"CONTRACEPTIVES USE PATTERNS, AND THEIR RELATIONSHIP TO FERTILITY AMONG WOMEN IN BAGAMOYO DISTRICT AND DAR ES SALAAM CITY, TANZANIA"

BY

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DECLARATION

I declare that this dissertation has never been submitted for a diploma or a degree in any other University.

Date 7th January 1954 Name Dr J A Adamiwa

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ABSTRACT

This study was done during June through August, 1983 in Lugoba village of Bagamoyo District and Magomeni Mapipa area in Kindoni District of Dar es Salaam City. The main objective of the present study was to determine the prevalence and patterns of use of contraceptives methods and their relationships to fertility among 15 to 49 year old women.

A random sample of 324 women from Bagamoyo and 200 women from Dar es Salaam were interviewed using a questionnaire specially designed for this study.

Results showed that more women in Dar es Salaam used some kind of contraceptive method, which did not increase significantly with age. With regard to traditional contraceptive methods, the percentages of women in Bagamoyo and Dar es Salaam were almost same, but a relatively higher percentage of Dar es Salaam women used modern contraceptive methods as compared to the Bagamoyo women.

In Dar es Salaam a significantly higher percentage of women used any method for less than 12 months compared to Bagamoyo women, but a slightly higher percentage of Bagamoyo women continued any method for 48 months or more than the percentage of Dar es Salaam women.

Over 60% of the women in both Dar es Salaam and Bagamoyo were married within four years from the onset

of menarche, and of these over 60% had their first delivery within one year of marriage.

Contraceptives methods users in both Dar es Salaam and Bagamoyo had higher mean number of pregnancies and live births as compared to the non-users of contraceptives methods.

Women in both the samples knew more about modern methods than about the traditional contraceptive methods. The women's educational level, religion, employment status, and history of live-births were significantly associated with use and type of contraceptive method. The number of surviving children, place of residence and the number of wives the husband has were not found to be associated with contraceptives use.

How women got their contraceptives from the different sources and their choice of the best time of the day were associated for the Dar es Salaam women; but not for the Bagamoyo women.

Implications of these findings with regard to the magnitude of the problem of fertility regulation and its relationship to the delivery of family planning services in Tanzania are discussed. Recommendation for further studies and other measures have been made.

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CHAPTER I

INTRODUCTION

Fertility is an area of human behaviour where individual tastes, religion, culture and social norms all play a major role (1) (2). Yet evidence from large group of people suggests that difference in fertility can be largely explained by differences in their social and economic environment. W. Parker Mauldin et al (3) in analysing fertility decline in developing countries for the period 1965 - 1975 found that there was a big decline in Asia, a short fall in the Americans and some in North Africa, but almost none in black Africa.

From census data and vital statistics, (21) it appears that 150 years ago crude birth rates were high all over the world, and were more or less stablewith the exception of France, where the birth rate had already started to fall. Between the two world wars of 1914 and 1939 alarm grew in Western countries on the fertility of the Western people, which was decreasing rapidly. The spectre was raised of a depopulated Western world where fertility, as measured by live birth rates had indeed fallen by over 50%. For many years well informed people seemed unable to believe that the change in fertility was almost entirely a matter of voluntary control of conception, and not a fundamental change in fecundity or the power to conceive.

Experience of relatively high fertility in the U.S.A. since 1945 and the evidence of specially designed field studies in the U.S.A., Britain and elsewhere leave little doubt that birth control is practiced by most couples in Western countries, and it is highly effective when people wish to have no more childre.

The level of fertility is higher in Africa than in any other continent (4). The United Nations estimate the crude birth rate for Africa for the period 1965 to 1970 to be 46 per thousand population per year, for Asia which is highest next to Africa to be 38 per thousand and 18 per thousand for Europe. The birth rate seems to be high throughout the continent; (over 40 per thousand population) varying from 41 for South Africa to 49 per thousand for Western Africa. The current world population of 4.4 billion people is projected to reach 6 billion people by the year 2000 out of which 4.9 billion people will constitute the population living in developing countries (1).

The last 20 years have provided the striking example of Japan, where the birth rate declined in 10 years from 35 to 17. In this instance the major method of birth control has been, and is, induced abortion. The agencies interested in health in Japan are now doing all they can to persuade the people to use contraception rather than induced abortion (8).

Some giant field studies covering many nations over eight or nine generations leave no doubt that fertility control is possible, and that it has been achieved by a variety of methods. Special studies indicate that the methods of birth control most widely used are coitus interruptus douching condom, induced abortion rhythm method, and in Ireland postponement of marriage.

Other mechanical and chemical vaginal methods, and of course oral contraceptives account for only a small part of the total reduction in fertility, Association of lower fertility with increased education, industrialisation and social mobility particularly in Western countries.

The same situation may apply when we consider the high fertility in other countries like Tanzania - why is to so high? That it is high because people do not know how to practice birth control may well be true. But whether a fall in the birth rate cannot be achieved with the benefit of chemical or mechanical methods of contraception is unknown.

In many countries a high proportion of currently married women are used modern methods of contraceptives (22). In Brazil Costa Rica, and Panama more than 50% of currently married women said that they were using some method, and in South Korea, Jamaica and Thailand, more than 50%. This compares eith about 70%

in the U.S. and Europe. In other surveyed countries however, the rather are much lower. In Guatemala and Paraguay only about 20% reported using contraception. In almost every country oral contraceptives and female sterilization are by far the two most widely used methods.

Nations that once thought of development primarily in terms of growth in national output are increasingly concerned with social and distributional objective (23). Programmes to reduce fertility once limited almost exclusively to providing family planning services through physician-staffed clinics are becoming diverse multisectoral efforts carried out within the context of broadly conceived population policies. Programme interests extend to raising age at marriage and expanding women's roles. Family planning services are being provided through increasingly diverse channels with growing emphasis on commercial and community distribution by para-professionals. At least there is to a certain extent, a growing concern for direct action on the government to achieve those goals.

With the recognition that her population is growing at too fast a rate, the government in Kenya (25) has given "high priority" to family planning programmes in her overall economic development scheme, stating "A high rate of population growth means a large dependent population, reduces the money available for development,

lowers the rate of economic growth and makes exceedingly difficult the task of increasing social services.

Tanzania is one of the least developed countries with a population of approximately 20 million people (5). Agriculture forms the backbone of the country's economy, employing about 90% of the population who live in rural areas, and estimated to produce approximately 40% of the gross domestic products (GDP). These were targets of the country's third five year development plan (July 1976 to June 1981). But due to high prices of fuel, low international prices for agricultural products, falling agricultural products output compared to the number of the people to be fed; the country has been forced to import food nearly every year. The economic growth is said to be negative 3.8 (Ministry of Planning).

The annual average increase of the population is high 3.3% according to the 1978 Population Census (5). The population growth rate is ascribed to the birth rate not folling and the specific age fertilities rising because of possible reduced pregnancy wastage and improved maternal services. The same factors were shown to contribute to rapid population growth in Nigeria (6).

The crude birth rate is over 50 per thousand population(s) thus exceeding the 45 per thousand figure which is taken as the "biological maximum"(6) for a balanced system between man, the environment and provision of essential social amenities; such as clothing, food and housing.

Furthermore, the basic reasons for family planning and hence regulating the fertility rate of women in their reproductive age as put forward by Sai (24) leave no doubt as to the benefits gained by the nation in adopting a system that aims at ensuring a good health for both mothers and children. These include:

(a) Health

The age at which a women enters into reproduction is itself important to her health and safety.

Childbirth under the age of 20 imposes much greater hazards on the woman than childbirth after the teens. The risks to health and life increase again quite seriously after the age of 35. Thus F.P. can be used to ensure that woman produce children only during the bilogically most efficient and least risky period in their fertile life.

(b) Economic

Each individual should be encouraged to have the number of children he/she can have and care for within their economic means. It is not true that the poor are poor because of their excessive

fertility or that they cannot be helped to overcome poverty unless they restrict their fertility first; but it means that programmes aimed at aleviating poverty will perhaps have a much more rapid and higher impact if fertility regulation takes place at the same time.

In less developing countries, where total development is so urgently needed, family planning and population regulation activities ought to be made part and parcel of the comprehensive development plan; which will in turn ensure education opportunities, provision and diversification of job opportunities, adequate nutrition and elementary health care as well as family planning.

(c) Welfare

The welfare of individuals and communities also requires that their numbers and the rate of growth of those number are planned. In all developing countries governments have rightly tried to assume the responsibilities of providing basic welfare services such as education, health care, housing etc for the population as a whole. It is necessary in such circumstance not only to expand the basic services and their outreach, but also to mount simultaneously programmes which will ensure that the total number in need of such services increase less rapidly than the national ability to expand them.

The above issues pose a major problem in most developing countries, including Tanzania, and hence ways which will lead to solving them are imperative.

High birth rates results in high dependency ratio which is about one to two at present. Children less than 15 years form nearly 45% of the population, and these children together with women in their reproductive age constitute nearly 70% of the total population. The annual average increase of the population is high about 33 according to the 1978 population census (5). The population growth is ascribed to the birth rate not falling, and the specific-age fertilities rising because of possible reduced pregnancy wastage and improved maternal services. Thus if the present trends are left alone, the population will be doubled in less then twenty years but socio-economic standards cannot be expected to double, hence the argument of checking the population growth and keeping these rates in balance with the available resources equally holds for Tanzania.

Definition of Terms Used

Contraceptive:

A device or method which is employed so as to avert the possibility of conception taking place.

Contraceptive User:

Any woman in her reproductive age (15-49 years) who deliberately uses any of the conventional methods such as the contraceptive pill, the intra-uterine contraceptive device, diaphragm condoms, jelly tubal ligation etc for spacing and or limiting her family size.

Non-Contraceptive User:

Is any woman in her reproductive age (15-49 years) not employing the above methods for spacing and or limiting her family size.

Natural Method:

This is a technique where no mechanical or chemical means are employed to avoid pregnancy. It includes abstinence rhythm method, safe period prolonged breast-feeding; local charms which are worn around the waist and coitus interruptus (withdrawal).

