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FAMILY PLANNING POLICY INITIATIVE AND CONTRACEPTIVE USE IN A COMPARATIVE STUDY FOR EGYPT AND THAILAND

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1. INTRODUCTION

The decade of 1950s witnessed accelerated growth of world population. The acceleration in the developed Countries is characterized by a relatively high birth rate and slowly declining death rate. This acceleration did not last for a long time. Since, 1960s the growth rate of these countries have been declining.

On the other hand, the acceleration in the developing countries continued through the 1960s. As a consequence of the dramatic mortality decline in these countries that was unaccompanied by an equivalent fertility decline. Population growth has slowed in developing countries since then as the fertility decline has become more effective.

It is worth mentioning that, the decline in the developing Countries differed from one country to the other. Dramatic declines are observed in several East and Southeast Asian Countries and they have brought fertility down to near or even below replacement level. However, a relatively slower decline can be observed in Northern Africa, such as Morocoo, Algeria and Egypt [4].

This study compares between Egypt and Thailand to provide an example that could be adopted by Egypt to complete its population transition. Fertility decline in Thailand is the third largest fertility decline, after South Korea and China [9]. As it is known, China reduced fertility by laws. They forced each couple to have only one child. However, in South Korea induced abortion is legal, and is used as a method of contraceptive use. Then reasons behind choosing Thailand to compare it with Egypt are : -

1. It has completed its population transition during two decades.
2. In Thailand, abortion is illegal.
3. Since Islam forbids abortion and eliminating the number of children by laws, so the national family planning program in Egypt can not benefit from the experiments of South Korea and China, rather it could benefit from Thailand experience.

1.1. Sources of Data

This paper uses data from Egypt Demographic and Health Survey 1988, (EDHS 88) [13] and Thailand Demographic and Health Survey, (TDHS 87) [2]. TDHS 87 is the latest DHS that has been conducted in Thailand. These two surveys have been conducted in two successive years and both of them are related to the first round of Demographic and Health Survey (DHS). In addition, the data from DHS can be used in comparative studies between countries.

Also, "World Population Prospects", the 1994 revision [15] is used. The past demographic history of each country is given for the period 1950-1990. For 1990-2010, three fertility variants and one fertility scenario of population projections were prepared in the 1994 Revision. We choosed the medium-fertility variant because it is often considered the most likely projection.

1.2. Organization of the Study

The next section gives a brief account of the population policies in both Egypt and Thailand. This is followed by an overview about the trends of some demographic variables, such as population size and its structure, Total Fertility Rate, Crude Birth and Population Growth Rate in section three for these respective countries. Section four handles the contraceptive use and its determinants by investigating Hermalin's model. The bivariate analysis is presented in section five and section six presents the results of logistic regression. Finally, the conclusion is provided in section seven.

2. COUNTRY BACKGROUND

2.1. Egypt

In Egypt, the problems posed by rapid population growth have been raised since the 1930s. In 1962, the National Charter emphasized the seriousness of the population problem and the need to find solutions. Following these initial efforts, by 1966 a National Family Planning Program was established. It aimed at reducing fertility and population growth.

The first population policy document was announced in 1973. Policy shifted to emphasize the importance of socio-economic development as a key factor in reducing fertility. Also, the adoption of the first population policy was accompanied by increased governmental activities relating to family planning.

A second population policy was issued in 1980. It placed greater emphasis on face to face communication and community based activities to promote family planning. However, the third and current national population policy was formulated and adopted in 1986. Again it emphasized the seriousness of population problems and recognized the interaction between population and development.

In 1994 a modified population strategy was developed due to the recommendation of the International Conference on Population and Development (ICPD) that was held in Cairo. It emphasized on providing reproductive health services and supporting Non-governmental Organizations (NGOs) in the development of local Communities [6].

Following these policies, strategies and the development of Egypt's family planning program, the results of the Demographic and Health Survey (EDHS 95) [6] assured that the policy makers should modify the current policy and strategy to achieve our goal targets and complete the fertility transition.

Concerning fertility, the results of EDHS95 indicated that fertility in Egypt has declined steadily from over 5 births per woman in the early 1980s to 3.9 births in 1992 which in turn reduced to 3.6 birth in 1995. Also, there was a marked differential between urban and rural areas. Inspite of these reductions in fertility level, many women were having more children than they considered ideal. On average a woman in Egypt is having one birth more than she wants at the current fertility level.

In addition, the slowing in the growth in contraceptive use is another area of concern. Despite contraceptive use in Egypt has doubled between 1980 (24 percent) and 1995 (47.9 percent), the pace of the increase in contraceptive use was most rapid in the 1980s, with virtually no change occurring in the overall rate of use between 1991 and 1995.

Also, EDHS 95 showed that, more than one in six Egyptian women were considered to have an unmet need for family planning. This group included women who were not using family planning but wanted either to wait two or more years for the next birth or wanted no more children.

2.2. Thailand

Since 1970, the Thai Government has declared a population policy. This policy stated clearly that family planning was the main strategy to reduce rapid population growth, and the Ministry of public health was given the responsibility for establishing the National Family Planning Program (NFPP).

