MOTHER AGE AT MARRIAGE AS A DETERMINANT OF REPRODUCTIVE HEALTH

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Abstract:
Background: Early pregnancy and unplanned childbirth may have far-reaching physical, psychological and social consequences for adolescent girls and her off spring. Therefore, public health issues of concern because of the growing cultural and social sensitivity and controversy over reproductive health issues.

Aim of the study: Studying mother age at marriage in association with different socioeconomic characters in the family, which might affect reproductive health of mothers.

Subject & methods: A cross-sectional study conducted taking data obtained from 800 randomly selected healthy mothers, during their visits to five primary health centers, which selected randomly from different areas in Baghdad city; this done during the period from June- November 1994. Information from the mothers obtained using well-studied questionnaire form.

Results: Significant relationship between mother's age at marriage and maternal education, birth interval, father age at marriage, number of pregnancies, under 5 years children in the family, crowding index, degree of consanguinity (P <0.001). Significant relationship found with father occupation, under 5 years death in the family (P <0.01). No significant relationship with number of abortion and type of family (P > 0.05) found.

Conclusion: maternal age at marriage is an important determinant of reproductive health of women when it studied with different socioeconomic variables.
Emphasis should be made on young people to have better access to health information schools, and the medical profession needs to work together both to provide information and to help young females to develop confidence to use available information sources.

Key words: reproductive health

Introduction

National family planning programs have been an important instrument in accelerating global fertility decline and in restricting ultimate world population to a level probably below ten billion. They begin to come into being after 1950 and probably go out of existence in most of the world 'regions by 2050[1]. The 1994 International Conference on Population and Development held in Cairo has generated wide spread commitment to changing family planning programs from categorical and medically focused service organizations to reproductive health initiatives that embrace wide range of social and human services[2]. Teenage pregnancy has reached epidemic proportions in the United States with 1 million pregnancies and more than 500000 live births occurring each year among women under the age of 20[3]. Early pregnancy and unplanned childbirth may have far-reaching physical, psychological, and social consequences for adolescent girls and her off spring and are therefore public health issues of concern[4]. Reproductive health-seeking behavior, source of advice, and access to care issues studied among a sample of clinic- based homeless adolescent women in USA,

and it found that adolescent women are among the most vulnerable homeless population in the United States. Homeless youth rarely invited to participate in research aimed at improving their access to appropriate health care, also the culture in which they live and the personal experience of being homeless are often not addressed[5].

A family planning program can be deemed successful if an individual is able to avoid having an unintended pregnancy (or is able to have a wanted child) within the stipulated period and if she experiences no severe reproductive health problems in the process[6].

Because of the growing cultural and social sensitivity and controversy over reproductive health issues, we aimed at studying mother age at marriage in association with different socioeconomic characters in the family, and its effect as a risk factor on reproductive health of the mothers.

Subjects & methods

A cross-sectional study was conducted taking data obtained from 800 randomly selected healthy mothers, during their visits to primary health centers for different reasons, five primary health centers were selected randomly from different areas in Baghdad city, and about 100-150 mothers were included from each center making a total of 800 mothers, which done during the period from June- November 1994.

Information from the mothers obtained and filled by the researcher only, using well studied and preceded questionnaire form, which include information regarding different socioeconomic characters that might be affected by mothers' age at marriage.

Statistical analysis:

Frequency tables used, statistical tests done using Chi-square. P values <0.05 were considered significant.

Table 1: Distribution of the sample by mother's age at marriage and occupation

Variables	< 20 years		> 20 years		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Age at marriage	441	55.1	359	44.9	800	100
Occupation						
House wife	431	53.8	311	38.9	742	92.7
Employed	10	1.3	48	6.0	58	7.3

Table 2: Distribution of different variables in association with mother age at marriage in the studied sample

Variable	Mother′s age at marriage						Significant
	< 20 years		> 20 years		Total		
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Mothers education							
Illiterate	**52**	**6.5**	**41**	**5.1**	93	11.6	
Read &write	**106**	**13.3**	**44**	**5.5**	150	18.8	$\chi^{(2}$=201.1
Primary school	**196**	**245**	**112**	**14.0**	308	38.5	DF =5
Intermediate school	**67**	**8.4**	**45**	**5.6**	112	14.0	P < 0.001
Preparatory School	**18**	**2.3**	**57**	**7.1**	75	9.4	
Diploma/University	**2**	**0.2**	**60**	**7.5**	62	7.7	
Total	**441**	**55.1**	**359**	**44.9**	800	100	
Birth interval							
0 -11.99months	112	14.0	145	18.1	257	32.1	$\chi^{(2}$=22.7
12-17.99 months	73	9.1	59	7.4	132	16.5	DF =4
18-23.99 months	41	5.1	25	3.1	66	8.2	P < 0.001
24-35.99 months	81	10.1	53	6.6	134	16.8	
36+ months	134	16.8	77	9.7	211	26.4	
Total	441	55.1	359	44.9	800	100	
Father age at marriage							
< 20 years	69	8.6	11	1.4	80	10.0	$\chi^{(2}$=29.74
> 20 years	372	46.5	348	43.5	720	90.0	DF=1
Total	441	55.1	359	44.9	800	100	P < 0.001
No. of pregnancies							
1-2	90	11.2	139	17.4	220	27.5	$\chi^{(2)}$=27.1
3-4	157	19.6	116	14.5	273	34.1	DF=2
5 +	194	24.3	104	13.0	307	38.4	P < 0.001
Total	441	55.1	359	44.9	800	100	
Under 5 years children in the family							
0-2	147	18.4	188	23.5	335	41.9	$\chi^{(2)}$=31.8
3-4	180	22.5	117	14.6	297	37.1	DF=2
5 +	114	14.2	54	6.8	168	21.0	P < 0.001
Total	441	55.1	359	44.9	800	100	
Crowding index							
< 2	57	7.1	88	11.1	145	18.1	$\chi^{(2)}$=19.1
2 -5	310	38.8	220	27.4	530	66.3	DF=2
> 5	74	9.2	51	6.4	125	15.6	P < 0.001
Total	441	55.1	359	44.9	800	100	
Degree of consanguinity							
First degree	227	28.4	127	15.9	354	44.3	$\chi^{(2)}$=27.58
Second degree	23	2.8	24	3.0	47	58	DF=3
Third degree	53	6.6	25	3.1	78	9.7	P < 0.001
No relation	138	17.3	183	22.9	321	40.2	
Total	441	55.1	359	44.9	800	100	
Father occupation							
Student	4	0.5	1	0.1	5	0.6	
Employed\self employed	377	47.2	334	41.8	711	88.9	$\chi^{(2)}$=11.54 DF=3
Others	60	7.4	24	3.0	84	10.5	P < 0.01
Total	441	55.1	359	44.9	800	100	