Modern Contraceptive Methods:

These include the contraceptive pill, intra-uterine contraceptive device (IUCD) the condom, sterilization (of women or men) injections, and other female scientific methods such as the diaphragm foam tablets and jelly application which act as spermicides.

"Marriage" is here defined as all stable sexual unions, whether the marriages were legal, religious or traditional.

Crude Birth Rate (CBR):

The number of live births per 1,000 population in a given year.

Total Fertility Rate (TFR):

The average number of children that would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific rates of a given year. The total fertility rate equals the sum of the age-specific fertility rate.

Age Specific Fertility Rate (ASFR):

The number of children born alive per 1,000 women in a specific age group. The age groups are usually 15-19, 20-24, 25-29, 30-34, 35-39, 40-44 and 45-49. Age-specific rates calculated for 5-year age groups are summed up and multiplied by five to arrive at the total fertility rate.

Rural Population; is used to refer to the women living in Luboba village in Bagamoyo District in Coast Region.

Urban Population: is used here to refer to the women living in Magomeni Mapipa area in Kinondoni Ward in Kinondoni District in Dar es Salaam City.

Pregnancy Wastage:

This a value of the number obtained by subtracting the mean number of live births from the mean number of pregnancies.

Ten-Cell Leader (Balozi):

Is the lowest political cadre person, whose area of jurisdiction is roughly ten houses (families).

CHAPTER II

REVIEW OF LITERATURE

In a World Fertility Survey in which more than 400,000 women of reproductive age in more than 40 developing countries and 20 developed countries Kendall (7) found that on analysing information on their marriages, fertility, and contraceptive practice that half of all married women of reproductive age want no more children, but about half of these women are not using effective methods of family planning and also that more than 20 percent of all married women in every country except Nepal have heard of contraception. The percentage who have used contraception varies widely from 10 percent in Pakistan to 82 percent in Costa Rica.

In studying family size preference and reproductive behaviour Coombs (1972) showed that data from the 1973 National Survey of Family Growth in U.S.A. revealed that while about half the married women state that they want only one or two children the underlying preference of many indicate a potential for larger families, one third of this group has a bias toward a moderate size or large family, inspite of statements to the contrary. For the country as a whole, 45% of all wives of child bearing age have an underlying preference for a small family 25% favour a moderate size, and 30% have a bias toward a large family (27).

However, in investigating why women choose specific methods, Kahley and Gallaspy developed a model using data from Bogota, Colombia, which suggested that income levels, education, parity, and age were associated with the individual's contraceptive choice(15). Using data primarily from black women in the U.S. Cochrine found that pill choosers were younger and had fewer children than IUD users (16).

In studying the user preference for contraceptive methods in India, Korea, the Philipines and Turkey WHO Task Force (26) found that despite the balanced presentation of information and freedom of method choice, the patterns of contraceptive selection vary considerably from country to country, reflecting the importance of local factors as major determinants of method preference. The intercountry variation may be due to cultural differences, prior knowledge of specific contraceptive methods, or differences in the socio demographic characteristics of the clinic population. However, the results of this study indicate that, at least in India and Turkey, rural residence may be associated with the preference for long-acting injectable contraceptives. This is in consistent with previous reports from Thailand and suggests that many rural women may find an injection lasting three months more satisfactory than other methods. In contrast, urban women in India, Korea, and Turkey strongly favoured the IUD.

Future family planning intentions were another significant factor underlying method choice. In India, Korea, Turkey, women who desired no additional children or wished to postpone the next birth for more than three years tended to select the IUD. In contrast, women who sished to space their next pregnancy for less than three years tended to select the pill in India and Korea, and Depo-Provera in Turkey and the Philipines. The high preference for injectable contraceptives among the postpartum Philippines women is mainly attributable to the fact that this method could be used during lactation, whereas the pill was contraindicated for breast feeding mothers. When women were asked which attributes were most important in determining their choice of contraception, some common intercountry responses emerged. In India, Korea and Turkey women who selected the IUD stated that perceived effectiveness was an important characteristic influencing their choice. Women choosing Depo-Provera frequently mentioned the convenience during lactation as a major positive attribute, and pill selectors often mention ease of use.

The choice of contraception among postpartum women in the Philippines was largely dictated by whether a method was suitable for use during lactation.

A study carried out in two family planning clinics in Thailand showed that women who choose the pill were likely to want more children than those who choose

the IUD (17). In the Philippines, Bullmeg found that women with large families and those who wanted no more children tended to favour the IUD, and that education and occupation were not significantly related to choice (18). In a recent survey of women using the IUD, pill, condom, or rhythm in the Philippines, Philips found that continuation rates were higher among IUD users and among older women whose husbands approved of family planning (19).

In Taiwan Te-Hsiung Sun et al (10) in a series of six sample surveys showed that between 1970 and 1976 the practice of contraception reached high levels in all social strata, and preferred family size and fertility both declined rapidly. These changes occured while many traditional familial values, including strong son-preference persisted. Confirmation of the relationship between use of contraception and fertility is also demonstrated by a population report on contraceptive prevalence surveys (CPS) (9); the higher the proportion of women using contraception, the lower the estimated fertility rate. The Peoples Republic of China with a population of about one billion people in 1981, is the first country in the World to embark on a deliberate and comprehensive policy to reach zero population growth by the year 2000 or as soon as possible thereafter (11). Stressing on late marriages, universal use of contraception, and small families, China has reduced its birth rate from 34 per thousand in 1970 to 18 per

thousand in 1979 according to government statistics. This is a decline unequalled by any other large developing country.

By 1980, as a result of the recent campaign for one-child families, an estimated 51% of all birth in China were first births, compared with 35% in Taiwan (1976) and 42% in the United States (1977). Moreover, by 1981 more than half of all couples with one child had pledged not to have another.

By intensified family planning campaign in rural Bangladesh Phillips et al (12) had 33% of their eligible couples using contraceptives. An overall fertility decline of about 25% was observed, concentrated among older women. The impact was two to three times that of an earlier project that included fewer contraceptive methods, and needed lesser trained workers indicating that intensive family planning efforts can affect fertility in the absence of socio-economic changes. In studying the characteristics of contraceptive accepters in rural Zaire, Brown et al (13) showed that acceptors in rural Zaire were much like acceptors anywhere; by favouring spacing of their pregnancies in order to nourish their youngest child better, desired a number of children, and when they approached that number, their desire for additional children diminished. Residents of remote African villages acceptance of modern contraceptives was better if it was presented to them by a familiar respected health workers.

Acceptors may respond to a choice of contraceptives but they are strongly influenced by the advice of those who offer the service. In Kenya, however, only 9 percent of women exposed to the risk of pregnancy practice contraception, even though in 1966, Kenya was the first black African country to start a government sponsored family planning programme (14). Moreover, the country's fertility rate among the highest in the world rose between 1966 and 1978, and showed few signs of decline in the near future. 68% of fecund married women say they would like to have another child; that is they wanted large families. However, age at first marriage was on the rise, polygamy was on the decline, more women were being educated, and that educated and urban women report wanting somewhat fewer children than uneducated and rural women. In another study in Kenya, Dow et al (15) in studying the modern transitional and traditional demographic contraceptive patterns among Kenyan women concluded that although socio-economic development was associated with increased contraceptive use, family planning alone was not the main contributory factor.

In Zambia, the results of KAP Survey by M.R. Bahn which involved women from different socio-economic groups of the City of Lusaka reported that a fairly large percentage of women were not aware of methods of spacing their families and 30.4% of the women

interviewed bleieved that the family size was much in the hands of God (28).

R.E. Brown in Uganda showed that only a very small percentage of men and women and any information about available methods for spacing and limiting children. Within the cities there was a relationship between fertility and both income and education. It was the literate urban white-collar person who first limits his family size. Poor illiterate people living in slums did not bother to limit or space their children because they had no interest in climbing the socio-economic ladder (29).

CHAPTER III

RATIONALE AND OBJECTIVES

In Tanzania, there is no policy to reduce fertility for demographic reasons, but the government has allowed the expansion of the Family Planning Association of Tanzania (UMATI); an International Planned Parenthood Federation (IPPF) affiliate. In 1973, the Dar es Salaam clinics reported some 3,200 new family planning aceptors. The government currently allows its national health staff to offer contraceptives (provided by IPPF) as a part of Maternal and Child Health (MCH) care. The Minister of Health stated in 1974 that by 1980 all dispensaries in the country would have one midwife trained in family planning (40). Recently in 1982 the President of the country (Mwalimu J.K. Nyerere) called upon the nation to exercise careful child spacing and family size, each family making sure that the family was in a position to support every new born child.

But, as seen from the population growth rate, the family planning services have not been effective in arresting the increase in population growth rate let alone reducing it. There can be several reasons for which the programme has proved to be ineffective such as, the lack of services to the majority of women in their reproductive age, the methods of family planning, and the lack of motivation of the people to accept family planning methods. We do not know why some women

accept family planning and others do not, and the factors which influence acceptance. One would also like to know if there is a real difference between the reproductive patterns among family planning acceptors (that is contraceptives users) and that of women not accepting family planning methods (that is contraceptives non-users). Basic data on the above questions are lacking in Tanzania; the results of which would help the Ministry of Health or health planners in the country to develop family planning education policies enabling them to choose the best strategy for population growth control in Tanzania.

The present study was designed to answer some of the above questions and to shed light on some of the above problems. The main objective was to study the methods and patterns of use of contraceptives and their relationship to fertility among rural and urban women. From this main broad objective, the following specific objectives were formulated.

1. To determine the prevalence of use of contraceptive methods both modern and traditional for women aged 15-49 years in rural (Lugoba village of Bagamoyo District) and urban (Magomeni Mapipa area of Kinondoni Ward of Dar es Salaam City) areas in terms of:-
   (a) age
   (b) religion
   (c) education
   (d) employment status

(e) current number of surviving children

(f) the number of wives the husband has

(g) history of live-births

(h) preferred duration for the next pregnancy

(i) child's sex preference

2. To determine rural and urban women's knowledge of different contraceptive methods.

3. To determine the interval between menarche, marriage, and first delivery among rural and urban women.

4. To determine the mean Age-Specific Fertility Rates, the mean number of pregnancies, and the mean pregnancy wastage among the users and non-users of contraceptives in rural and urban areas.

