# FAMILY PLANNING ATTITUDES AND PRACTICES AMONG NON-PREGNANT MOTHERS ATTENDING MATERNAL AND CHILD HEALTH CENTRES IN ALEXANDRIA

by

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#### INTRODUCTION

The ten urban maternal and child health (MCH) centres in Alexandria U.A.R were established in the following order: Moharam Bey centre in 1949;

Ramleh centre in 1959; Gomrouk centre in 1960; Karmouz, Kabbari and Montazah centres in 1961; Hadara centre in 1962; Hagar El Nawatia and El Labban centres in 1963 and Abou Keer centre in 1965 (Alexandria Governorate, 1968). They appear to be evenly distributed all over the city. They provide comprehensive MCH work that practically conforms with the standards and specifications prescribed by the World Health Organization technical reports (WHO 1952 and 1957).

One of the specific functions of these centres as given in their manual of instruction is «giving information and health education for family planning and limitation» (U.A.R, 1966) From another side the UAR National Family Planning Program depends in its implementation on the existing health centres and units all over the country, including the MCH centres (Hamza, 1967). In fact the MCH centres rank first in order among other health centres regarding their work load and achievements in family planning activities (Elnomrossy, 1968). The present study aims at helping the MCH centres in Alexandria to carry a better job in the area of family planning and limitation.

#### METHOD OF STUDY

The study started late in 1967 by repeated visits to the ten MCH centres in Alexandria. The number of non preganant mothers attending the well baby clinics of the 10 MCH centres was estimated be to about 1200 mother per month.

It was decided to study a 25% systematic random sample of those mothers i. e. about 300 mothers. An interviewing schedule was prepared and pretested to measure the biological and psychlosocial characteristics of mothers in relation to reproduction and family planning. The schedule included direct, indirect and projective questions. The sample of mothers were interviewed during the month of March 1968 i. e. two years from the start of the National Family Planning Program. The interviews were effected by 10 well trained social workers one for each MCH centre.

#### RESULTS

The number of non pregnant mothers attending the 10 MCH centres during the month of the study, March 1968, were 1148. The 25% systematic random sample was of 287 mothers of whom 9 mothers refused to be interviewed. Analysis of the collected data was as follows:—

# A.—Social characteristics of the sample of mothers:

From Table I it was found that:

- 1. 96% of the mothers were below the age of 40 years i. e. in the fertile age. Their mean age was 29 years while that of their husbands was 37 years.
- 2. 66.5 % of mothers originated from urban communities and the rest from rural areas.
  - 3. 96.4% of mothers were moslems and 3.6% were Copts (christians).
- 4. 76.2% of mothers were illiterates and 4.3% have had educational certificates; compared to 38.2% and 12.9% for their husbands respectively.
- 5. 98.6% of mothers were full time house wives and 1.4% were employed. 18.7% of the husbands were government officials, 48.2% were semiskilled labrours and 33.1% were unskilled labrours.

# B.—Obstetric and reproductive characteristics of the studied mothers:

Table II showed that:

- 1. The mean age of marriage of the mothers was estimated to be 18 years. 80.3% of them got married before the age of 20 years and 20.8% mentioned that they gat married before the age of 16 years.
  - 2. 54.7% of the mothers have had a duration of marriage less than 10 years.

The mean duration of marriage for the sample was estimated to be 10.5 years.

TABLE I
Social Characteristics of 278 Mothers of the Study Sample and Their
Husbands, in Percent

Characteristics	Mothers	Their Husbands
	Prcent	Percent
A) Age in years:		
Less than 20	4.0	0.0
20—24	30.2	5.0
25—29	22 .6	11.5
30—34	21 .9	24 .8
35—39	16.2	24 .8
4044	5.0	19.4
45+	0.0	14.4
Mean age in years	(29)	(37)
B) Place of origin:		,
Urban	66.5	60 .1
Rural	33 .5	39 .9
C) Religion:		
Moslims	96.4	96.4
Christians	3.6	3 .6
D) Education:		
Illiterates	76 .2	38.2
Can just read and write	19 .4	48 .9
Had any educational certificate	4.3	12.9
E) Occupation:		
Government officials	0.0	18.7
Semiskilled laborors	0.0	48.2
Unskilled labrors	1 .4	33.1
Houswife	98 .6	_

<sup>3. 49.5%</sup> of the mothers have been preganant 5 times or more. 17.9% were pregnant 9 times or more.

