

Contraceptive use in Jordan

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ABSTRACT

Objective: To compare women in the child bearing age for the years 1983, 1990, 1997 regarding their use of contraceptives and the variations in the source of intrauterine contraceptive devices, as it was recently observed that women are more likely to use intrauterine contraceptive devices.

Methods: Three national surveys carried out in 1983, 1990, 1997 were compared. The samples selected in the 3 surveys were women in the child bearing age. A multistage sampling procedure was used to ensure the representativeness of the samples in the 3 surveys.

Results: The use of contraceptives increased from 26% in 1983 to 40% in 1990 and 53% in 1997. Women became more likely to use intrauterine contraceptive devices where

the percentage of use increased from 32% in 1983 to 44% in 1997. The percentage of users of contraceptives in general and intrauterine contraceptive devices in particular was higher in urban areas and in educated women with a high number of children.

Conclusion: Women at risk of not using contraceptives should be identified and contacted to convince them to use contraceptives. All barriers to access, use and quality of contraceptives should be investigated. The identification of such barriers will be useful for decision makers and health planners in the country.

Keywords: Contraceptive use, intrauterine contraceptive devices.

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Jordan is a small country with a rapid population growth. The growth rate was 2.5 in 1950 as compared to 3.1 in 1960 and 3.4 for the period 1986-1990. Average family size in the country was 5.7 persons in 1960 as compared to 6 persons in 1994.¹ If the current growth rate sustains, the population of the country will reach 6.5 million in 2010. Total fertility rate per Jordanian woman aged 15-49 years decreased from 6.6 in 1983 to 5.6 in 1990 and 4.4 in 1997.¹⁻³ The 1997 survey shows that if all unwanted births were avoided the total fertility rate for the 3 year period before the survey would be 2.9, which is 34% lower than the observed rate for that year. The same survey shows that 27% of married women want to delay their next birth for at least 2 years. Different national surveys¹⁻³ had been conducted in the field of contraception over the last few years without analyzing changes in the use of contraceptives in Jordan. In this paper an attempt was made to

investigate the following objectives: 1. To compare the use of contraceptives by women for the years 1983, 1990, 1997 according to area of residence (urban, rural), age of the woman, level of education and number of living children. All women in the 3 surveys will be classified into users and non users of contraceptives. Users of contraceptives will be classified into intrauterine contraceptive devices users and users of other methods. 2. To compare the types of contraceptives used for the years 1983, 1990, 1997. Types of contraceptives will be classified into: pill, IUD, sterilization, withdrawal, condom, injection and other methods. 3. To compare the variations in the source of IUDs for the years 1983, 1990, 1997. Sources of IUDs will be classified into: public hospitals, MCH clinics, family planning clinics, private doctor, pharmacy and other sources.

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Methods. For achieving the objectives of the study 3 national surveys¹⁻³ were compared. The surveys were conducted in 1983, 1990, and 1997. The samples in the 3 surveys were selected by using a multistage sampling procedure to ensure that the selected samples were representing the target population for the 3 years. There were no other national surveys from 1983 regarding the issue under analysis. The response rate in the 1997 survey was 96% as compared to 89% in 1990 and 94% in 1983. The total number of currently married women included for studying contraceptive use was 3735 in 1983 as compared to 6184 in 1990 and 5337 in 1997.¹⁻³ A questionnaire was used in the 3 surveys as an instrument for the surveys. Interviews with the selected women were carried out by trained field workers after pretesting the questionnaire in each of the 3 surveys. Data extracted from the 3 surveys were manipulated and analyzed to serve the objectives of this study. Z-test⁴ was applied to find out the significance of the difference between 2 proportions. The difference was considered significant if p value is less than 0.05.

Results. Table 1 shows that 26% of women were using contraceptives in 1983 as compared to 40% in 1990 and 53% in 1997. In the 3 surveys, the differences between urban and rural areas were significant (P<0.05). In 1990, the percentage of use of contraceptives was 12% in women aged 15 to 19 years as compared to 19% in 1997. The 1990 and 1997 surveys showed that the percentage of use was increasing with increasing age in women aged less

Table 2 - Comparing women who were using contraceptives for the years 1983, 1990 and 1997 according to the type of contraceptive method used.

Method	1983 % of users	1990 % of users	1997 % of users
Pill	30	11.5	12
IUD	32	38	44
Sterilization	15	14	8
Withdrawal	9	10	14.5
Condom	2	2	5
Injection	1	0	1
Others	11.5	24	15
Total	100	100	100

IUD=Intrauterine contraceptive device

than 40 years. Table 2 shows that the use of pills decreased from 30% in 1983 to 11.5% in 1990 and 12% in 1997. On the other hand, the use of IUD increased from 32% in 1983 to 38% in 1990 and 43% in 1997. Table 3 shows that 45% of urban women were using IUDs in 1997 as compared to 35% in rural areas and the differences between urban and rural areas was significant (P<0.05). In the age 35 to 39, the percentage of users of IUD was 25% in 1983 as compared to 37% in 1990 and 47% in 1997. Differences between these last percentages were significant (P<0.05). Table 4 shows that approximately three quarters of IUDs in 1983 were supplied through the private sector as compared to

Table 1 - Comparing women for the years 1983, 1990 and 1997 according to their use of contraceptives and, both area of residence and age of the woman.

Variable	1983		1990		1997	
	Users %	Non-users %	Users %	Non-users %	Users %	Non-users %
Residence						
Urban	28	82	44	56	54	46
Rural	12	88	28.5	71.5	45	55
Age in Years						
15-19	4	96	12	88	19	81
20-24	17	83	28	72	37	63
25-29	25	75	37	63	42	48
30-34	33	67	48.5	51.5	48	42
35-39	30	70	52	48	63	37
40-44	32	68	52	48	64	36
45-49	25.5	74.5	34	66	48	52
Total	26	74	40	60	53	47

Table 3 - Distribution of users of IUDs for the years 1983, 1990 and 1997 according to area of residence and age of the woman.

