Contraceptive practices among Palestinian refugee women using the UNRWA MCH centre at Nuzha, Jordan

Haifa Madi [1]

ممارسات منع الحمل بين اللاجئات الفلسطينيات المنتفعات من مركز صحة الأمومة والطفولة التابع للأنروا بمنطقة النزهة في الأردن

هيفاء ماضي

خلاصة : أجريت دراسة ذات مرحلتين لقياس ما طرأ من تغيُّر في ممارسات منع الحمل بعد مضي سنة على إدخال خدمات تنظيم الأسرة في مركز لصحة الأمومة والطفولة تابع للأنروا . ولقد شملت الدراسة سائر الأمهات والأطفال دون السنة الثالثة من العمر، الذين زاروا المركز خلال فترة الدراسة . وتبين أن انتشار منع الحمل بالوسائل الحديثة ارتفع من 37.5% إلى 41.1% . وكان الأنروا هو مصدر موانع الحمل لنسبة بلغت 11.4% من الأمهات في بدء الدراسة، ثم ارتفعت إلى 31.4%. ولوحظت زيادة في استعمال موانع الحمل الحديثة مع ارتفاع عدد الولادات والعمر باستثناء السنوات الأولى والأخيرة من فترة الإنجاب. كما أن جنس الأطفال الأحياء كان له تأثير ملحوظ في مستوى استعمال الوسائل الحديثة لمنع الحمل.

ABSTRACT A two-phase study was conducted to measure the change in contraceptive practices after a year of introducing family planning services at an UNRWA maternal and child health centre. The study included all mothers of children under 3 years of age who came to the centre during the study period. Prevalence of modern contraceptive use increased from 37.5% to 41.1%. UNRWA was the source of contraceptives in the baseline study for 11.4% of mothers; this increased to 31.4%. Modern contraceptive use increased with parity and age except at the two ends of the reproductive span. The sex of the living children also affected the level of modern contraceptive use.

Pratiques contraceptives chez des réfugiées palestiniennes fréquentant le centre SMI de l'UNRWA à Nuzha (Jordanie)

RESUME Une étude en deux phases a été réalisée pour mesurer les changements survenus dans les pratiques contraceptives un an après l'introduction de services de planification familiale dans un centre de santé maternelle et infantile (SMI) de l'UNRWA. Etaient incluses dans cette étude toutes les mères d'enfants âgés de moins de 3 ans qui se sont rendues au centre pendant la période de l'étude. La prévalence de l'utilisation des moyens contraceptifs modernes est passée de 37,5% à 41,1%. Dans l'étude initiale, l'UNRWA était la source auprès de laquelle 11,4% des mères se procuraient les moyens contraceptifs; ce chiffre a atteint 31,4% dans l'étude de suivi. L'utilisation des moyens contraceptifs modernes augmente avec le nombre d'enfants et l'âge sauf aux deux extrémités de la période reproductive. Le sexe des enfants vivants est également un élément affectant le niveau d'utilisation des moyens contraceptifs modernes.

[1] *Chief, Family Health, United Nations Relief and Works Agency for Palestine Refugees in the Near East, Amman, Jordan.*
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Introduction

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) provides child health care services as part of the integrated maternal and child health (MCH) family planning services. These services include medical care and screening of newly registered infants, growth monitoring and immunization of infants up to three years of age and early detection and management of iron deficiency anaemia. Use of the child health clinics is very high as evidenced by the very high immunization coverage by the Expanded Programme on Immunization (EPI) (99% among infants registered at MCH clinics throughout the Agency).

In July 1993, UNRWA adopted a comprehensive maternal health strategy including family planning (FP) in the five fields of its area of operations, including Jordan. As a result, the Agency became one of the providers of FP services in Jordan

Although people have long been using contraceptives, both modern and traditional, few studies have been conducted among refugees in Jordan to assess the current practices of contraceptive use. This study was carried out to measure the change in practices after a year of integrating family planning services into the Agency's maternal and child health care services.

The objectives of the two-phase study, the baseline and the follow-up, were:

- to estimate the prevalence of contraceptive use among mothers of children between 0 and 3 years attending Nuzha MCH centre
- to determine the contraceptive method mix among users by type and source among the same target population.

Subjects and methods

The study population in both phases of the study consisted of all mothers of registered children under 3 years of age who attended the well-baby clinic with their children during the period from January to March 1994 for the baseline study and from January to March 1995 for the follow-up study. The number of women surveyed was 2042 in the baseline study and 2291 in the follow-up study. This group of women was of interest in these studies because UNRWA is advocating child spacing rather than birth limitation.

The study instruments were:

- child health records
- a standard questionnaire completed through direct interview.