5. To determine the preference and problems of family planning services with regard to:-

(a) approval or disapproval of current family planning services;

(b) choice of days for availing the family planning services;

(c) means and costs of availing the family planning services;

(d) problems encountered in availing the family planning services.

CHAPTER IV

METHOD

(a) Target Population

Bagamoyo is one of the five districts forming the Tanzania Coast Region. This area is approximately 8,800 Km^2 and ranges in altitude from 0 to 1000 on above sea level. The climate found through out the district is that of hot and humid weather over the whole year. The local population is 136,059 (33) with females forming 50.2% and mothers in their reproductive age (15-49 years) forming 20.6% (5) of the total district population. The main occupation is agriculture (peasant type - small farms) livestock and fishing. Ethnically the population is a mixed one although basically of Bantu descent and consists mainly of the Zaramo, Zigua, Ndengereko, Doe, Kwavi, Mahonde, Luguru, and Matumbi. These tribes are evenly distributed in the district and Islam is the dominant region. Economically, the district is one of the poorest districts in Tanzania.

Dar es Salaam City also has similar climatic features with that of Bagamoyo District but it is the largest urban centre in Tanzania with a population of about one million (830,492 in 1978). The population growth is very high about 7% due to urban immigration (5). This high population growth has led to acute presure on the existing infrastructural services which have not been developed

fast enough. Current information shows that 50% of the urban population constitute of low income groups and live in unplanned and inadequately serviced areas. Magomeni area however, where the survey was conducted is well serviced with most of the people living in Government constructed low cost houses (National Housing) and the inhabitants are a mixture of medium and low income groups but also including unemployed people especially housewives.

(b) Preliminary Survey

In the first two weeks of June 1983, the author obtained letters of introduction to the Party and Government officials whose district the survey was to be conducted. This opportunity was utilized also to establish rapport with the District Medical Officers and the Village Chairman; and also the questionnaire be used in the survey was discussed with them in order to find out if the questions were not embarassing or ambiguous. It was finally agreed that the questions were clear and not embarassing. The village chairman also agreed to mobilize their ten-cell leaders in preparation for the actual survey. In the third week of June 1983, three MCH aides working with Lugoba Health Centre, were assigned to the author by the Medical Assistant in Charge of the health centre. These aides were carefully instructed on the importance and proper way of interviewing the women with particular

emphasis on reassurance of the mother, maintaining privacy during the interviewing, and to work at a pace of the woman's thinking and thus avoiding implications of being in a hurry. Where the woman had a question. This was answered by the interviewer or the author who was always with the survey team. As a practical excercise, each aide had to fill ten questionnaires by interviewing women attending MCH services at the health centre. A total of fifty filled in questionnaires were analysed by the author and a Sociologist, after which some questions were deleted from the original questionnaire and new questions were added to it.

(c) Sampling

The ten cell leaders of the village were listed down and a simple random sampling was done to get the ten-cell leaders whose houses were to be entered into the survey. A total of 324 women were interviewed. This was 92% of the 352 women who were to be covered by the survey and 40% of the total women aged between 15 and 49 years living in Lugoba village.

The village is one of the 72 villages in Bagamoyo District, and it was selected for the research because of accessibility and convenience of the research; including the presence of a family planning services clinic, which had been going on for over five years. The village had also the highest number of women between 15 and 54 years as compared to the other villages in the district.

(d) Instrument

A pretested questionnaire form was used for every woman in the survey and the language used was Kiswahili which is the main language of the people living in coastal areas. This Kiswahili questionnaire form was an interpretation of an English one (see Appendix I and II). The questionnaire had four main parts; the first part of the dealing with the woman's background charactersistics, including - name, place of residence, religion, age, education, employment status and parity. The second part dealt with the woman's obstetrics history and the third part covered the woman's knowledge and practice of contraceptive methods. The fourth part of the questionnaire on the other hand dealt with the woman's adolescence and marital history.

(e) Procedure

A house to house survey was carried out of the end of June and July by interviewing all females aged between 15 and 49 years who lived in the houses whose ten-cell leaders were randomly selected. Each woman was interviewed privately by one interviewer and her answers were recorded on the questionnaire form. The interviewers were the author and three MCH aids working at the health centre of the village. These aides worked hand in hand with the author in interviewing the women, and at the end of work every day the author had to go through all the filled in questionnaire forms in order to ensure

that they were properly and completely filled, and where this was not done, the woman had to be interviewed again the following day. However, the coding of the questionnaire forms was strictly done by the author himself.

Magomeni Mapipa area where the second survey was done is situated in Kinondoni Ward in Kinondoni district, which is again one of the three districts constituting Dar es Salaam City. The total population of the Kinondoni Ward is 27,859 with women aged between 15 and 54 years forming 24.5% (6839) of the total population of the ward.

A similar method to that of Lugoba village of first listing down all the ten-cell leaders of Magomeni Mapipa area and selecting those whose houses were to be covered in the survey by random sampling was used.

A total of 200 women aged between 15 and 49 years were interviewed.

The questionnaire forms were similar to those used in Lugoba village, and a separate form was used for every woman in the survey.

The interviewers were the author and a very competent registered nurse who works in Magomeni Hospital but also familar to the residents of Magomeni Mapipa area, where she had been employed to conduct some researches unrelated to the present one. However, she too was first trained by theory and practice, on how to interview and

fill the questionnaire forms. The same procedure of supervision, re-checking the filled in questionnaire forms at the end of the day and coding them was done by the author himself.

(f) Problems encountered in this study

(a) Since the criteria of a woman to be entered into the survey was that she must be between 15 and 49 years, this entailed her accurate remembrance of her age; and although the younger age groups looked apparently easier to remember their exact age; the older age groups were more difficult. Hence some errors in exact ages was inevitable.

(b) The house to house survey necessitated a lot of walking and making sure that all women of age 15 to 49 living in the randomly selected houses were seen and interviewed. As such some houses had to be re-visited a number of times until the women were found, and interviewed. However, over 90% coverage of the study population was achieved.

(c) The accuracy of the answers given by the women when they were asked about the number of pregnancies and live births is also questionable. This is because abortions and still births are sometimes forgeotten especially when this happened a long time ago.

(d) The time given for the survey was rather too short, and since the amount of information to be recorded for each woman was considerably long, the temporary employment of extra staff for helping in interviewing and filling in the questionnaire forms was unavoidable.

CHAPTER V

RESULTS

Plan of data analysis

The collected data was partly analysed manually by talying and an electronic hand calculator and partly by use of DOS minicomputer particularly for the crosstabulations and statistical computation. Both Bagamoyo and Dar es Salaam women were divided into Users and Non-Users of contraceptive methods and contigency tables were constructed for significance testing. Other background characteristics of the women such as age, religion, educational status, employment status, etc were also based on users and non-users or place of residence were compared on the basis of percentages and chi-square tests done on the frequencies.

Findings

Prevalence and use of contraceptives

First, it was found that out of the 324 women interviewed in Lugoba village in Bagamoyo District 115 (35.5%) were using contraceptive methods while out of the 200 women interviewed in Magomeni Mapipa area in Dar es Salaam City 86 (35.5%) were using some contraceptive methods.

Second, with regard to age distribution in contrraceptive use, it was found that among the rural Bagamoyo women the percentages of women using contraceptives increased consistently up to 25 - 29 years and decreased consistently from 35 - 39 with a slump between 30 - 34. However, for Dar es Salaam women there was no consistency with regard to age, though between 30 - 34 and 45 - 49 the percentages of Dar es Salaam users were significantly higher than Bagamoyo users. These results are illustrated in Figure I.