Ever since the Third Five - Year Development plan (1972-76), the National Family Planning Program (NFPP) has been designated as the principal organization for implementing the population policy. After the declaration of the policy, specific goals to lower population growth rate have been set in each National Five-Year Social and Economic Development Plan. The Third Five - Year plan (1972 – 76) was the country's first national economic development plan that incorporated statements of population policies which included a reduction of the population growth rate as a major factor. Its primary objective was to reduce the growth rate through voluntary family planning from slightly over 3% to 2.5% by the end of the third plan. Despite various problems due to implementation, this objective was achieved, probably due to the fact that there were large number of women in real need of services. The objective of the Fourth Five - Year Plan (1977-81) was to reduce the growth rate from 2.5% to

2.1% and the Fifth Five - Year Plan (1982 - 86) announced that population policies would further attempt to reduce the population growth rate from 2.1% to 1.5% per year by the end of the plan [12]. The goals of the Sixth Five-Year Plan (1987-91) are further reduction of the growth rate, improved quality of life, and population distribution. Other objectives were included such as the extension of family planning outreach services, public acceptance of the two-child family, community participation, and cooperation of governmental and non-governmental organizations. Finally, the Seventh Five-Year plan (1992-96) focused upon reducing the population growth rate to 1.2% per year by the end of 1996, population distribution issues and the development of population quality [11].

In line with the national goal, the NFPP converted the demographic goal into family planning (FP) targets to provide contraceptive services. So, family planning promotion, population education, and information, education and communication (IEC) would be targeted to special population groups such as ethnic groups and women in urban slums, especially in the northeastern and southern regions where fertility levels remain higher than the national average.

It is worth mentioning that, the National Family Planning Program was highly Centralized; all plans and targets were set by NFPP central office. The central NFPP had three main sections: Training section, information section and research and evaluation Section.

3. TRENDS OF SOME DEMOGRAPHIC VARIABLES

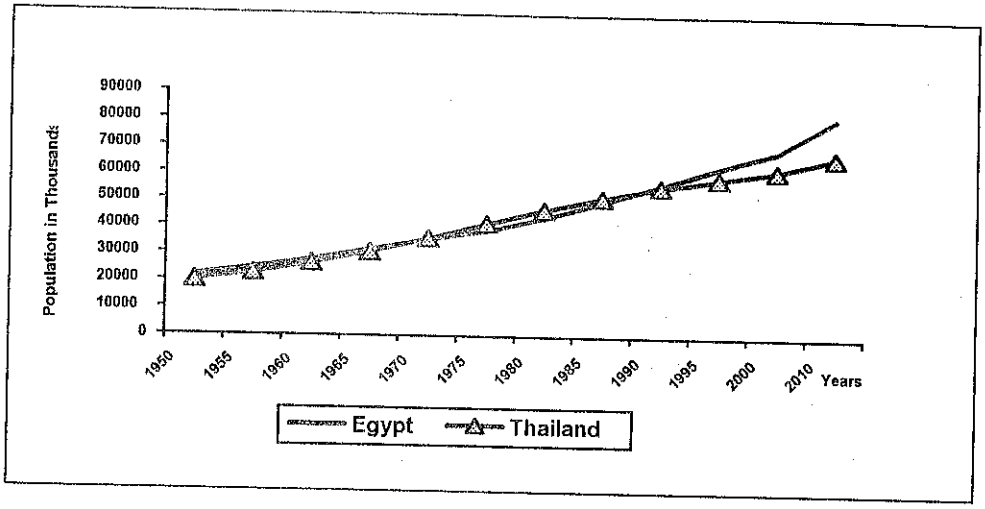
We intend to trace back the trends of some demographic variables in Thailand and Egypt, in order to link it with Policy and national family planning program development.

3.1. Population Size and Structure

The trends of population size for both Egypt and Thailand are indicated in figure(1). Before 1970s (before they have launched their population policies) the population size of Thailand was less than it in Egypt. During the period from 1970-1985, the population size of Thailand was higher than Egypt's Population size. This was consistent with population growth rates. Thailand's population growth rate was higher than Egypt's population growth rate until 1980 [figure (5)]. Since 1990 Thailand's population was less than Egypt's population. They are projected to be 81 and 67 million for Egypt[1] and Thailand respectively. This difference can be explained by the fact that Thailand has completed its population transition during 1990s, but Egypt as projected will reach the replacement level by 2010.

[1]The Egyptian Projections are less than these projections.