Variable	1983		1990		1997	
	Users %	Others* %	Users %	Others* %	Users %	Others* %
Residence						
Urban	34	66	39	61	45	55
Rural	17	83	33	67	35	65
Age in Years						
15-19	75	23	59.3	41	27	73
20-24	31	69	42	58	43	57
25-29	45	55	46	54	44.5	55.5
30-34	27	73	49	51	48	52
35-39	25	75	37	63	47	53
40-44	27	73	26	74	46	54
45-49	21	79	19	71	28	72
Total	32	68	38	62	44	56

*Others=Using contraceptive methods other than intrauterine contraceptive devices

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Table 4 - Distribution of intrauterine contraceptive device users for the years 1983, 1990 and 1997 according to the most recent source of supply of the intrauterine contraceptive device.

Source	1983 % of the source	1990 % of the source	1997 % of the source
Public Hospital	7	3	3
MCH Clinics	3	9	20
Family planning clinic	13.5	49	36
Private Doctor	73.5	31	26
Private Hospital	0.3	6	5.5
Pharmacy	2	1	1
*Others	1	2	9
Total	100	100	100

*Others=University Hospital, UNRWA (United Nations Relief and Welfare Agency), Friends, Relatives, MCH=Maternal and Child Health

Table 6 - Distribution of women for the years 1983, 1990 and 1997 according to their use of contraceptives and number of living children.

Variable	Using any contraceptive method		
	1983 & of users	1990 & of users	1997 & of users
No. of children			
0	8	1	1
1	-	23	27
2	24.5	37.5	51
3	31	46	72
≥4	29.5	48	64
Total	26	40	53
		Using IUDs	
No. of children			
0	24	22	17
1	-	12	13
2	42.5	47	45
3	34	47	43
≥4	32	39	45
Total	32	38	44

No.=number, IUDs=intrauterine contraceptive device

37% in 1990 and 32% in 1997. The family planning clinics supplied women with 49% of the IUDs in 1990 as compared to 36% in 1997 and only 13.5% in 1983. Differences between these last 3 percentages was significant (P<0.05). Table 5 indicates that the use of contraceptives in the 3 years was the lowest for non educated women ranging between 17% in 1983

Table 5 - Comparing women for the years 1983, 1990 and 1997 according to their use of contraceptives and school education of the woman.

Using any contraceptive method			
	1983 % of users	1990 % of users	1997 % of users
Education	17	32	37
1-6 years	29.5	43	49
7-12 years	-	42	54
> 12 years	-	43	58
Total %	26	40	53
		Using IUDs	
Education	22	26	33
1-6 years	28	36	39
7-12 years	-	42	46
> 12 years	-	46	45
Total %	32	38	44

IUDs=intrauterine contraceptive device

and 37% in 1997 (P<0.05). For highly educated women the percentage of use was 43% in 1990 as compared to 58% in 1997 (P<0.05). The percentage of users of contraceptives was highest in 1997 when compared to 1990 and 1983 and for the different levels of education. Table 5 also shows that the use of IUDs in 1997 was higher than in 1990. Table 6 indicates that the percentage of contraceptive users was increasing with the increase in the number of children until the 3rd child, then the percentage decreased for the years 1983 and 1997. Table 6 also shows that the use of IUDs was highest after the birth of the 2nd child where it was 43% in 1983 as compared to 47% in 1990 and 45% in 1997.

Discussion. The aim of this paper was to compare the use of contraceptives by Jordanian women for the years 1983, 1990, and 1997. Special emphasis was given to the use of IUDs as it was observed that Jordanian women in recent years were more attracted to the use of IUDs as a contraceptive method. The results of the comparison show that there was a significant increase in the use of contraceptives from 1983. This increase was obvious at all levels of variables included in the comparison. Over the period 1983-1997, the use of contraceptives increased more than 2 times in the following subgroups of women; rural, non educated and for women having 2 children or more. In the 3 surveys; rural women, the non educated and women with low parity were more likely to be non users of

contraceptives. The findings presented in this paper were in general agreement with the findings of other studies regarding the use of contraceptives and its relationship with education of the woman, area of residence, and number of living children.⁵⁻⁸ The number of Jordanian women using contraceptives for the year 1990 was higher than Egypt, Morocco, Nigeria and Pakistan, but lower than Tunisia, Turkey, Brazil, Japan, China, United States of America and United Kingdom.^{5,9-11} Rural women and the less educated are more likely to be non users of contraceptives. The knowledge, attitudes and practices (KAP) study carried out in Jordan in 1997 identified the following as factors that were responsible for the non use of contraceptive methods. fear that these methods cause congenital anomalies, sterility and infertility. Religious oppositions of the husband were important factors of the non use of contraceptives. In recent years, Jordanian women are becoming more likely to use the IUD. This can be explained on the basis that IUDs are mainly provided to women through the Ministry of Health Services and Family Planning Clinics, free of charge. This last finding should be investigated to find out the real reason(s) behind this behavior.

Groups of women at risk of not using contraceptives should be identified and should be contacted to convince them to use contraceptives. Home visits to such women might be needed to achieve the above goal. Trainers in the field of maternal and child health should have a major role in this activity. Evaluation of such an activity should be carried out taking into account the following items: inputs, process, outcomes, impacts and any other indicators needed. Further studies are needed in this field with special emphasis on the husband and families. Regulations and rules in the country concerned with the availability and use of contraceptives should be evaluated. Barriers to expanded access and quality of contraceptives should

be investigated. Such barriers include governmental policies, guidelines and practices of health care providers.

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