<sup>4.</sup>  $9.6^{\circ/}_{00}$  of the mothers were 9 paras or more (has 9 deliveries or more).

<sup>5. 43.4%</sup> of the sample of mothers gave the history of one or more early fetal death (abortions). 11.9% aborted 3 or more times.

<sup>6.</sup> The mean interval between births for mothers was 27 months.

TABLE II
Obstetric and Reproductive Characteristics of the 278 Mothers of the Study
Sample, in Percent

	Characteristics	Percent
A)	Age at first marriage, in years:	
	Bess than 16  16  17  18  19  20  25+  Mean age at first marriage in years	20 .8 11 .1 17 .2 8 .0 19 .0 0 .7 (18 .0)
B)	Duration of marriage: Less than 5 years 5-9 1 0-14 1 5-24 Mean duration of marriage in years	28 .4 26 .3 16 .2 29 .1 (10 .5)
C)	Number of pregnancies:  1 or 2 3 or 4 5 or 6 7 or 8 9 or 10 11 or more  Mean number of pregnancies	29 .2 21 .2 17 .9 13 .7 12 .9 5 .0 (5 .5)
D)	Number of Deliveries:  1 or 2 3 or 4 5 or 6 7 or 8 9 or 10 11 or more  Mean number of deliveries	30 .6 23 .7 21 .6 14 .4 7 .6 2 .1 (4 .6)
E)	Number of early fetal deaths (abortions):  0 1 2 3 or 4 5 or more Mean number of abortions	57 .6 18 .3 12 .2 8 .9 3 .0 (0 .9)
F)	Interval between births $i^r$ months (or from date of Marriage in primipara): 0—11 12—23 24—35 36—47 48+ Mean interval in months	0.4 34.5 46.1 12.6 6.4 (27.0)
G)	Sex of the living children of monthers: Both males and females Males only Females only	73 .9 12 .1 14 .0

# C.—Attitudes of the mothers of the study:

From Table III one finds that:

- 1. 58.2% of the mothers thought that girls should get married at the age of 20 years or more.
- 2. 70.8 % preferred 2 or 3 children per family. The mean preferred number was estimated to be 3 children.
- 3. 96.4% of the sample of mothers showed favorable attitudes towards the limitation of the number of children.
- 4. Reasons given by mothers for favoring the limitation of the number of children were, in the following rank order:—

First, well being of children	(40.2%)
Second, High cost of living	(32.4%)
Third, Reservation of health of mother	(13.9%)
Forth, Well being of the family	(7.7%)

5. Mothers thought that people do not limit the number of children for the following reasons:—

General ignorance	(25.7%)
Had few number of children	(23.8%)
Fatalism and religious factors	(14.8%)
Ignorance of or being afraid of birth control methods	(11.7%)
Economic capabilities	(10.9%)
Self pride and strength	(6.0%)
To tie the husband	(5.6%)

### D.—Felt need for birth control:

The study showed that:

- 1. 72.5% of the mothers of the study felt the need for birth control sometimes during their marital life, while 27.5% never felt such a need.
- 2. The mothers thought that they felt the need for birth control for the following reasons:—

Well being of children	(30.8%)
Reservation of mother's helth	(27.3%)
High cost of living	(19.7%)
Satisfied with the number of children they have had	(17.2%)
Well being of the family	(5.0%)