Figure (1): Trends Of Population Size, Egypt and Thailand 1950-2010

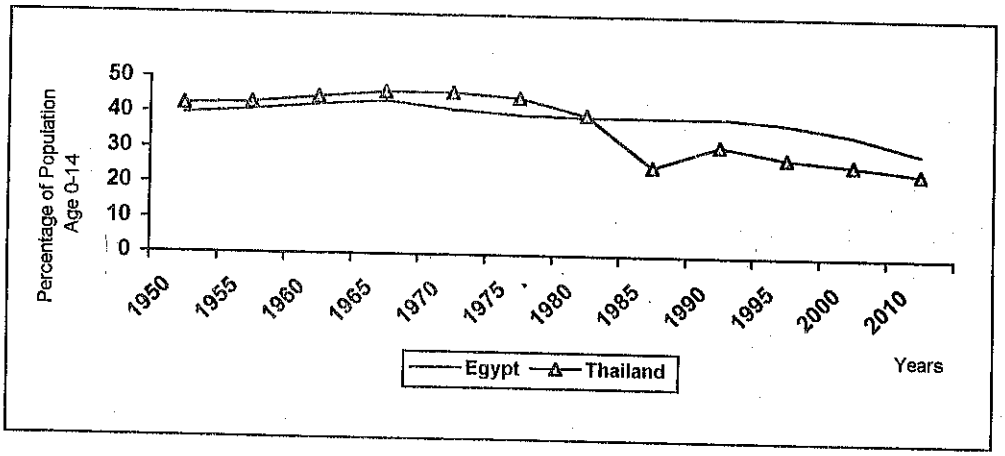


Source: World Population Prospects: The 1994 Revision, PP. 620 and 838.

It is expected that the gap between the population size of Egypt and Thailand will become wider after the year 2000.

Concerning the age structure of both countries, there was a change in their Population Pyramids. But they still hold the potential for growth for several decades to come. Figure 2 presents the trends of the percentage of the population aged 0-14 years during the period (1950-2010). Before 1980, the percentage of population aged 0-14 years in Thailand was higher than it in Egypt.

Figure (2): Trends in Percentages of Population Age 0-14 Years, Egypt and Thailand 1950-2010



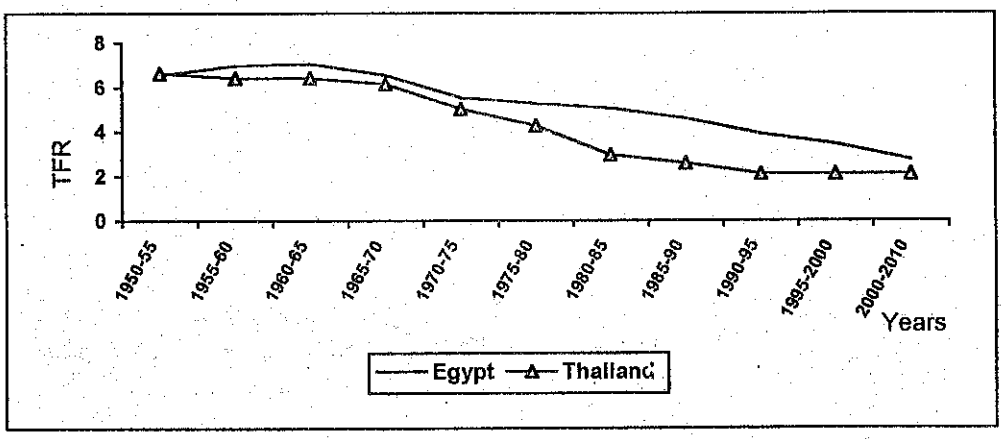
Source: World Population Prospects: The 1994 Revision, PP. 620 and 838.

Since the fertility decline in Thailand was more rapid than in Egypt, its impact on the decline of the percentages of the population in the age group (0-14) in Thailand was faster than Egypt. Although this percentage (40 percent) was almost the same in 1980. It declined more rapidly in Thailand and it is projected to be less than one fourth of the population by 2010. Concerning Egypt the decrease in this percentage was projected to decline slowly and will reach 30 percent in 2010.

3.2. *Total Fertility Rate*

Thailand has experienced concurrent fertility change and economic change. Now fertility in Thailand is at replacement level . Fertility declined in Egypt, but the pace of fertility decline slowed somewhat in the 1990s compared with the 1980s. Figure 3 illustrates the trends in Total Fertility rates during the period (1950-2010).

Figure (3): Trends in Total Fertility Rate, Egypt and Thailand 1950-2010



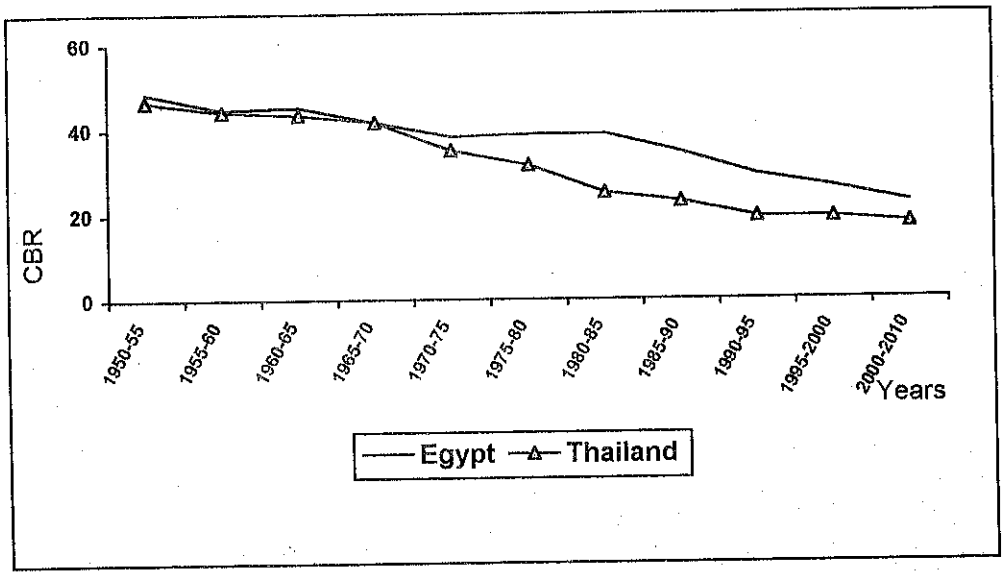
Source: World Population Prospects: The 1994 Revision, PP. 620 and 838.