Figure 1

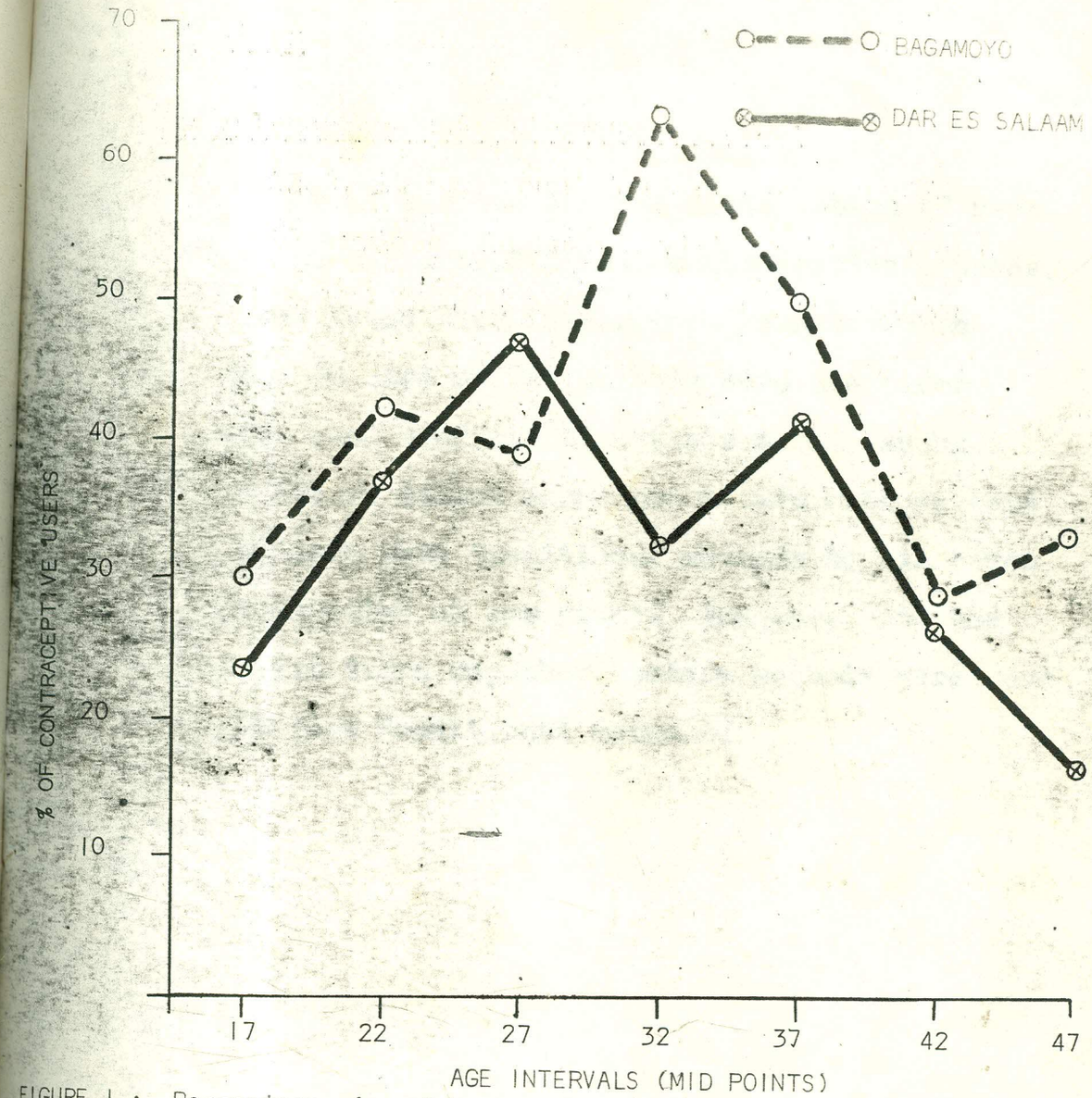


FIGURE 1 : Percentage of contraceptives users in each of the seven age groups (15 - 19, 20 - 24, 25-29, 30 - 34, 35 - 39, 40 - 44, 45 - 49) of women, in rural (Bagamoyo) and Urban (Dar es Salaam) areas.

Table 1 shows the age distribution of users of modern and traditional contraceptive methods. It was found that in Bagamoyo younger women below 30 used modern methods more and older women used traditional methods more. Among the Dar es Salaam women the modern methods were used more than traditional methods by all women irrespective of age group. However, both the samples taken together, modern methods were more used than traditional methods.

TABLE 1

AGE DISTRIBUTION OF USERS IN RELATION TO THE TYPE OF CONTRACEPTIVE METHODS USED

Intervals	Bagamoyo			Dar es Salaam		
	N	% of users of Modern Methods	% of users of Traditional Methods	N	% of users of Modern Methods	% of users of Traditional Methods
15-19	10	60.0	40.0	7	85.7	14.3
20-24	12	69.0	31.0	26	61.5	38.5
25-29	29	69.0	31.0	23	60.1	39.9
30-34	19	42.0	58.0	19	52.6	47.4
35-39	17	47.0	53.0	8	50.0	50.0
40	8	37.5	62.5	3	67.7	33.3
Average		54.1	45.9		55.8	44.2

Table 2 present the percentages of Christian and Moslem women using modern and traditional methods. It was found that the percentage of Christian women using modern contraceptives was significantly higher than the percentage of Moslem women using modern contraceptives. On the other hand, the percentage of Moslem women using traditional methods was significantly higher than the percentage of Christian women using traditional contraceptives while Christian women generally favoured modern methods, the Moslem women equally favoured both the methods.

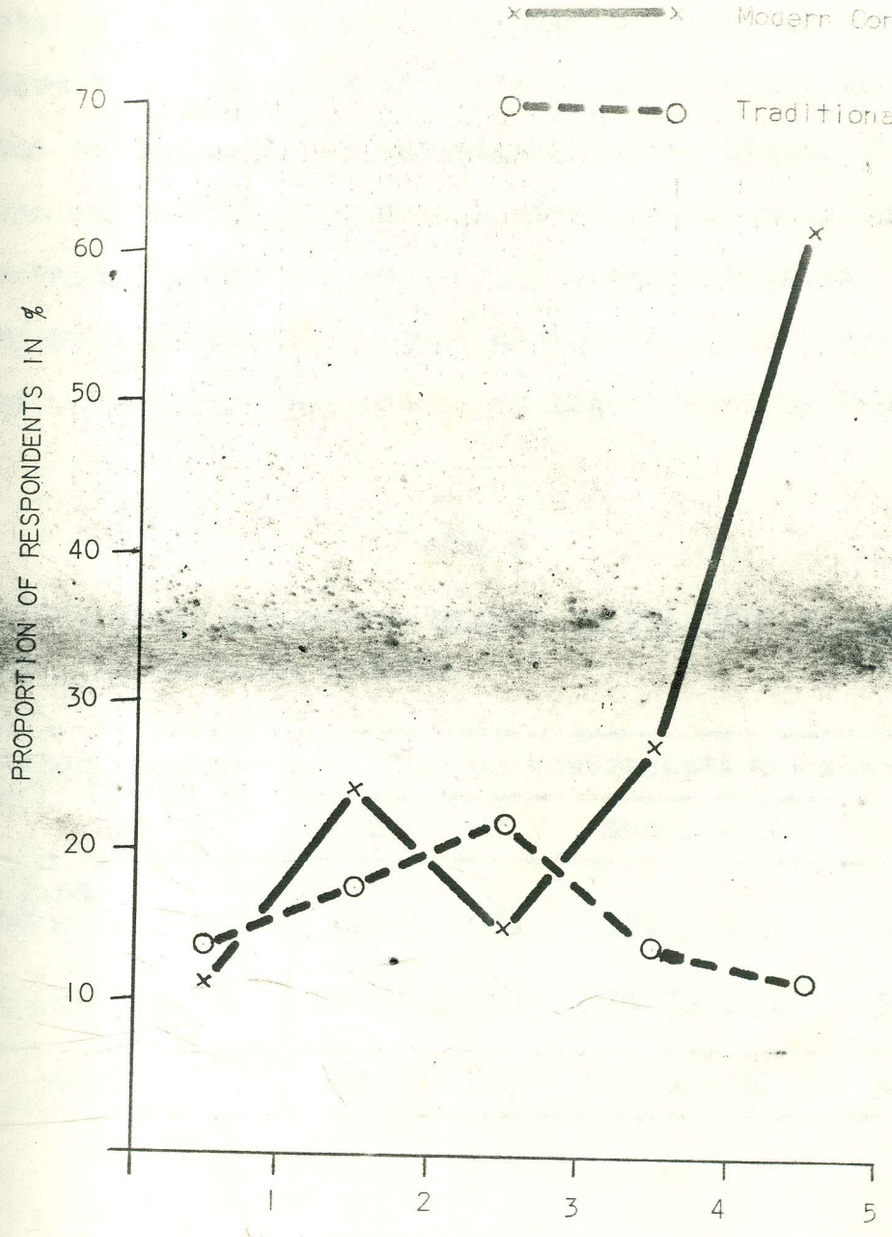
TABLE 2

THE RESPONDENTS RELIGION IN RELATION TO THE USE OF EITHER MODERN OR TRADITIONAL CONTRACEPTIVE METHODS

Religion	Total No. using contraceptives	% Using Modern Contraceptive Methods	% Using Traditional Contraceptive methods
Christians	103	90.3 (93)	9.7 (10)
Moslems	89	49.4 (44)	50.6 (45)
Others	9	11.1 (1)	88.9 (8)
Total	201	68.7 (138)	31.3 (63)

Figure 2 shows that in both the samples, the use of traditional contraceptives consistently rise up to when the women has attended some formal school other than adult education and then begins to consistently decline with the rise of educational level. On the other hand, the use of modern contraceptive method consistently rises with educational level of the women other than adult education, and that the association between educational level and use of modern contraceptives was statistically significant.

Figure 2



1. Never went to school
2. Adult education
3. Less than class seven
4. Finished class seven
5. Secondary and or College education.

FIGURE 2: Distribution of the Respondents Educational level and the type of Contraceptive methods they use.

With regard to the respondents salary employment status and use of contraceptive methods, it was found that the percentage of contraceptives users among the salary employed was significantly higher than the percentage of contraceptives users among the unemployed women. However, the percentage of unemployed women was much higher than the percentage of salary employed women; as illustrated by Table 3.

TABLE 3

RESPONDENTS EMPLOYMENT STATUS IN RELATION TO USE OF CONTRACEPTIVE METHODS.

Salary employment Status	Use of Contraceptive Methods		
	Users	Non-Users	Total
Salary Employed	81 (54.7%)	67(45.3%)	148(28.4%)
Unemployed	120 (31.9%)	256 (68.1%)	376(71.6%)
Total	201 (38.6%)	323(61.4%)	524(100%)

Table 4 shows that the percentage of women in Bagamoyo who had used their contraceptive methods continuously for less than 12 months was much lower than the percentage of women in Dar es Salaam who had used their contraceptive methods continuously for less than 12 months. On the other hand the percentage of contraceptive users in Bagamoyo who continued to use their contraceptive continuously for fourty eight or more months was higher than that of the Dar es Salaam contraceptives users.

TABLE 4

RESPONDENTS NUMBER OF LIVING (SURVIVING) CHILDREN IN RELATION TO THE TOTAL PERIOD OF USING CONTINUOUSLY CONTRACEPTIVE METHODS UP TO THE TIME OF THE INTERVIEW.

No. of Surviving Children	Total No. (N)	Total period of using continuously contraceptive Methods in months				
		⩽12	12 - 23	24 - 35	36 - 37	48
Bagamoyo						
0 - 1	36	19.4%	41.7%	22.2%	83%	8.3%
2 - 3	36	16.7%	38.9%	25.0%	5.5%	13.9%
4 - 5	31	29.0%	35.5%	25.8%	3.2%	6.5%
⩾ 6	12	8.3%	50.0%	33.3%	8.3%	0%
Total	115	20.0%	40.0%	25.2%	6.0%	8.6%
Dar es Salaam						
0 - 1	15	46.7%	40.0%	13.3%	0%	0%
2 - 3	34	47.0%	29.4%	11.8%	5.9%	5.9%
4 - 5	21	38.1%	19.0%	23.8%	9.5%	9.5%
⩾ 6	16	43.8%	18.6%	25.0%	6.3%	6.3%
Total	86	44.2%	26.7%	17.4%	5.8%	5.8%

With regard to the respondents number of wives the husband had in relation to use of contraceptive methods, it was found that the percentage of women whose husbands had only one wife was much higher than the percentage of women whose husbands had two or more wives. However, the percentage of women using contraceptives was higher in the women whose husbands had two or more wives as compared to the percentage of the women whose husbands had only one wife. These results are illustrated in Table 5.

