amenorrhea.

On field visits conducted during the Contraceptive Needs Assessment, demand for a long-acting, injectable contraceptive was found to be widespread, both on the part of users and service providers. Among some providers, however, long-standing biases against DMPA in particular remain quite strong. Many of the public health nurses currently responsible for the supervision of family planning service delivery, for example, were themselves providers when DMPA was withdrawn from the national method mix. Their exposure to the negative publicity surrounding the method is still visible today in that many of them were quite adamant that if DMPA were the only injectable available, they would *not* use it or recommend it for use by their field staff. Field-based staff, on the other hand, exhibited far fewer biases and many felt it important to reintroduce the product. Even in rural areas of provinces such as Luapula, several women who had previously used DMPA said they would recommend its use to others in the community.

Recommendations:

Injectable contraceptives could play an important role in expanding contraceptive choice nationwide. The potential for this should be explored fully, particularly in rural areas where irregular supplies of oral contraceptives are common and where the infrastructure is not adequate for quality Norplant services. However, given the sensitivity surrounding the previous withdrawal of DMPA, the potential role of an injectable contraceptive should be explored carefully and its introduction undertaken gradually.

The incorporation of multiple injectables into Zambia's contraceptive method mix is likely to prove equally as cumbersome to the present logistics and service delivery system as is the presence of multiple pill brands. For that reason, it is recommended that a single injectable contraceptive be selected for use within the national family planning programme. Such a selection must be based on the characteristics of each of the two available products including costs.

Contraceptive implants. Norplant® contraceptive implants have been used on a trial basis in Zambia since 1986, when the Population Council initiated limited clinical trials of the method in collaboration with Lusaka's University Teaching Hospital (UTH). The five-year study involved 180 clients recruited between March, 1986 and December, 1987.

The results have been extremely positive. User satisfaction with the method within the context of an academic teaching hospital appears to be high; the discontinuation rate was approximately

21% during the first year of use; and there have been no serious or unanticipated adverse experiences associated with its use. Moreover, Norplant® appears to meet the contraceptive needs of a clearly defined sector of the population: high parity women who have knowingly chosen to delay subsequent pregnancies for an extended period of time, but have not yet decided to undergo a tubal ligation.

The ability to provide Norplant® within the context of informed choice and quality of care depends largely on the availability of services and infrastructure at an urban facility such as the UTH. Sterile procedures can be assured; trained staff are available for insertion and for immediate implant withdrawal if requested; and follow-up for routine monitoring and removal at five years can be facilitated because transport and communication facilities are present. These are all critical factors which must be present if Norplant® is to be provided with appropriate quality of care and are prerequisites before consideration is given to expansion of availability of this method beyond UTH. On the basis of its observations of existing facilities for, and quality of care in the provision of, family planning throughout the country, the Assessment Team considered it unlikely that Norplant could be made widely available, other than in certain larger health facilities in urban areas.

Recommendations:

If Norplant® services are to be expanded beyond the current introductory programme, this should be done only where access to urban facilities with appropriate follow-up procedures and trained providers can be assured.

Emergency Contraception

Post coital or "emergency" contraception has been proven to be a safe and highly effective way of preventing an accidental pregnancy after unprotected intercourse or a contraceptive accident such as condom breakage or slippage (Kubba, 1995). There are two types of emergency contraception available. One involves use of a combined estrogen-progestogen oral contraceptive regimen within 72 hours (the Yuzpe method); the other involves postcoital insertion of a copper IUD within five days. Neither of these, however, were known to Zambian service providers. Most providers did acknowledge having had clients approach them for assistance soon after unprotected sex, but admitted having advised them only to come for contraceptives once they could confirm they were not pregnant.

The use of emergency contraception would provide an additional option for women and adolescents to avoid an accidental or unwanted pregnancy and avoid the need to seek a clandestine abortion. It would also give providers an additional tool for rape management. Given the discussion on the provision of IUDs, the introduction of emergency contraception should be restricted to the Yuzpe method. This method involves provision of two oral contraceptive tablets containing levonorgestrel, 250µg and ethinyl estradiol, 50µg within 72 hours of intercourse followed by a further two tablets 12 hours later. Since it has been recommended that combined oral contraceptives containing 50µg of ethinyl estradiol be removed from the national programme, it would be appropriate to obtain the commercially available four-pill packs marketed for emergency

contraception. This would have the advantages to the providers of dissociating pill use for emergency contraception from normal oral contraceptive use and preventing partially used packs of oral contraceptives lying around in clinics.