It is clear that, the total fertility rate (TFR) in Thailand is less than it in Egypt. Before 1975, the total fertility rate in Thailand is less than the TFR in Egypt by nearly half a child. This means that before launching population policies in these two countries the TFR was nearly the same. During the second half of 1970s, this difference increased and the TFR in Thailand became less than TFR in Egypt by one child. This means that on average, the Thai woman would have one child less than the Egyptian woman at the end of her reproductive life during the period 1975-80. As figure (3) indicates, the gap between Thailand and Egypt reached its maximum during 1980s. The TFR in Thailand was less than it in Egypt by two children. Also, Thailand has reached the replacement level in early 1990s, but it is projected that Egypt will reach it during the period 2010-2020.

3.3. Crude Birth Rate

Since the reduction in fertility entails a decline in crude birth rate (CBR). Figure (4) shows the trends in crude birth rate during the same period (1950-2010). It indicates that, the crude birth rate had the same trend as TFR.

Figure (4): Trends in Crude Birth Rate, Egypt and Thailand 1950-2010



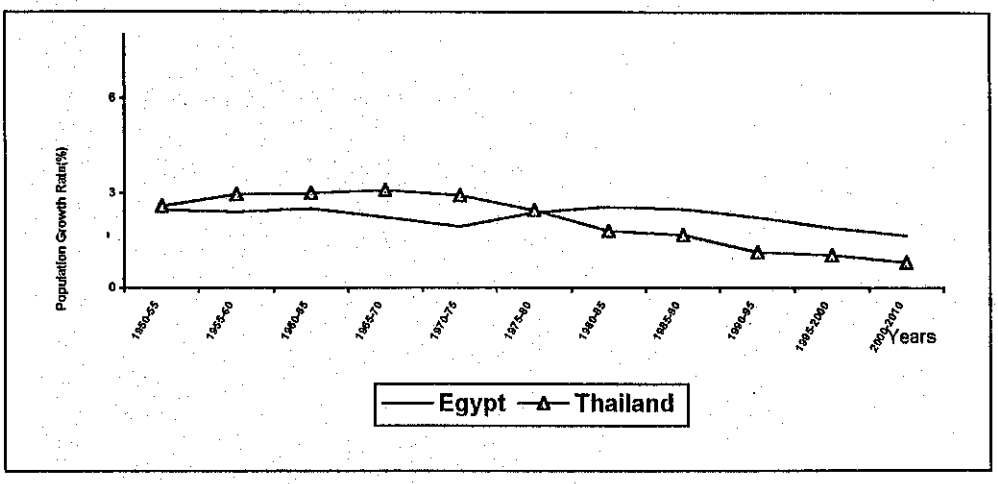
Source: World Population Prospects: The 1994 Revision, PP. 620 and 838.

It is projected that the crude birth rate in Egypt will be 26.4 per 1000 population by the year 2000. However, the CBR was only 25 per 1000 population in Thailand during the period 1980-85. This decrease in CBR has its effect, in turn, on the population growth rate.

3.4. Population Growth Rate

The trends of population growth rates in Thailand and Egypt during the period 1950-2010 are presented in figure (5). The continuing fertility decline in Thailand has affected the population growth rate, which declined from 2.92 to 1.12 over the 1970 to 1995 period.

Figure (5): Trends of Population Growth Rates, Egypt and Thailand 1950-2010



Source: World Population Prospects: The 1994 Revision, PP. 620and 838.

Before 1980, Thailand's population growth rate was higher than Egypt's population growth rate. Figure (5) indicates that the population growth rate in Thailand decreased rapidly but in Egypt it decreased fairly steadily. It is projected that its value in Thailand will be less than one percent during the period 2000-2010, whereas during the same period Egypt's population growth rate is projected to be 1.64, which equals its value in Thailand during the period 1985-1990.

4. CONTRACEPTIVE USE

Egypt and Thailand have launched their population policies in early 1970s. As the trends analysis has shown, there was a little difference between Egypt and Thailand in 1970s. Since 1980 Thailand has achieved its target and reduced its population growth rate through the decline in total fertility rate also, and it has already completed its population transition. Concerning Egypt, there has been a striking change since 1980 in the level of total fertility rate but it has not completed its fertility transition yet. It is projected that the TFR will reach the replacement level during the period 2000-2010.