TABLE 5

RESPONDENTS NUMBER OF WIVES THE HUSBAND HAS IN RELATION TO THE USE OF CONTRACEPTIVE METHODS.

Number of wives	Total Number	%	Total using contraceptive methods	%
One wife	439	83.8	166	37.8
Two wives or more	85	16.2	35	41.2
Total	524		201	38.6

As shown by the results in Table 6 there was a statistically signficant association between a history of a live-birth and the use of contraceptives methods for both the rural and urban population samples; where most women who use contraceptive methods had at least a live birth two to three years previously.

TABLE 6

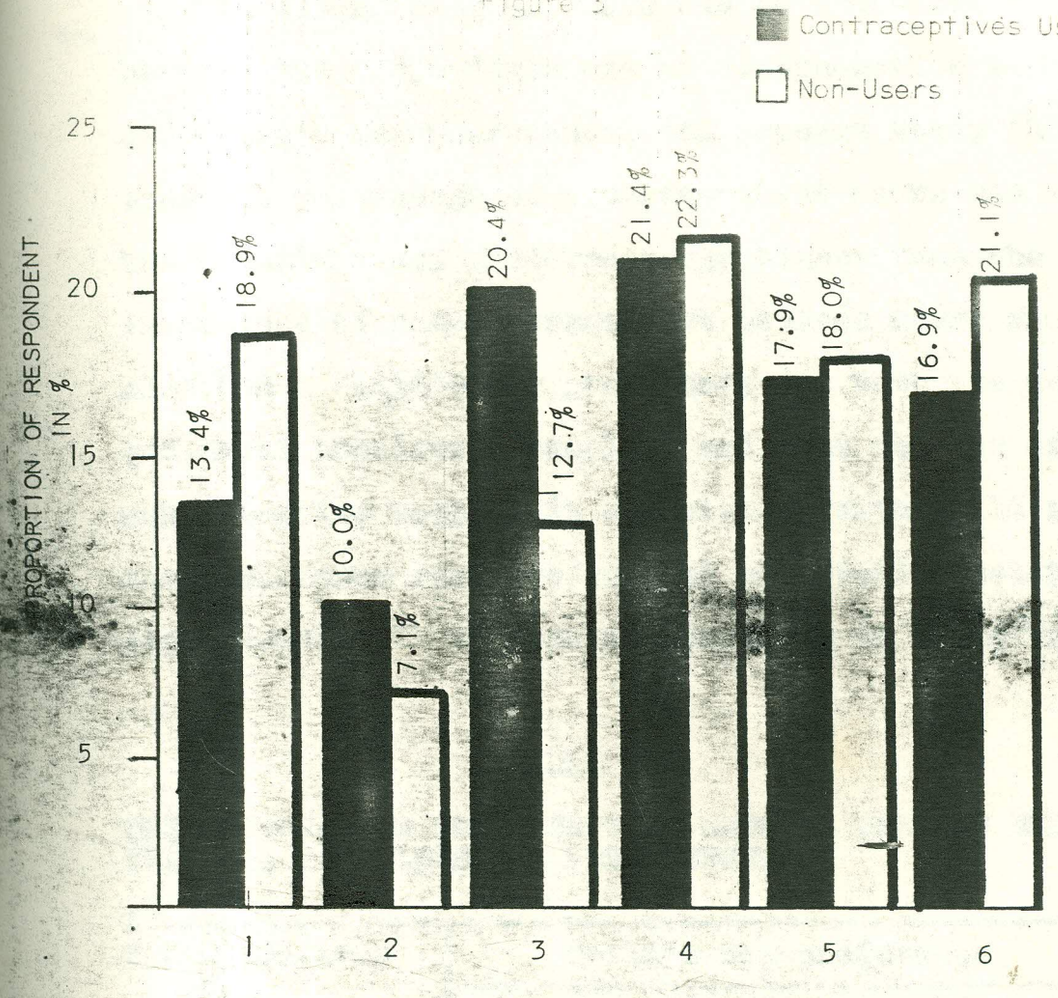
THE RESPONDENTS LAST PERIOD OF DELIVERING LIVE BIRTH AND USE OF CONTRACEPTIVE METHODS.

Last time of delivering a live baby	Contraceptive Methods Usage					
	Users	% of Users	Non Users	% of Non Users	Total	% of Total
Bagamoyo						
This year	22	38.6	35	61.4	57	17.6
Last year	23	39.0	36	61.0	59	18.2
Two years ago	35	54.7	29	45.3	64	19.8
Three years ago	18	54.5	15	45.5	33	10.2
Four years ago	4	21.1	15	78.9	19	5.9
Five years ago	7	31.8	15	68.2	22	6.8
More than five years	6	8.6	64	91.4	70	21.6
Total	115	35.5	209	64.5	324	100
			X^2 = 40.8 and p= 0.0001			
Dar es Salaam						
This year	7	26.9	19	73.1	26	13.0
Last year	28	58.3	20	41.7	48	24.0
Two years ago	27	57.4	20	42.6	47	23.5
Three years ago	8	50.0	8	50.0	16	8.0
Four years ago	6	37.5	10	62.5	16	8.0
Five years ago	6	37.5	10	62.5	16	8.0
More than five years	7	20.6	27	79.4	34	17.0
Total	86	43.0	114	57.0	200	100
			X^2 = 22.8 and p = 0.00014			

With regard to the respondents preferred duration for the next pregnancy, the percentages of contraceptives users who preferred their next pregnancy after one to two years was higher than the percentages of the non-contraceptives users who preferred to have their next pregnancy in one to two years to come. However, the percentages of the women who wanted to become pregnant as soon possible was higher in the non contraceptive users than in the contraceptive methods users; as illustrated by Figure 3.

? Did you exp
those using
Contraceptive
to say yes the
would like to be
pregnant whil
on Contracepti

Figure 3



1. As soon as possible] I expected contraceptive users to be 0.
2. After 1 year
3. After 2 years
4. After 3 years
5. When God wishes
6. Dont know.

FIGURE 3: Contraceptives methods use status and the respondents preferred period for the next pregnancy among women 15 to 49 years old living in Bagamoyo (rural) and Dar es Salaam City (urban).

In determining if there was an association between the respondents use of contraceptive methods and child's sex preference, the present study showed that the percentage of contraceptives users who also had a child's sex preference was higher than the percentage of non-contraceptive methods users who also had a child's sex preference for both the urban and rural population samples; and that the use of contraceptive methods in association with child's sex preference (son preference) was statistically significant. These results are shown in Table 7.

TABLE 7

THE RESPONDENTS CONTRACEPTIVE METHODS USE AND WHETHER THEY HAD A CHILD'S SEX PREFERENCE.

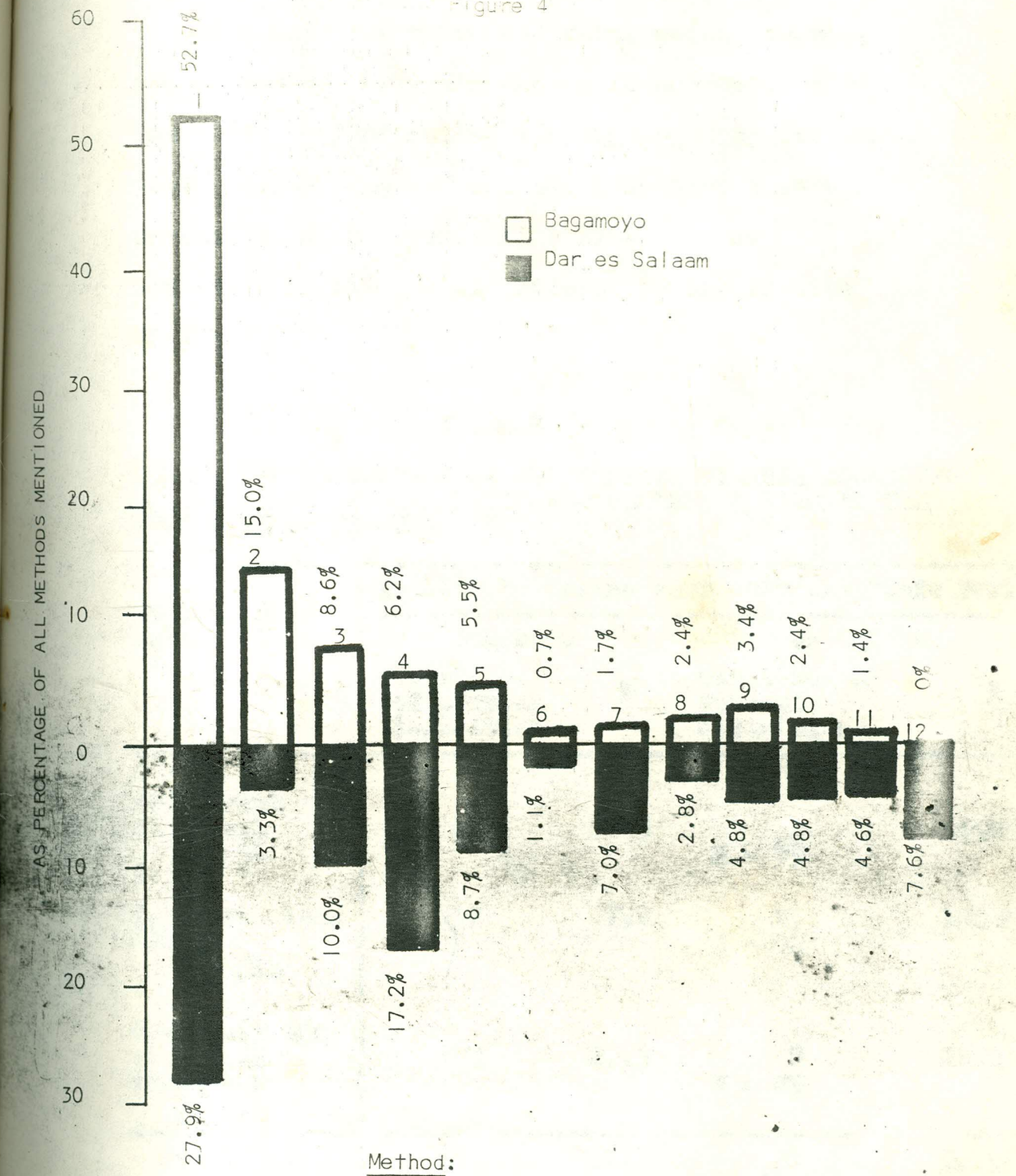
Contraceptives Use	Child's sex preference		
	Yes	No	Total
Yes	59 (29.4%)	142(70.6%)	201(38.4%)
No	67 (20.7%)	256(79.3%)	323(61.6%)
Total	126 (24.0%)	393(76.0%)	524(100%)