TABLE III

Fertility attitudes of the 278 mothers of the study

	Attitudes	Percent
A)	Preferred age of marriage for girls:	
	Less than 18 years	26 .7
	18—19	15.1
	20—21	48.8
	22—23	5.0
	24—25	4.4
	Mean preferred age of marriage in years	(19.0)
3)	Preferred number of children per family:	
	1	0.7
	2	23 .4
	3	47 .4
	4 ·	20 .1
	5	6.2
	6 or more	2.2
	Mean preferred number (Children)	(3.0)
<b>(</b> (	Attitude towards limitation of number of children:	
	Favorable	96.4
	Unfavorable	3.6
))	Reasons given by mothers for favoring limitation of Number of children:	
	1—Well being of children	40.2
	2—High cost of living	32.4
	3—Reservation of mother's health	13.9
	4—Well being of the family	7.7
	5—Having enough number of children	5.8
)	Reasons given by mothers for not favoring limitation of children:	
	1—General ignorance	35.7
	2—Donot have enough number of children	23 .8
	3—Fatalism and religeous causes	14.8
	4—Ignorance of or being afraid from birth control methods	11.7
	5—Economic capability	10.9
	6—Self pried and strength	6.0
	7—To tie the husband	5.6
	8—Refusal of husband to use contraceptives	1.5

3. Mothers who never felt the need for birth control had the following reasons:—

Wanting a boy or a girl	(44.0%)
Ignorance of or fearing birth control methods	(24.0%)
Had few number of children	(22.7%)
Husband resistant to family planning	(6.7%)
Fatalism and religious factrs	(2.6%)

# E.—Current use of birth control methods:

The study showed that (Table IV):

1. 62.9% of mothers were currently using birth control methods. They control their births for:

The well being of children	(27.9 %)
Reservation of mother's health	(27.4%)
High cost of living	(24.9%)
Satisfied with the number of children they have had	(17.5%)
Well being of the family	(2.3%)

2. It was also estimated that 37.1% of the mothers were not currently using birth control methods for the following given reasons:

Wanting a boy or a girl	(31.3%)
Depending on breast feeding as a natural contraceptive	(22.5%)
Ignorance of or fear from birth control methods	(21.1%)
Resistance of husband	(15.5%)
Not having enough number of children	(5.6%)
Fatalism and religious factors	(4.2%)

- 3. It was found that 73.1% of those who were using birth control methods were using the pills (hormonal) and 21.7% using the loops (I. U. D. s) the other methods, including the indigenous ones (baladi) were used by 5.2% only.
- 4. 73.8% of the mothers that were using birth control methods started this action within the 2 years preceding the study.

# F.—Characteristics of mothers and their felt need for family planning and limitation:

The study showed that (Table V):

1. The percent of mothers who felt the need for family limitation was significantly higher:

TABLE IV

Current use of Birth control methods by mothers of the study

Ite	ems	Percent
A) Use of Birth control Methods:		
Not using		37.1
Using birth control methods		62.9
B) Reasons given for current use of birth of	control methods :	3.
1—Well being of the children		27 .9
2—Reservation of mother's healt	h	27 .4
3—High cost of living		24 .9
4—Having enough number of ch	ildren	17.5
5—Well being of the family.		2.3
C) Reasons given for not using currently b	irth control methods:	
1—Wanting a boy or a girl		31 .3
2—Depending on lactation as a n	atural contraceptive	22.5
3—Ignorace or fear of birth contr	rol methods	21 .1
4—Resistance of husband		15.5
5—Donot have enough number of	of children	5.6
6—Fatalism and religeous factors	\$	4.2
D) Used birth control methods:		
1—Hormonal pills		73.1
2—I.U.Ds. (Loops)		21 .7
3—Indigenous (Baladi) methods		2.3
4—Condom		1.7
5—Other methods		1.2
E) Length of use of birth control methods	:	
Less than 12 months		48 .1
1223		25 .7
24—35		8.1
36—47		7.5
48+		10.6

- (a) In the age group 25 years or more, than the younger group.
- (b) Mothers of duration of marital life 5 years or more than those with shorter duration.
- (c) Mothers having both sexes of children than mothers having boys only or girles only

- (d) Mothers who had monthly family income 10 pounds or more than those who had less than 10 pounds.
- 2. There was no significant difference among groups of mothers in feelling the need for family limitation by place of origin or occupation of husband.