It is worth mentioning that, Thailand is one of the most successful countries in implementing family planning program. Between 1970-1996 the contraceptive prevalence rate increased by 5 folds where it rose from 15 percent to 74 percent. Whereas in Egypt contraceptive prevalence rate only doubled. It increased from 24 percent in 1980 to 47.9 percent in 1995.

One might want to know the reasons behind this fascinating success achieved by Thailand in terms of both fertility reduction and contraceptive upraise as compared to Egypt. Bongaarts (1982)[1], has identified four proximate variables assumed to affect the fertility level significantly. These variables include, marriage, contraception, postpartum infecundability and induced abortion. Postpartum infecundability is highly

affected by duration of breastfeeding which has declined in both Egypt [6], and Thailand [8] but not greatly. Abortion is considered illegal in both countries. Thus, only two variables, marriage and contraceptive are perhaps more effective in reducing TFR.

Marriage incidence and timing is a behavioral decision that is difficult to be influenced by policies or programs. So marriage is not a policy manipulatable variable, rather it is sensitive to socio-economic status of the individuals and the community. On the otherhand, use of contraceptives is also a behavioral variable, but it can be manipulated through policies, programs, and campaigns.

Hence, in this paper we will give a great deal of attention to use of contraception. Accordingly, the determinants of contraceptive use in Thailand and Egypt will be explored in an effort to understand the factors that influenced contraceptive use in Thailand and will help the policy makers in Egypt to promote the national family planning program and the population policies. Also, it may help in defining the factors that may influence future trends in current use of Egypt.

4.1. Conceptual Framework

The investigation of the determinants of contraceptive use will build upon one of the pioneering models of the determinants of contraceptive use developed by Hermalin (1983)[7]. According to Hermalin's model, there are two main proximate determinants of contraception use. These are, motivation to control fertility and the cost of regulation which operate through a set of socioeconomic and demographic variables to affect use of fertility regulation. Motivation is considered as a function of the interaction between the supply of children and the demand for children. The cost of regulation includes economic cost, health costs and subjective costs.

We are satisfied with the information available from the first round of DHS on motivation to use than on cost of use. It has to be clarified that, some questions in the DHS questionnaire are considered specific country questions. So, some variables are available in EDHS 88 only. In the following two sub-sections the factors affecting motivation to use and costs of use which are available in EDHS 88 will be discussed.

4.1.1. Factors Affecting Motivation to Use

These factors can be classified into the following items:

a. ***Desire for children*** : This factor is a powerful discriminator of the motivation to use. In other words, it is the most direct measure for the motivation to use.

b. ***Demographic Status***: It is one of the factors which indirectly influence motivation. It can be measured by number of living children and duration of marriage. It is assumed that, duration of marriage plays an important role in affecting motivation to use more than the wife's age.

c. ***Costs and Benefits of Children*** : This factor influences the desired family size which, in turn, indirectly affects motivation to use. With respect to cost its measures include women's employment, education of the couple which illustrates if both the husband and wife had some education, one of them only or neither of them had any education, economic activity of the household as reflected in the husband's occupation, and a measure of the household's standard of living [5]. Considering benefits, it can be assumed that, the economic activity of the household as reflected for example by occupation of the husband will affect the potential economic contribution of children. This potential economic contribution will also be a function of the place of residence.

d. ***Family Life Value*** : It can be expected that family size desires are heavily influenced by family life values. These ideas about family life and childbearing will be rooted in the culture and social structure of the community. Also, family life values are changing across generations in developing countries. So, this factor is measured by an index of the wife's role in family decisionmaking[5], duration of marriage and place of residence.

e. ***Exposure to family planning IEC*** : Information, Education and Communication (IEC) plays an important role in influencing motivation to use. This is measured by whether the wife heard family planning massages on radio and/or television and for how many times during the month preceding the survey, whereas in Thailand, it measured by whether the wife heard a family planning massages on radio and / or television regardless the frequency.

However, El-Zanaty [5] mentioned that reproductive knowledge which measured by accurate knowledge of ovulatory cycle can be considered as one of the factors affecting motivation to use. But the simple regression for the variable was estimated and showed that this variable was weak predictor of use and, thus omitted from the multivariate model.

4.1.2. Factors Affecting Cost of Use

As stated before, Hermalin (1983)[7] classified the costs of fertility regulation into three cateroies : economic costs, health costs and subjective costs. He mentioned that, the economic costs include the monetary and time costs of gaining information about and access to a method of contraceptive use. However, health costs include major as well as minor side effects of methods. Whereas subjective costs encompass cultural, social, personal, perceived health and psychic factors.

Unfortunatly, EDHS88 and TDHS87 do not have enough information about all these measurable costs. So, factors affecting cost of use can be summarized as follows:-

a. ***Economic Costs:*** measured by economic circumstances of household as reflected in husband's occupation and a woman's employment, and household standard of living.

b. ***Normative and Psychic Costs:*** measured by a woman's own approval of family planning, the role that women play in decisionmaking and exposure to IEC messages.

c. ***Social Costs:*** are measured by place of residence.