Table 2: *Continued*

Variable	Mother's age at marriage						Significant
	< 20 years		> 20 years		Total		
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Under 5 years death of children in the family							$\chi^{(2)}$ =10.16
Yes	60.0	7.5	24	3.0	84	10.5	DF=1
No	381	47.6	335	41.9	716	89.5	P < 0.01
Total	441	55.1	359	44.9	800	100	
Number of abortion							
No abortion	288	36.0	248	31.0	536	67	$\chi^{(2)}$ =1.28
1-3	122	15.2	89	11.2	211	26.4	DF=2
4 +	31	3.9	22	2.7	53	6.6	P > 0.05
Total	441	55.1	359	44.9	800	100	
Type of family							
Extended	325	40.6	239	29.9	564	70.5	$\chi^{(2)}$ =4.84
Nuclear	116	14.5	120	15.0	236	29.5	DF=1
Total	441	55.1	359	44.9	800	100	P > 0.05

Results

Table 1 shows that more than half of mothers (55.1%) were married before the age of 20 years, and that 92.7% of mothers were housewives in the studied sample.

There were significant relationship between mother's age at marriage and maternal education, birth interval, father age at marriage, number of pregnancies, under 5 years children in the family, crowding index, degree of consanguinity ($\chi^{(2)}$=201.1,27.7,29.74,27.1,31.8,19.1,27.58 respectively P <0.001), also there were significant relationship with father occupation, under 5 years death in the family ($\chi^{(2)}$=11.54,10.16 respectively P <0.01),while there were no significant relationship between mother age at marriage and number of abortion, and type of family($\chi^{(2)}$=1.28, 4.84 respectively P > 0.05)

Discussion

This study was done on mothers from whom data were taken in the year 1994, since that time, many changes have occurred in our country which might have great effect on the Iraqi families

especially the reproductive health of mothers, the results presented in this article might be useful for future similar studies to show changes in behavior and reproductive health of mothers during the last 10 years.

The end of the twentieth century is an appropriate half way mark at which to evaluate the twentieth-century National family planning programs, and to assess what changes in them needed for twenty-first century[1].

A reproductive health approach recognizes that the foundation of women's health are laid in childhood and adolescence, and are influenced by factors such as education, nutrition, social roles and social status, cultural practice, and the socioeconomic environment[7].

In the present sample, data taken from 800 women; of them, 441 (55.1%) women were married at the age less than 20 years, which means that more than half of women in the sample were adolescent at time of **their marriage.** According to Sedlecki 2001[8], the reproductive health of adolescent girls is endangered by their sexual behavior, poor acceptance of healthy life styles,

lack of responsibility in sexual relationship, and high prevalence rates of unintended pregnancy and sexually transmitted diseases. Another fact found that 742 (92.7%) of women were housewives.

The finding that there was a significant association between maternal age at marriage and mother education coincide with the finding of other studies[9, 10]. Heck K 2002[11] concluded that public health insurance coverage is critical to ensure adequate health care access and utilization among children of less educated mothers, regardless of family structure.

Significant association was found in this study between mother age at marriage and birth interval (P <0.001), which coincide with other studies[12, 13]. Modin 2002[14] also came to important conclusion that childhood social condition that linked to birth order position seem to have had consequences for their individuals health and survival that extended over the whole life-course.

Under 5s death in the family was significantly associated with maternal age at marriage in this study (P < 0.01), this result coincide with other studies[15, 16].

Number of abortion was not significantly associated with mother age at marriage (P > 0.05), this result does not coincide with the result obtained by Yassin 2000[17], and he found that the incidence of abortion was significantly associated with gravidity, consanguinity, and mother occupation, while recurrent abortion was associated with mothers' age at marriage, consanguinity, and mother occupation.

Also in the present study significant association was found with father age at marriage, degree of consanguinity, number of pregnancies and children, crowding index (P <0.001), father occupation (P <0.01), while there was no significant association with the type of family (P > 0.05). Those results possibly reflect the effect of socioeconomic conditions on maternal age at marriage as a determinant of reproductive health of mothers in the family in the studied sample, in which a good proportion of the women were of low education, housewives, married at a young age, and usually lived with their relative and having a higher number of pregnancies and children; with possibly little knowledge about their reproductive health.

Conclusion

Maternal age at marriage is an important determinant of reproductive health of women when it studied with different socioeconomic variables.

Special attention should be paid to adolescent sexual and reproductive health services, these should include contraceptive counseling in order to prevent pregnancy at a young age, also emphasis should be made on young people to have better access to health information schools, and the medical profession need to work together both to provide information and to help young females to develop confidence to use available information services.

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