TABLE V

Felt need for family limitation by some biological and and social characteristics of the mothers of the study\*

	Characteristics	Number feeling	Number Not		Statis	Statistical inference	
	of mothers	the need	the	Total	Computed X <sup>2</sup> Value	Significance	
a)	Age n years: Less than 25 25 or more	58 147	25 17	83 164	15 .2388	Significant (p < 0.0005)	
b)	Duration of marital life:  Less than 5 years 5 years or more	. 48 157	20 22	68 179	10 .2359	Significant (p < 0.005)	
c)	Sex of living children:  Both sexes Females only and Males only	161 41	21 19	182 60	13 .2506	Significant (p < 0.0005)	
d)	Place of origin: Urban Rural	138 67	27 15	165 82	0.1444	Not Significant	
<b>e</b> )	Educational status: Illiterate Can read and write only Had educational certificate	156 39 12	35 7 0	191 46 12	2.5581	Not Significant	
f)	Monthly family Income: Less than 10 pounds 10 pounds or more	81 123	24 78	105 141	4 .3286	Significant (p < 0.05)	

<sup>\*</sup> Excluding those depending on breast feeding their children as a natural contraceptive.

## G.-Attitudes of mothers towards birth control methods:

1. When mothers were asked what were the causes that made them devaluate and not use a birth control method they gave the following causes:—

First, the method being unsafe	(70.7%)
Second. being of low efficiency in birth control	(12.3%)
Third, if lead to permenant sterility	(10.5%)
Forth, if inconvenient	(4.4%)
Fifth, if expensive	(2.2%)

2. When mothers were asked which birth control method they consider the worst one, their answers were as follows:

The loop	(53.3%)
The pills	(16.9%)
The indigenous (baladi) methods	(12.8%)
Sterilization of wife	(8.7%)
Coitus interruptus	(3.1%)
Vaginal diaphragm .	(2.6%)
Condom	(1.6%)
Sterilization of husband	(1.0%)

3. When those using the pills were asked which was the best birth control method 98.4% of them scored the pill as the best. In case of those using the loop 94.6% scored the loop as the best.

# H.-Indigenous (Baladi) birth control methods:

The study showed that 42.1% of mothers knew of one method or more of the non scientific indigenous (baladi) birth control methods. Of the study sample 27 mothers (9.7%) have practiced the use of such indigenous methods. It was also found that 13 mothers currently use these methods, some of them conjointly with pills.

The popularity of the indigenous birth control methods among the mothers were as follows:—

1.	Asprin tablets	(14.3%)
2.	Aloes species and aloin (Sabbar and Sabre)	(11.1%)
3.	Cotton wick and lemon juice	(10.8%)
4.	Indian barley	(6.5%)
5.	Common alum	(3.3%)
6.	Common salt	(2.9%)
7.	Onions	(2.9%)
8.	Soap	(2.5%)
9.	Sugar	(0.7%)

The attitude of those mothers towards the indigenous birth control methods methods were as follows:—

- 39.3% thought they were unsafe.
- 35. 7% thought they were inefficient,
- 9.5% thought they were inconvenient methods.