5. BIVARIATE ANALYSIS

Since many variables are hypothesized as influencing the motivation or cost of using contraception, the first step to develop the multivariate model is to examine the proportion of women using contraception for each of these variables. As stated before, some variables were not available in TDHS 87. For example, the household standard of living index and the wife's role in family decision making index and family planning approval are not available for Thailand. The measure for exposure to family planning IEC is also constructed differently in the respective countries as a result of difference in the related questions in each country.

Considering table (1), many variables associated with motivation to control fertility assure a strong relationship to use and they have the same pattern in Egypt and Thailand. As expected, there is a strong association between use and the desire for more children. The highest level of use is observed among women who want no more children, it is less common among women who wants a child after two years (later) and it is low among women who want a child within two years (soon). Duration of marriage also shows the expected effect. The highest levels of use among women in the middle duration of marriage (5-24 years). This pattern can be explained by the fact that the newly married women haven't yet achieved their desired family size and therefore they are less motivated to use any fertility control. Also, it can be concluded that the Thai women prefer the small families. Almost three in four Thai women are using contraception during the period 5-9 years after their marriage vs. less than one half of Egyptian women in the same category. In addition to that, an increase in use is associated with an increase in the number of living children.

Residence in rural areas is associated with lower levels of fertility control. It has to be noted that, rural-urban differentials are profound in Egypt, whereas these differentials are negligible in Thailand. This reflects the Thai program strength in reaching rural as equal as urban women. Women who are currently working are more likely to use contraception than other women. Also, there is a positive relationship between the education of the couple and use, but the education of the woman is more important than the husband's education (44.6 Vs. 37.7 percent in Egypt and 66.8 Vs. 62.2 percent in Thailand). But the differential between wife's education and husband's education in Thailand is very minimal and the multivariate analysis proves that this difference is insignificant (see section 6.2). A similar relationship is observed with approval of family planning.

Table (1) : Percentage of Currently Married, Non-pregnant and fecund Women Currently using Family Planning, by Selected Background Characteristics, EDHS88 and TDHS87.

Background Characteristics	EDHS 88 (%)	TDHS 87 (%)
Marriage Duration (in Years)		
0-4	30.6	58.4
5-9	44.9	74.3
10-14	50.6	81.2
15-19	51.6	78.1
20-24	51.0	69.5
25+	37.2	50.9
Desire for Children		
Wants Within 2 Years	8.5	35.2
Wants After 2+ Years	46.1	70.7
Wants, Unsure Timing	8.2	23.2
Undecided	17.6	48.2
Wants no more	56.6	79.1
Number of Living children		
<2	32.8	66.9
3-4	53.9	78.8
5-6	50.3	71.7
7+	42.3	39.2
Education Of Couple		
Both Educated	56.7	71.3
Wife Only	44.6	66.8
Husband Only	37.7	62.2
Neither	28.2	49.6
Husband's Occupation		
Prof.\Admins.	61.2	74.6
Sales	53.7	73.8
Services	46.7	69.6
Workers	41.6	70.0
Agri.	26.2	68.4
Ever Worked		
Yes	57.7	71.0
No	40.3	66.6
Place of Residence		
Urban	59.4	72.2
Rural	29.3	69.4
Household's Standard of Living		
Low	26.6	NA
Medium	46.7	NA
High	58.3	NA
Wife's Role in Family Decisionmaking		
Weak	27.4	NA
Moderate	40.5	NA
Strong	58.4	NA
Approval Of Family Planning		
Both Approve	56.3	NA
Wife Only	25.1	NA
Husband Only	9.9	NA
Neither/Don't Know	6.2	NA
Exposure to Family Planning IEC 1		
None	25.8	NA
Rare/Sometimes	48.3	NA
Often	56.3	NA
Exposure to Family Planning IEC 2		
Through Radio and TV	NA	70.7
Through TV only	NA	73.5
Through Radio only	NA	65.8
Neither	NA	66.5
Total	44.2	69.9

With respect to husband's occupation, wives of men employed in agriculture are generally less likely to use than other women. Also, both higher living standards and the strong role accorded to wives in family decisionmaking are more likely to motivate women to use contraception. They may be related to a desire to invest more in each child, leading to smaller desired family size.

Finally, the variables measuring exposure to family planning IEC is associated with higher use levels. Whereas in Thailand, Television is more important than radio. Since the exposure to family planning IEC through television only or radio and television associated with higher use levels.

6. MULTIVARIATE MODEL

6.1. Specification of Variables

The factors hypothesized in section 4 to influence use of contraception are included in the multivariate model. These variables were recorded into binary or categorical variables. The groupings and the reference category for each variable are shown in Table (2).