$X^2 = 5.0$, $0.05 < p < 0.02$

Knowledge of Contraceptives

Figure 4 shows the percentage of Dar es Salaam and Bagamoyo women reporting their knowledge of different methods of contraceptives such as the Pill, local herbs and charms, the Intra-Uterine Devices, Depo Provera (Injections) etc. The Dar es Salaam women appeared to know more about contraceptive methods than the Bagamoyo women. The least known methods in Bagamoyo were vaginal methods (0%) vasectomy (0.7%) tubal ligation (1.4%) the "Safe Period" method (1.7%) and prolonged breast feeding (2.4%) while in Dar es Salaam vasectomy (1.1%), induced abortion (2.8%), prolonged breasfeeding (4.8%) local charms and herbs (3.3%) were the least known contraceptive methods.

Figure 4



Method:

1. The pill
2. Local herbs and charms
3. Injection (DEPO)
4. IUCD
5. Condoms
6. Vasectomy
7. The "Safe Period"
8. Induced abortion.
9. Abstinence
10. Prolonged breast feeding
11. Tubal ligation
12. Vaginal methods (Jelly, Foams)

FIGURE 4: Distribution of spontaneous mentions of having knowledge of contraceptives methods by women aged 15-49 years living in Bagamoyo (rural and Dar es Salaam City (urban area).

For both the urban and rural women however, the percentage of women who could correctly define the "Safe Period" method was higher among the women with secondary and or college education than the percentage of the women with little or no education at all; as illustrated by the results in Table 8.

TABLE 8

NUMBER AND PERCENTAGE OF RESPONDENTS BY AREA ACCORDING TO THEIR EDUCATIONAL LEVEL WHO DEFINED CORRECTLY THE SAFE PERIOD METHOD.

Educational Level	Ability to define correctly the "Safe Period"			
	Bagamoyo		Dar es Salaam	
	Total No. of correct definition	%	Total No. of correct definition	%
Never went to school N = 98	16	16.3	1 N = 73	1.4%
Finished class Seven N = 215	17	7.9	13 N =102	12.7%
Secondary and or College education N = 11	3	27.3	7 N = 25	28.0
Total N = 324	36	11.1	21 N =200	10.5

In Table 9 results show that the less the time interval between menarche and marriage, the more the number of early deliveries (61.6% against 28.3% in Bagamoyo) and (65.6% against 51.4% in Dar es Salaam). Those who marry at younger age get a child earlier than those who marry late, and the difference is highly statistically significant in Bagamoyo ($X^2 = 29.4$ and $p = 0.001$). In Dar es Salaam this difference is also statistically significant ($X^2 = 4.04$ and $0.05 > p \geq 0.02$).

Menarche marriage delivery and contraceptive use

In determining the respondents time interval between menarche, marriage and first delivery, this study showed that the percentage of women who get married within four years from the onset of menarche is much higher than the percentage of the women who get married in five or more years from the onset of the menarche for both the urban and rural women. Moreover, a higher percentage of the women who get married within four years from the onset of menarche get their first deliveries within the first year of marriage as compared to the percentage of the women who were married in five or more years and got their first deliveries within the first year of marriage. The association between early marriage and early first delivery was statistically significant for the rural and urban population samples, as whown by the results in Table 9.

TABLE 9

RESPONDENTS TIME INTERVAL BETWEEN MENARCHE, MARRIAGE AND FIRST DELIVERY

Time interval between Menarche and marriage in years	Time interval between Marriage and First delivery in years					
	Equal to of Less than One year	%	Equal to or More than Two years	%	Total	%
Bagamoyo						
0 - 4	143	61.6	89	38.4	232	71.6
≥ 5	26	28.3	66	71.7	92	28.4
Total	169	52.2	155	47.2	324	100
			x^2 = 29.4 and p<0.001			
Dar es Salaam						
0 - 4	84	65.6	44	34.4	128	64.0
≥ 5	37	51.4	35	48.4	72	36.0
Total	121	60.5	79	39.4	200	100
			x^2 = 4.04 and 0.05≥ p ≥0.02			

Objective four

To determine the mean Age Specific Fertility Rates the mean number of pregnancies and the pregnancy wastage among the users and non-users of contraceptives in rural and urban areas.

In estimating the mean Age Specific Fertility Rate and the mean number of pregnancies by age and contraceptives methods use, the study showed that in both the Dar es Salaam and Bagamoyo women, the mean number of pregnancies and the mean number of live births was much higher among the contraceptives methods users than the non-users of contraceptives methods. The mean pregnancy wastage (by subtracting the mean number of live births from the mean number of pregnancies was higher among the non-contraceptives methods than the contraceptives methods users for the urban women but in Bagamoyo women, contraceptives methods users had a slightly higher mean number of pregnancy wastage than the non-users of contraceptives methods as illustrated by the results in Table 10.

TABLE 10

MEAN AGE SPECIFIC FERTILITY RATE AND MEAN NUMBER OF PREGNANCIES BY AGE AND CONTRACEPTIVE METHODS USE.

Age Group	Fertility Rate by Live Births		Pregnancies			
	Non-Users	Users	Non-Users	Pregnancy Wastage in Non-Users	Users	Pregnancy wastage in users
Bagamoyo						
15 - 19	0.7	2.1	0.9	0.2	2.2	0.1
20 - 24	1.8	2.9	2.4	0.6	3.4	0.5
25 - 29	3.3	2.9	4.4	1.1	3.5	0.6
30 - 34	3.8	4.0	3.9	0.1	5.2	1.2
35 - 39	2.9	4.8	3.9	1.0	5.9	1.1
40 - 44	3.1	7.0	4.0	0.9	7.0	0
45 - 49	2.6	4.5	3.1	0.5	7.0	2.5
Total Mean	2.6	4.0	3.2	0.6	4.9	0.8
Dar es Salaam						
15 - 19	0.4	1.1	0.8	0.4	1.3	0.2
20 - 24	1.7	2.4	2.2	0.5	2.5	0.1
25 - 29	2.3	3.6	3.1	0.9	3.7	0.1
30 - 34	4.9	4.4	5.7	0.8	4.6	0.2
35 - 39	5.1	7.3	6.4	1.3	8.0	0.7
40 - 44	1.8	7.0	2.8	1.0	8.5	1.5
45 - 49	4.5	11.0	4.8	0.3	11.0	0
Total Mean	3.0	5.3	3.6	0.7	5.6	0.4

Pregnancy Wastage = Mean number of pregnancy means the mean number of live births.

Objective five

To determine the Preferences and Problems of family planning services with regard to:

(a) Approval or disapproval of current family planning services.

(b) Choice of days for availing the family planning services.

(c) Problems encountered in availing the family planning services.

As shown by the results in Table 11 regarding the respondents age group in relation as to whether or not they approved of family planning services in Tanzania, the percentages of women increased consistently with age upto 30-34 years age group and declined consistently thereafter. Moreover, the percentages of women who did not aprove of family planning services increased consistently with age. However, a higher percentage of women approved of family planning services in Tanzania as compared to the percentage of women who did not approve of family planning services in Tanzania.

When asked as to which was the best day for availing the family planning services, contraceptives users in Bagamoyo who attend a Government run clinic said Saturday was the best (19% of the users).

TABLE 11

RESPONDENTS AGE GROUP IN RELATION AS TO WHETHER OR NOT THEY APPROVED OF A FAMILY PLANNING PROGRAMME IN TANZANIA

Age Group	Total	Response			
		Approved	%	Did not Approve	%
15 - 19	66	43	65.2	23	34.8
20 - 24	147	109	74.1	38	25.9
25 - 29	121	88	72.7	33	27.3
30 - 34	88	65	73.9	23	26.1
35 - 39	57	35	61.4	22	38.6
40 - 44	30	17	56.7	13	43.3
45 - 49	15	7	46.7	8	53.3
Total	524	364	69.5	160	30.5

While contraceptives methods users living in Dar es Salaam and getting their family planning services from a similar source stated that Monday was their best day (30% of the users).

Table 12 presents the percentages of the contraceptives users choice of best time of the day for family planning services in association with the means of getting to the sources of the services. While the results showed that contraceptives users in Bagamoyo had no time preference in relation to the means of getting to their contraceptive methods sources, women in Dar es Salaam who use contraceptives had a time preference in association with the means of reaching the source of contraceptives; whereby most women prefered getting their services in the mornings and that most of them reach their contraceptives source by public transport. This association between time preference and means of getting to the source of contraceptives was statistically significant for the Dar es Salaam contraceptives users.

Of the 115 contraceptives users in Bagamoyo 17(14.8%) spent more than one hour to reach their source of contraceptives and 20 users (17.4%) spent more than ten Tanzanian shillings to reach the sources of contraceptives methods. In Dar es Salaam on the other hand 7(8.1%) of the contraceptives users spent more than one hour to reach the sources of contraceptives methods; and 8(9.3%) out of the 86 contraceptives users

spent more than fifty Tanzanian shillings to reach their source of contraceptives methods.