It was also found that 15.5% of the mothers had favorable attitudes towards these indigenous methods

#### DISCUSSIONS

The social characteristics of the sample of mothers indicated as was expected, that they come from the lower socioeconomic groups of Alexandria. Rrom the data of the study it was estimated that mothers attending MCH centres in Alexandria usually get married at young age, had a mean age of 29 and a mean marriage duration of 10.5 years. Their estimated mean number of pregnancies and deliveries were 5.5 and 4.6 respectively. The average interval between births (27 months) is equal to that estimated by other workers in an area in the vicinity of Alexandria (Kamel et al, 1968). These findings denote that those mothers were young, of high fertility and in actual need for family planning and limitation. The study showed that the 278 mothers of the sample have had 258 abortions. This high abortion mother ratio may indicate that the mothers seek abortions as a method of birth control. This may be endorsed by the fact that 11.9% of the mothers abourted 3 or more times, one can hardly expect them to be spontaneous abortions.

The mothers of the study preferred the age of marriage of girls to be on the average one year older than their own age of marriage. Their preferred number of children was found to be on the average 3 children per family. This is in line with the findings of other workers in other countries (Glass, 1962). If this number of children is applied to the sample studied the total number of their children would have been 834 instead of the present number of 1006 children i. e. reduced by 17%. In fact the number would have been reduced more than that; as the mothers were still in their early fertile age and would have given birth to more children by reaching their menopausal age.

The percent of mothers that showed favorable attitudes towards family limitation is very high (96.4%. It is higher than the estimated percent for the same population one year before (Gadalla 1967) The latter was 16.8% This may be an indication of the success of the National Family Planning Program in changing the attitude of mothers to a more favorable one.

The reasons given by mothers for favoring limitation of number of children were similar to the findings of Labban study carried in 1966 (Gadalla 1966). The main difference was in giving higher rank order for «the wellbeing of children» as a cause for family limitation in the present study than the Labban one. This may be due to the difference in the approaches of the two studies; the present study was carried out in a wellbaby chlinic while the other study used the household approach.

The reasons given by mothers for not limiting the number of children resemble in general the results of Labban study. The difference is mainly in the rank order of the reasons, «Wanting children» was given a higher rank in

the present study. This may be because mothers in MCH centres were younger and of lower parity. Any way the given causes are amenable to change and reduction.

Although the percent of monthers that felt the need for family limitation was found to be a high one yet it was lower than the percent of them that favour family limitation. This may be because some of them have had only one or two children or one sex of children. In other words they favoreed family limitation when there was a need for that.

The rank order of causes leading to felt need for family planning showed that the wellbeing of children and reservation of mothers health were the most important motivating factors for family planning among the sample of mothers attending maternal and child health centres. This was not the case in Labban study where the main causes were economic ones. The difference may be explained on the basis of difference in the settings of the two studies i. e. the mothers attending MCH centres were more concerned with maternal and child health.

Three of the reasons given for not feeling the need for family limitation were amenable to reduction. These are: Ignorance of or fearing birth control methods husband resisting family limitation and fatalism and religious factors. This could have been achieved by proper health education for family planning. Thus the percent of mothers feeling the need for family planning would increase to 81.7%.

The percent using birth control methods was found to be 62.9% i. e. less than those feeling the need for family limitation (72.5%). The factors which made mothers use birth control methods were identical to those leading to the felt need for family limitation i. e. mostly maternal health and child wellbeing.

The reasons given for making 73.1% of the mothers not to use birth control methods were mostly amenable to reduction i. e. depending on breast feeding as a natural contraceptive, ignorance of or fearing birth control methods, resistance of husbands, fatalism etc. These made 63.1% of the causes. Their reduction would increase the percent of mothers using birth control methods from 62.9% to about 86%. The non users would be mainly mothers having one or 2 children or having one sex of children.

The majority of mothers who were currently using birth control methods use the two methods of the National Family Planning program i. e. pills and lops. This is again another evidence of the popularity of the national program. It can be substanciated by the other finding of the study namely the majority of

mothers started family planning action within the two years preceding the study i. e. since the start of the National program.

Feeling the need for family planning and limitation differed among mothers by some of their biological and social characteristics. The difference was statistically significant by age of mothers, the duration of their marriagee the sex of their living children and the family monthly income. The differenc, was not significant by place of origin, educational status of mothers or the occupation of their husbands. This may be because the difference in these latter social group of factors are not marked e. g. the occupational statuses of husbands as well as the educational levels of the mothers were practically the same.