Table (2) : Categorization of Variables used in Logistic Regression Model of Determinants of Contraceptive Use

Variable	Category
Place Residence	Rural (reference); Urban
Number of Living children	0-2 (reference); 3-4; 5-6; 7 or more
Education of Couple	Neither educated (reference); Both educated; Wife only; husband only
Desire for Children	Wants no more (reference), wants within two years (soon); wants after two years (later); unsure; undecided
Husband's Occupation	Agricultural (reference); Professional and administrative; Sales; Services; Workers.
Wife's employment (ever worked)	No (reference); yes
Approval of Family Planning	Don't know (reference); both approved; wife only; husband only
Household's standard of Living	Low (reference); medium; high.
Wife's Role in Family Decisionmaking	Weak (reference); moderate; strong.
Exposure to Family Planning IEC1 (Egypt)	None (reference); rare (sometimes); often.
Exposure to Family Planning IEC2 (Thailand)	Neither (reference); through radio and television ; through television only; through radio only.
Marriage duration	Is considered as continuos variable

6.2. Determinants of Use : A Multivariate Analysis

Given the dichotomous nature (0,1) of the dependent variable, the logistic regression model is applied as the most suitable technique. The results of the logistic regression analysis for both Egypt and Thailand are summarized in table (3). The table contains the relative odds (the exponentiated coefficients) of using for each variables. This measure indicates the contribution of each variable in the prediction of contraceptive use after controlling for the other variables.

Table (3) : Relative Odds of using Family Planning Methods for Egypt and Thailand: Results of Logistic Regression Analysis.

Variable	Egypt	Thailand
Place of Residence		
Rural ®	1.000	1.000
Urban	1.881*	0.9934
Marriage Duration	0.9679*	0.9375*
Desire for Children		
Wants soon	0.0861*	0.0735*
Wants later	0.5594*	0.3090*
Wants, unsure timing	0.1043*	0.0452*
Undecided	0.31.5*	0.2017*
Wants no more ®	1.000	1.000
Number of Living children		
0 – 2 ®	1.000	10.000
3 – 4	1.5186*	1.3919*
5 – 6	1.8099*	1.2225*
7 or more	1.6362*	0.4251
Education of Couple		
Both educated	1.365*	1.8519*
Wife only	1.424*	1.4413
Husband only	1.117	1.4175
Neither ®	1.000	1.000
Husband's Occupation		
Prof./ Admins	1.2424	1.2445
Sales	1.1018	1.1680
Services	1.2173	0.9789
Workers	1.0110	0.9298
Agri ®	1.000	1.000
Ever worked		
Yes	1.3133*	1.2747*
No ®	1.000	1.000
Household Standard of Living		
Low ®	1.000	NA
Medium	1.5296*	NA
High	1.6350*	NA
Wife's Role in family decisionmaking		
Weak ®	1.000	NA
Medium	1.0941	NA
Strong	1.3997*	NA
Approval of Family Planning		
Both Approve	7.1189*	NA
Wife Only	2.1412*	NA
Husband Only	0.7739	NA
Neither / Don't know ®	1.000	NA
Exposure to Family Planning IEC 1		
None ®	1.000	NA
Rare / Sometimes	1.1997**	NA
Often	1.7425**	NA
Exposure to Family Planning IEC 2		
Through Radio and TV	NA	1.500
Through TV only	NA	1.2115*
Through Radio only	NA	0.9068
Neither ®	NA	1.000

® = Refrence group * P < .01 ** P <0.05

The results indicate that, there are many similarities between Egypt and Thailand except in some variables. These differences are related to the country specific characteristics of themselves.

Concerning the place of residence, the results show that urban residence is among the most important determinants of use in Egypt. The odds of use in urban is nearly twice its value in rural residence. In contrast, the urban residence is insignificant in Thailand. This can be explained by the fact that, the percentage of urban population in Thailand during the second half of 1980s is 19.5 percent[2] and it is projected that this percentage will be 44.7 percent in 2020. So, the effect of urbanization may affect insignificantly contraceptive use. In addition, Thailand National Family planning Program took in his account this characteristic and overcame it by following outreach strategies (for more details see [14]).

The results assure that the desire for children is considered as one of the most important determinants of use in both Egypt and Thailand. In Thailand the odd of use for women who want no more children is three times the odd of use for women who wanted children later. In Egypt the odd of use for the same group is only twice the odd of use for women who wanted children later. This can be explained by the fact that NFPP in Thailand succeeded in recruiting new users and achieved its goals concerning reducing population growth rate.

The results indicate that the levels of use in Egypt are associated with high parities. The odds of use are highest among women who have five or six children followed by women who have more than seven children. This result reflects the situation that have been in Egypt in 1988. The mean number of children ever born was four children [13], whereas the ideal number of children was 2.9 children. In contrast in Thailand, the mean number of children ever born was 2.75 children in 1987 and the ideal number of children was 2.8 children and among recently married women was only 2.3 children [2]. This explains the results that the odds of use are highest among women who have three or four children and the odds of use are insignificant among women who have seven or more children. The result of logistic regression assures that the family planning program in Egypt has a lot to benefit from Thailand experience, especially in recruiting new users (see section 7).

The results also indicate that the role of husband in fertility control in Egypt is insignificant. Husband's education, husband's approval of family planning and his occupation are insignificant. In contrast, the wife's education, approval of family planning and the strongest role she has in decisionmaking are highly significant in increasing use of family planning. So, the Family Planning Program in Egypt has to concentrate on the husband's involvement in family planning programs and contraceptive use.