TABLE 12

RESPONDENTS CHOICE OF BEST TIME OF THE DAY FOR FAMILY PLANNING SERVICES IN ASSOCIATION WITH THE MEANS OF GETTING TO THE SOURCES OF THE SERVICES

Time	Means		
	By walking	By Govt. transport	Total
Bagamoyo			
Mornings	25(83.3%)	5(16.7%)	30(44.8%)
Evenings	32(86.5%)	2(15.5%)	34(55.2%)
Total	57(87.5%)	7(12.5%)	64
	$X^2 = 1.91$, $p > 0.05$		
Dar es Salaam			
Mornings	18(35.3%)	33(64.7%)	51(83.6%)
Evenings	7(70%)	3(30%)	10(16.4%)
Total	25(57.4%)	36(43.6%)	61
	$X^2 = 4.2$ and $0.05 > p > 0.02$		

These results show that whereas Contraceptive methods users in Bagamoyo District have no time preference in relation to means of reaching the source, ($p > 0.10$) for getting their contraceptive methods, women in Dar es Salaam who use Contraceptives have a time preference in association with the means of reaching the source; whereby most women prefer to get their services in the mornings and that most of them reach their source by Public transport, with a statistical significance of $0.05 > p > 0.01$.

Table 13 presents the modern contraceptives users response as to whether they had encountered any medical problem (such as irregular bleeding, dysmenorrhoea, heavy menses severe headaches and or diagnosed elevated blood pressure) as a result of using modern contraceptive methods. The percentage of modern contraceptives users with a medical problem following the use of modern contraceptives in Bagamoyo was higher than the percentage of modern contraceptives users with a medical problem in Dar es Salaam. The difference between the percentages of women with medical problems due to use of modern contraceptives in Dar es Salaam and Bagamoyo was however, not statistically significant.

TABLE 13

RESPONDENTS ANSWERS WHEN THEY WERE ASKED IF THEY HAD ENCOUNTERED AND MEDICAL PROBLEMS AS A RESULT OF USING MODERN CONTRACEPTIVE METHODS.

Place	Response					
	Have a Medical Problem*	%	Have No Medical Problem	%	Total	%
Bagamoyo	24	39.9	41	63.1	65	55.1
Dar es Salaam	13	24.5	40	75.5	53	44.9
Total	37	31.4	81	68.7	118	100

$X^2 = 2.1$, p 0.05

*A medical problem in this context include irregular bleeding, dysmenorrhoea, heavy menses, severe headaches and or diagnosed elevated blood pressure occurring after starting on modern contraceptive methods particularly the pill.

CHAPTER VI

DISCUSSION

Prevalence and Use of Contraceptives

Despite different social and economic background, it is interesting to find out that only a small percentage 35.3% of the women in Bagamoyo and 43% of the women in Dar es Salaam use any type of contraceptive method; and that this difference between rural and urban women is not statistically significant. This rate is lower than that of many developing countries such as Brazil, Costa Rica, and Panama where 60% of the women reported the use of some method of South Korea, Jamaica and Thailand where 50% of the women were using some contraceptive methods, and much lower than U.S.A. and Europe where the rates are above 70%(30). The higher prevalence of contraceptives use in Dar es Salaam than in Bagamoyo indicates that family planning services are still mainly confined to urban areas. This finding calls for the necessity of increasing these services in the rural areas where most people live.

As it has been found in other countries, there is an increase in the frequency of use of contraceptives which was positively related to a women's age. During their 20's many women are still adding to their families whereas after 40 many women may consider

themselves infecund or may have traditional views and not want to use modern contraception.

In this study most users in Bagamoyo were aged between 20 and 30 years while in Dar es Salaam most contraceptives users were older in their early 30's and early 40's. From the population control point of view, one would like contraceptives users to be in their maximum reproductive age period that is between 20 and 30 years hence the above results imply that women in Dar es Salaam use contraceptives methods after attaining the desired family size that is they use contraceptives for birth control, while the contraceptives users in Bagamoyo who were younger than their conterparts in Dar es Salaam do so for the purpose of child-spacing rather than birth control. Surveys in Brazil, Thailand and Guatemala showed that the greatest use of contraceptives methods between 1975 and 1978 took place among women in their late 30's(31).

This study has shown that although the knowledge of contraceptives methods was moderately low, actual use of contraceptives was even lower and that traditional and modern contraceptives were being almost equally used by both the Bagamoyo and Dar es Salaamwomen. The general tendency of increase in usage of traditional contraceptives with age can partly be due to cohort effect, and partly due to the fact that modern contraceptives are relatively new in the country. The high usage of modern contraceptives by the younger women in both urban

and rural areas also suggests that with time the rate of use of traditional contraceptive methods will decrease, while the use of modern contraceptives methods will on the other hand increase. However, such a declining trend of traditional contraceptives methods will be influenced by other factors such as religion of the women and the level of education the woman has attained. As the results of the present study have revealed, Christian women generally favoured modern contraceptives while Moslem women favoured the traditional as well as modern methods. Religion has therefore some influence on the use of contraceptives, and Islam religion which is more liberal on the question of contraceptives use can account for the wider use of both traditional and modern contraceptives by Moslem women in this study. The increase of modern contraceptives and decrease of traditional methods usage with the level of education the woman has, also suggests that not only does education enlighten a woman on the importance of contraception, but it also helps women who may have had unsuccessful or unrelaible traditional contraceptive methods to adopt modern and more reliable contraceptive methods.

This study has also revealed that salary employment, just like education and urban residence was significantly associated with the use of contraceptive methods. However, socio-economic factors are probably beginning to have influence on African fertility, but the impact of emphoyment education and

urbanization is not as straightforward as in other parts of the world. It is not clear whether, on one hand women use contraceptives because they are working and so do not want children now, or because on the other hand, they work because they are using contraceptives and have fewer children and so, are better able to hold jobs (32). In any case, with the current increased rate of urbanization, high education for women and greater chances of employment for women in Tanzania, family planning services will undoubtedly have greater demand in the future. This has been shown in other studies such as in Kenya where 22% of the women who are highly educated use contraceptives methods while in Costa Rica 82% use contraceptives methods. The Kenya figure is five times more than the uneducated women, and three times more among urban than among rural women (35).

When asked about at what period they would like to get pregnant again, there was no statistically significant difference between the users and non-users of contraceptives methods in both Dar es Salaam and Bagamoyo women. However, the percentage of non-users of contraceptives who said they would like to become pregnant as soon as possible was bigger than the percentages of users who said they would like to become pregnant as soon as possible. Again, the percentage of women who were non-users of contraceptives who said they did not know when they would like to become pregnant was higher than the percentage of contraceptives methods users. These findings indicate that

contraceptives users were more sure and decisive as when they would like to become pregnant again. That is why they are on contraception here

In Guatemala, Sao Paulo Brazil, and Costa Rica among women who wanted a child later about one third were using Contraceptive methods (33). In Kenya however 68% of fecund married women said they would like to become pregnant again; 17% said they did not and 15% were undecided (14). Among those who want more children later but not now, women with three or fewer children were more likely to use contraception than women with four or more children. This observation implies that after three children higher parity may not necessarily provide stronger motivation to use contraception as was proved in Latin America, and also in developing countries where it has been shown that the number of women who want no more children but are not using contraception increases rapidly both with age and with parity in most developing countries because the desire for no more children grows faster overtime than use of contraception (33).

This study has revealed that 20% of contraceptives users in Bagamoyo stop using their method in less than 12 months while only 8.6% reported continuously using for four or more years. In Dar es Salaam, on the other hand 44% of the users stop using their method in less than 12 months and only 5.8 continue using their method for four or more years. There was no association however, between the total period of continuous use of the contraception and the number of children a woman has.

The implications of these findings from the family planning point of view is that most contraceptive users do not use their methods long enough to effectively bring about the desired child spacing on birth control irrespective of the number of children.

In Mexico, almost 50% had used some contraceptive rates were highest among women aged 35 or older, women with five children or more and women married for 15 years or longer. In the Mexico study, women under 25 years were 3-4 times more likely to stop using a method because they wanted to become pregnant, and were twice as likely to discontinue because of side effects than those aged 35-49. In 12 months duration 13% of pill users, 12% of using injectables, and only 4% of IUD users stopped practicing contraception because of side effects. Out of the pill users 14% whose source was the public sector and 11% of users from a private source, stopped using their pill within 12 months because of side effects (32).

This study has also demonstrated that there is a tendency for a child's sex preference among the women interviewed particularly the contraceptive users, and that the association between the non-user of contraceptives and male child preference was significant. In Tunisia, among women who already had four children, only 28% said they wished to have another child. In addition, women clearly expressed

a preference for sons; and among all those who had no sons 86% wanted to have more children; among women with 3-5 children but not sons only 19% said they would be satisfied to discontinue childbearing. This suggests that the desire for more children decreases sharply as the number of sons in the family increases (34). On the other hand, in Mexico, women with a prepondence of sons are least likely to use contraceptives, this finding suggesting that there is a possible preference for daughters.

Knowledge of Contraceptive Methods

About 70% of the women in the present study could spontaneously mention at least one contraceptive method, Dar es Salaam women knowing 26.5% modern and 16.5% traditional methods and Bagamoyo women knowing 20% modern and 15.4% traditional methods. Knowledge was greatest among women aged 20-29 years in Bagamoyo and aged 20-34 years in Dar es Salaam.

The most frequently cited methods for Dar es Salaam women were the pill (52.7%) local herbs and charms (15%) followed by injections (8.6%) and the IUCD (6.2%). For the Bagamoyo women the percentages for the above methods in the respective order were 27.9, 3.3, 10.0, and 17.2. However, the above four methods were mentioned by 73.3%, 51.2%, 36.2%, and 35.3% of Bagamoyo women and 71.9%, 60.0%, 37.7% and 68.7% of Dar es Salaam respectively.

Other traditional methods such as obstinence, the safe period method, prolonged breastfeeding, induced abortion, tubal ligation and male sterilization were relatively less known to Bagamoyo women than the Dar es Salaam women, but in both samples these are least known. This indicates that family planning services may not be educating people particularly the women on their importance of fertility regulation.

Time Interval between Menarche Marriage and First Delivery.

This study has shown that 71.6% of women in Bagamoyo and 64% of Dar es Salaam women get married within 4 years from the onset of menarche and of these 61.4% and 65.6% of Bagamoyo and Dar es Salaam women respectively get pregnant and deliver within one year of marriage.