Recommendation:

It is recommended that the Yuzpe method of emergency contraception is introduced as soon as possible into the national programme. This will involve the development of appropriate IEC materials for providers and users, and the provision of four-pill packs containing tablets of levonorgestrel, 250µg plus ethinyl estradiol, 50µg.

Natural Family Planning

Given the limited range of modern contraceptive options currently available in Zambia, an effective natural family planning programme could very well have a significant impact on overall contraceptive use and, in many cases, make the difference between use and non-use of any family planning method at all. Yet visits to health centres and hospitals across the country revealed that natural family planning has not been incorporated as an option within the overall range of available family planning methods. This appears to be true whether the service delivery site is operated directly by the Ministry of Health or even by one of the many religious missions operating in rural areas.

Menstrual-cycle related methods.

Based on interviews with family planning providers, users, and potential users, the marginalized role of natural family planning appears to derive from at least

two features of the current service delivery system. First, natural family planning does not appear to be viewed, either by providers or users, as representing just one of a range of family planning options. Rather, modern and natural methods are portrayed as mutually exclusive - an exclusivity that manifests itself at all levels. At the service delivery level, a sharp line is drawn between personnel trained to provide modern methods and those authorized to counsel in natural family planning. In any given health centre or hospital, the latter are likely to include at most one person adequately trained in natural family planning. This separation between providers of natural and modern family planning not only reinforces the conceptual gap between these two broad categories, but also means that few staff are familiar enough with both options so as to allow users to choose the method most appropriate to them.

Even at the user level, there is a widespread perception that natural family planning is fundamentally different from modern family planning. Combining the two (eg. condoms with calendar/rhythm method) or switching to a modern method is often portrayed as a sign of failure or moral weakness. The association of natural family planning with Church-supported programmes also contributes to the exceptional status of natural family planning within the overall method mix.

A second major reason for the marginal role of natural family planning is the limited knowledge of natural family planning options. Among Zambia's natural family planning advocates, special importance has been attributed to only two methods, both associated

with menstrual cycle monitoring. These include Basal Body Charting (the Temperature Method) or Cervical Mucus Charting (the Ovulation or Billings Method). Other cycle-related methods such as the calendar/rhythm method are down-played by providers as ineffective, dismissed as "not scientific" or deemed inappropriate because, as in the case of the rhythm method, "rural women cannot read calendars".

Lactational amenorrhea. Research suggests that apart from its nutritional benefits to the child, the lactational amenorrhea method (LAM) can be a highly effective contraceptive method for women breastfeeding exclusively in the first six months following delivery (Hatcher et al., 1994).

Interviews carried out during the Assessment reveal that most service delivery personnel are aware that lactation extends a woman's period of suppressed ovarian function and infertility. This knowledge is not, however, used proactively by providers; in fact, in none of the clinics visited by the Assessment Team, did any providers consider LAM for use in assisting postpartum women to control their fertility. Although nearly all children in Zambia are breastfed, the median duration of breastfeeding with no supplementation is less than one month. With only water as supplementation, the median duration is only 2.3 months (Gaisie et al., 1993).

Ironically, perhaps the greatest effect of present biases towards so-called "scientific methods" has been a widespread rejection of natural family planning in general. Indeed, interviews with health personnel across the country

reveal that the decision by many health centres, particularly mission facilities, to introduce modern methods was taken precisely because of the practical difficulties of using the temperature or ovulation methods, the ineffectiveness of menstrual cycle-related methods anyway during the postpartum period, and the generalized lack of faith in such "non-scientific" natural methods as calendar/rhythm or LAM.

Recommendations:

Successful incorporation of natural family planning within Zambia's service delivery programme is necessary, but will require fundamental changes in the way such services are offered. First, knowledge and responsibility for training of natural family planning should not be, as is currently the case, the monopoly of selected health care providers. All providers within a given service delivery setting should be trained in all methods so that natural family planning becomes merely one option to choose from.

The training curriculum for providers should reflect the advances and research currently being undertaken elsewhere in natural family planning. Few providers, for example, even those officially trained by Family Life Movement, were familiar with alternative means for monitoring menstrual cycles (eg. coloured beads) despite the fact that it was the "inappropriateness of the calendar" that was cited most frequently as grounds for rejecting the rhythm method.

The range of natural family planning methods discussed by providers should be expanded to include lactational as well as other menstrual cycle-related methods. Users should also be encouraged to switch methods as their reproductive health needs change or even to combine methods (rhythm and condoms). Regrettably, the present focus of service providers on efficacy (resulting in limited method choice) and/or exclusivity (discouraging method switching) has been pursued at the expense of both potential as well as lost natural family planning users.

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