The characteristics of mothers should be considered when planning educational programs aiming at motiviating them for family planning and limitation.

The findings regarding the attitudes of mothers towards birth control methods were misleading. The loop and pills were considered at a disadvantage by 70.2% of the mothers, while the other methods by 29.8% of the mothers. The difference may be due to the difference in the degree of popularity and exposur to the method. Most of the mothers knew of the loop and the pills and not of the other methods, i. e. the choice was between the 2 popular methods. This is substanciated by the fact that most of the pill users considered the pills as best method and the loop as the the worst method. The opposite was true for the loop users.

The study demonstrated a big battery of indigenous birth control methods. They were used mostly per vaginum to kill the sperms. They were from the common available substances. The efficiency of these mothods as contraceptives is doubtful but have not been investigated.

#### RECOMMENDATIONS

- 1. Family planning activities should be promoted omong Mothers attending MCH centres as the study showed that they were young and of high reproductivity
- 2. Although the attitude of mothers towards family planning was favorable in most of the cases yet some of them were still in need of educational programs to motivate them to take action for limiting the number of their children. This educational program should aim at promoting the following beliefs identifyed by the study:
  - (a) The belief that if the number of children is small there are better chances for their wellbeing than if their number is big.

- (b) The belief in hazardous effects of successive and several deliveries on mothers health.
- (c) The belief in the big economic burden of bringing up of several children.
- 3. The educational program of family planning in the MCH centres should also aim at the reduction of the following barriers to family planning practice:
  - (a) Ignorance of birth control methods by proper programmes of publicity.
  - (b) Being afraid of birth control methods and their side effects.
  - (c) Resistance of husbands and their refusal to family planning and limitation
  - (d) Depending on breast feeding children as a sure reliable birth contral method, which might not be true in many cases.
- 4. The program of family planning education in the MCH centres should be enforced particularly among:
  - (a) Young mothers.
  - (b) Recently married mothers.
  - (c) Lower income group of mothers.
  - 5. Further research work is required for the investigation of;
  - (a) The magnitude of the problem of abortions and its etiology.
  - (b) The indiginous birth contral method and their efficiency as contrace\_ ptivel as well as their degree of safety.

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#### **BIBLIOGRAPHY**

- 1. ALEXANDRIA GOVERNORATE (1968): Official records of the Directorate General of Health Affairs.
- 2. ELNOMROSSY M.M. (1968): The National Program of Family Planning. The Executive Board of Family Planning Press, Cairo.
- 3. GADALLA, F.R.A. (1966): Biological Social and Psychological Factors Related to Fertility Rates and Family Planning in Labban Districf, Egypt Pub. Hlth. Assoc. 41:1 (in Arabic).
- 4. GADALLA, F.R.A. (1967): Fertility Study in MCH centres in Alexandria, Unpublished study.
- 5. GLASS, D.V. (1962): Family Limitation in Eeurope: In Research In Family Planning edited by Kiser, C.V. Princeton University Press, New Jersey.
- 6. HAMZA, A.A. (1967): Family Planning Activities in Alexandria, U.A.R. Typed unpubshed monograph.
- 7. KAMEL, W.H.; HANNA, A.T.; WAHDAN, M.H. and KAMEL, N.M. (1968): A Fertility Survey in El-Amreyya—Reported in Medical Research in Family Planning in Alexandria by Toppozada, H.K. Alexandria University Press 1969.
- 8. U.A.R. (1966): Manual of Instructions, Maternal and Child Health Section Ministry of Public Health; Cairo.
- 9. W.H.O. (1952): Expert Committee on Maternity Care, Wld Hlth Org. techn. Rep. Ser. 51.
- 10. W.H.O. (1957): Administration of Maternal and Child Health Services, Wld Hlth Org. techn. Rep. Ser. 115.