Thailand Family Planning Program concentrated on the husband's involvement in the family planning and contraceptive use [14]. The results in table 3

[2]The source is "Thailand", Microsoft ® Encarta ® 96 Encylozedia © 1933-1995 Microsoft Corporation. © Funk & Wagralls Corporation.

clarify that, the odd of use for the couples' education (both educated) in Thailand is higher than in Egypt. So, the odd of use for the both educated is significantly high. However, the odds of use for wife only or husband only are insignificant and almost had the same value. This insignificance because literacy rate is relatively low in Thailand[3].

Controlling for other variables, women who are currently working had a significant effect on use in the respective countries. As expected in Egypt both the household's standard of living and exposure to family planning IEC play a significant role in determining use. Although the family planning IEC Program was very intensive and covered a very large population in Thailand [14] the result indicate that, the exposure to family planning IEC through Tv is significant.

7. CONCLUSION

Analysis of the determinants of contraceptive use in Egypt confirms that, high parity, better educated, urban residents, with a strong role in family decisionmaking, working women and those living in household with high standard of living are more likely to use fertility control. Also, the analysis suggests that FP campaigns must target men as well as women and efforts to promote the status of women should be devoted. It also shows that, the family planning program had to introduce outreach strategies to overcome the disparities in contraceptive prevalence between urban and rural areas.

The changes that have occurred in some demographic variables in Egypt and Thailand since 1950 are documented in this study. Thailand has completed its population transition in early 1990s and it is expected that Egypt will achieve the replacement level and complete its population transition in 2010. Thailand's population policies and strategies have some positive implications that Egypt can benefit from it. These can be summarized as follows:-

1. Thailand National Family .Planning Program demonstrates how a strong governmental program with attention to the full range of program elements such as accessibility, method choice, quality of care, training, logistics, and communication can make a major impact. The program also developed the following innovative approaches: woman - to - woman services by paramedics outreach to undeserved groups, and broad support for nongovernmental agencies.

It is obvious that, several factors account for Thailand's Population Program success. They are:

[3]Education in Thailand is free and compulsory for all chiidren between the ages of 7 and 14, but the available school facilities, both public and in Buddhist monasteries, are insufficient to provide a primary education for all children. The literacy rate was nearly 67 percent in 1960 and increased to 94 percent in 1992

a. The Thai program has also stated a clear delineation of roles for nongovernmental organizations. The Ministry of Health coordinates all programs in order to avoid duplication of programs and competition among field workers

b. The program followed demographic - economic approach, which stresses the economic implications of population growth.

c. All governmental hospitals have a family planning clinic. Paramedics particularly midwives and nurses have been trained to deliver family planning services. Unless clients can demonstrate that they are unable to pay, all family planning services carry a standard fee. This led to the availability and accessibility of family planning services.

d. The NFPP has doubled its efforts with the help of private sector and NGO's in order, to overcome disparities in contraceptive prevalence between regions. So, outreach strategies have been extensively introduced. Also, information and services which were not available such as IUDs, male and female sterilization and Norplant have been delivered by mobile units to districts and villages throughout the country. In addition, the NFPP made a concerted effort to reach undeserved groups with innovative programs for minorities, emphasizing an extension of Maternal and child health (MCH) and family planning services, outreach factories Programs, and expended FP counseling and services for adolescents [14].

2. Also, the monitoring and evaluating system to trace the achievements in delivering family planning services was successful. Each district collects the number of FP new acceptors and current users which are then reported to the NFPP central office. The data are then tabulated and analyzed to produce a monthly report showing the number and percentage of acceptors and current users classified by method, district, month and service outlet.

The monthly reports of new acceptors and the contraceptive prevalence rate (CPR) are then fed back to each province to evaluate their progress. Each year this report is summarized to compare with the targets set. Ranking information on each province is also sent to provinces. The report of acceptors is also used for projecting the need for contraceptive supplies.

Personnel from the three main sections-Training, IEC, Research and Evaluation - of the Central NFPP regularly visit every province to monitor the program. Visits are also made to the lowest outlets, health posts and volunteers to evaluate the outcome of their activities. Discussions are held with the provincial personnel in order to strengthen the program [14].

3. In addition to that, the National Family Planning Program gave high priority to communication programs aimed at stimulating contraceptive use among the population. Information on the seven contraceptives has been standardized for repeated use in every medium. The promotion of family planning methods in

every village has been carried out using auxiliary midwives in combination with a mobile film show and printed materials advertising contraceptives. Popular radio programs with inserted contraceptive messages are broadcasted every day throughout the Kingdom. Meetings and Campaigns have been regularly launched in each village. Entertainment programs which convey contraceptive messages have also been very popular. All communication programs and campaigns launched in rural villages have had a specific targeted number of family planning acceptors for services. This strategy helps to direct health personnel in the field to identify the magnitude of the task and the goal to be achieved in family planning program.

As a result the family planning communication program is very intensive and covers a very large population. All reproductive groups are aware of the different contraceptive methods and the two-child family norm, spacing as appropriate is the way of life for the population [14].

4. Finally we can say that, Thailand has not experienced religious opposition to family planning and female sterilization is the most common contraceptive method used in all parties. Also, information, education and communication Programs interested in youth and students.

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