There are significant differences between Dar es Salaam and Bagamoyo women who marry early (less than four years after the onset of menarche) and who marry late (more than five years) with regard to the interval between marriage and first delivery. Since these young girls are more fertile, marrying early means lengthening their reproductive period, thus making it very difficult for countries to reduce their population growth to the desired levels even if marital fertility is sharply reduced (36).

Other studies by Henin R.A. et al (44) in Tanzania showed that among Tanzanian women aged 20-24 the proportion single rises from 2 percent for women with no education to 9 percent for those with five to eight years of school and reaches 17 percent for women with nine or more years of education. For those married, median age at first marriage among women with no education was 16.3 and among those with 9-13 years of education 20.9, and that the rural-urban differences in percentage ever married at 15-19 or in mean age at marriage were negligible.

Other studies on these early marriages have shown that Bangladesh is the extreme, where about half of each age cohort had a first birth before the age of 17 and on the other hand is Korea where fewer than one percent of the cohorts between the ages 20 and 39 had a very early first birth. In Nepal, Indonesia, Jordan and Pakistan between 14-26% of women aged 20-24 had their first births before the age of 17. In these contries however, there is a strong inverse relationship between female secondary school attendance and the proportions of women delivering before the age of 17 years (37).

In Kenya, however, women aged between 20-24 with no education revealed that for this group the age at first marriage was 16.5 years while those with

nine or more years of education, it was 23.5 years. Rural women aged 20-24 were on the average 17.8 years old when they married and those in metropolitan areas was 19.2 years old (35). It is likely that improving standards of female education are largely responsible for the slight rise in the average age at marriage, and hence postpone the likelihood of early childbearing.

Mean Number of Pregnancies and Live Births (Age Specific Fertility Rate).

This study has demonstrated that contraceptive users have significantly greater mean number of pregnancies and live births than the non-users that is the users show a higher Age-Specific Fertility Rate than the non-users. This positive association between high fertility and use of contraceptive methods can probably be explained by a greater tendency on the part of more fertile women to look for a solution to control their birth rate after the realization of their problem of high fertility. In Bagamoyo the mean number of pregnancies was 4.9 and the mean number of live births was 4.0 for the contraceptive users while for the non-users, the mean number of pregnancies was 3.2 and mean number of live births was 2.6. In Dar es Salaam the mean number of pregnancies was 5.6 and the mean number of live births was 5.3 for the users while for the non-users the mean number of pregnancies was 3.6 and

the mean number of live was 3.0. However, the pregnancy wastage among contraceptive users of Dar es Salaam was much less than that of non-users, (0.4 against 0.7) while in Bagamoyo, the reverse was the case with a mean of 0.8 for the users against 0.6 for the non-users. The mean age specific fertility rate of 5.3 for the users in Dar es Salaam and 4.0 in Bagamoyo can possibly be explained by the facts which have been shown to affect total fertility; namely polygamy, separation, subfecudity and divorce which, even if they are combined with early marriage of 15-19 years and high fertility rate do not affect the total fertility rate (39).

Preferences and problems of family planning services

Preferences and problems of family planning services have been shown to be the key factors that determine the success or failure of such programmes; partly because of convenience and partly because of other commitments such as shamba work or office work which must be fulfilled first. This study has shown that young women of age 30-34 were mostly in favour of a national family programme while the older women generally had a tendency of being against such a programme. This is most likely because family planning services in Tanzania are a relatively new thing, and hence the more likelihood of the young women to know more about it than the older women who in any case might not have heard about them or may be reluctant to abandon their old methods if they had any.

The different days chosen by the women in Bagamoyo and Dar es Salaam as their best day for getting their family planning services most likely is a reflective of home or office pressure of work, and clearly shows that when, now family planning services are to be started at any area in Tanzania. The question of community participation in deciding the best day for offering them services is vital.

This study also revealed that the best time of the day for availing family planning services and the accessibility to the centre offering family planning services were vital. Where these necessitated long distances of walking or spending quite a bit of some money precipitated a general reluctance to seek for the family planning services and hence poor attendance or irregular follow-up for subsequent visits; i.e. poor compliance. In similar studies it was shown that in rural areas of Colombia, El Salvador, Guatemala and Tunisia, long travel times were required to reach source of supply of contraceptive methods discouranged the women from attending the services. By contract, in urban areas where most women are within 15 minutes of a source, contraceptive use was generally higher (40). Lightborne (41) on analysing the higher percentage of contraceptive methods by urban women compared to rural women concluded that this urban rural difference

could in part reflect the greater availability of contraceptive supplies and services in the cities. Greater availability and accessibility of family planning services is associated with increased use of contraception independent of education and urban residence, and that the differences in use between urban and rural women are small.

Thus, to be maximally effective family planning programmes must overcome such problems as distance, cost, awareness, and shyness barriers so that the existing motivation of the people can properly be utilized. As pointed out by Hassouna (42) in Egypt, the provision of broader range of contraceptive methods so that potential acceptors will not be lost in the programme because of lack of choice, improving the management of the delivery system which include establishment of unit-level, setting up acceptor targets and evaluation procedures together with facilitated regular dispatch of contraceptive supplies from regional centres to individual units are very important. These suggestions, if adopted would most likely increase the use of contraceptives in Tanzania particularly in rural areas where the rates of Contraceptive use among women in their reproductive age are still very low.

CHAPTER VII

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

The results of the present study may be summarised as follows:

1. The prevalence of contraceptive methods is still very low compared to many developing countries.

2. The rate of use of traditional contraceptive methods is almost equal to that of modern contraceptives, particularly in the rural areas.

3. The woman's religion, education, employment status and history of live births were important parameters in the promotion of contraceptive methods use.

4. The knowledge of contraceptive methods was found to be very low particularly the traditional methods. Only the contraceptive pill was well known by the women in both Bagamoyo and Dar es Salaam.

5. Many women in both Dar es Salaam and Bagamoyo get married within four years from the onset of menarche and of these over half of them get their first delivery within one year.

6. The mean number of pregnancies and the mean number of live births were higher among the contraceptive users than the non-users for the women in both Dar es Salaam and Bagamoyo.

7. More younger women approved the current family planning services in Tanzania, while the older women disapproved of the necessity of such services.

8. Contraceptives users in Dar es Salaam preferred Mondays as the best day for availing the family planning services while the contraceptives users in Bagamoyo preferred Saturdays.

9. About 15% of the contraceptives users in Bagamoyo spent more than one hour to reach their source of contraceptive methods, but only 8% of the contraceptives users in Dar es Salaam spent more than one hour to reach their source.

10. In Bagamoyo 17.4% of the users spent more than ten Tanzanian shillings to reach the sources of contraceptive methods, while in Dar es Salaam 9.3% spent more than fifty Tanzanian shillings to reach their source of contraceptive methods.

11. The contraceptives users in Bagamoyo had a slightly higher percentage of medical complications as a result of using contraceptives than the Dar es Salaam contraceptives users.

Conclusions

1. The low prevalence of contraceptive methods is indicative of the low coverage of family planning services in Tanzania, particularly in the rural areas. With such low prevalence the use of contraceptive methods cannot be expected to effectively bring a remarkable change in either child-spacing or birth control, the two most important issues in checking out rapid population growth.

2. The fact that traditional contraceptive methods are used as much as modern contraceptive methods is suggestive of people's reluctance to adopt the modern contraceptive methods. On the other hand, this may reflect some suscipicion of the modern contraceptive methods. It is also indicative of non-availability of services to all sections of the Society.

3. Since religion education, employment status and history of live births were important in promoting use of contraceptive methods, this means that promotion of the above variables is likely to lead to a greater use of contraceptive methods.

4. The low knowledge of contraceptive methods as found in this study means that the current family planning services have not fully embarked on the issue of educating people (particularly the women in their reproductive age of their importance.

5. With regard to the early marriages and early child bearing it can be concluded that these women will inevitably have more total number of children due to the early exposure of sex and hence pregnancy.

6. Since the contraceptive users had a higher Age-Specific fertility Rate, it can be concluded that contraceptive users resort to using the methods after realizing their real or potential ability to conceive frequently for which they must do something to prevent it. Hence the acceptance of contraceptive methods.

7. The fact that more younger women approved the current family planning programme in Tanzania while the older women did not and still the prevalence of contraceptive methods is still very low means that there is a great demand which has not been met by the current family planning services.

8. The different days preferred by the contraceptive methods users in both Dar es Salaam and Bagamoyo shows that the user preferences in the current family planning services have not been attended to.

9. The long hours of travel and expenditure of money in the otherwise poor country is most likely to discourage many of the women who would like to attend family planning services, as found in this study.

10. Contraceptive users, particularly the modern contraceptive users must have a regular medical check up to detect any development of complications. The slightly higher medical complications in the contraceptive users in Bagamoyo is most probably due to lack of such follow up. This service must also be rendered to contraceptives users to ensure good compliance.

Recommendations

1. There is a stong need for a more intensified approach in educating and spreading of family planning services in Tanzania particularly in the rural areas in order to increase the prevalence of use of contraceptive methods.

2. More emphasis should be put on raising the educational level of women, better opportunity for employment and improved maternal and child health care services so that mothers and children are assured of good health and longer life expectancy, thus reducing the need of having many children on the assumption that if some of the children die, some will survive.

3. Intensified education programmes with involvement of different sectors other than health, such as politicians, religions people, schools etc on the importance of contraception and the different methods available is important so that women can chose the the method of their own choice rather than being forced to take or leave the only few methods available.

4. Since young age at marriage exposes a woman to a longer period of reproduction, people should be advised or a law be passed for raising the age at marriage; say from the current 15 years to 20 years for girls. The onset of menarche should not be taken as the "prime" age for sex and marriage.

5. The current family planning services should address itself to user preferences such as best days for availing the services, establish outreach clinics so as to increase availability to contraceptive methods and also minimizing the total costs incurred by the women in securing the services.

6. For a more homogenous and a sound conclusion on the use and knowledge of contraceptive methods and its relationship on the fertility of women in their reproductive age in Tanzania, another region with some family planning services being carried out should be chosen whereby a rural and an urban area should be surveyed.

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