The following variables were recorded from the child health record: serial number, date of birth, sex of the child, birth weight, name and age of the mother (marital and present age), number of pregnancies and number of living children by sex. The date of the previous delivery (second youngest child) was investigated in the follow-up study.

The following data on contraceptive use were collected through individual interviews with mothers:

- For contraceptive users:
  - type of contraceptive
  - source of contraceptive, including Government, UNRWA and others (private clinics, nongovernmental organizations (NGOs), etc.); the Jordanian Family Planning Association was considered separately for its major role in FP provision in Jordan.
- For non-users, the mother was asked whether she was pregnant or lactating.

It was also noted whether the mother was divorced or widowed, or whether her husband was away, and if there had been an abortion after the youngest child.

The study population was almost a closed population since mothers were in the habit of coming to the centre for growth monitoring and immunization of their children. This made it possible to obtain prevalence data; otherwise prevalence data would have to be obtained through surveys such as the Demographic and Health Surveys (DHS). Furthermore, the sample was restricted to all women attending the well-baby clinic with their children. Since attendance at the well-baby clinics for vaccination and growth monitoring is high, this allowed a good proportion of the target population to be captured.

However, the limitation of this approach is that it could not cover primigravidae and mothers whose youngest child was ≥3 years of age. Furthermore, the two studies were conducted in one health centre and thus they do not necessarily reflect the situation in other centres of the Jordan field or other fields of the area of operations of UNRWA.

Results

General characteristics

The mean present age of all mothers in the target population was 26.67 years with a standard deviation of 5.58 years. The present age of 60% of them was ≤27 years. Figure 1 shows the frequency distribution and the corresponding percentages of the target population by present age. Age structure in the baseline and follow-up studies was the same.

The mean marital age was 19.65 ± 3.27 years. Some 6.2% women were married before or at the age of 15 years, 27.1% were married before or at the age of 17 years and 54% were married before or at the age of 19 years. Three mothers were married at the age of 13 years.

With regard to the number of living children, 1412 (61.6%) women had 1–3 living children, 620 (27.1%) had 4–6, 213 (9.3%) had 7–9 and 46 (2.0%) had ≥10. The mean number of living children was 3.4 children ± 2.33; therefore the average current family size of the target population was about 5.4 (unless a parental death or divorce had occurred). By examining the number of living children and women aged ≥40 years, who are near the end of their reproductive life, it was seen that 80% had more than seven living children.

About 57% of children were ≤12 months, 32% were in their second year and 11% were in their third year. This pattern is not expected to change in the near future as the compliance of mothers is high during

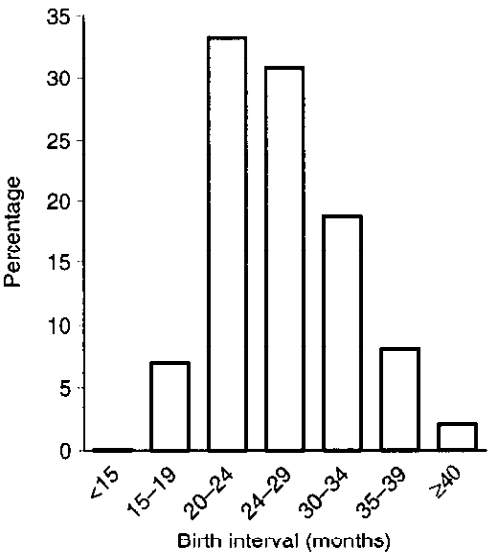

Figure 1 **Age distribution of the target population**

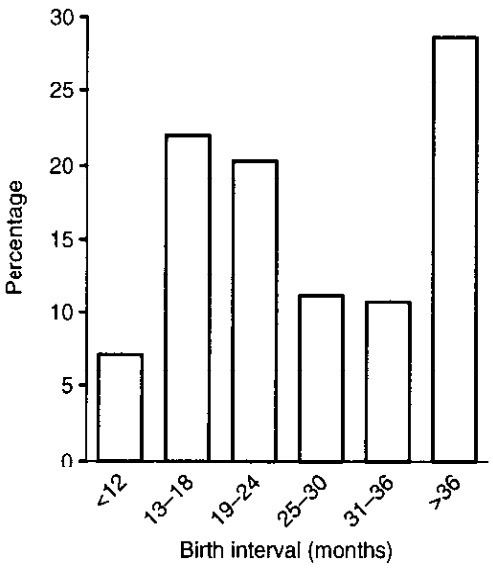

Figure 2 **Birth interval between youngest and second youngest child**

the first 18 months of the child's life due to the fact that children are expected to complete their immunization schedule during this period, after which the compliance drops.

Information on the length of birth intervals among the target group is presented in Figure 2. About 50% of youngest children were born at least 2 years after their sibling, which is similar to the findings of the DHS in 1990 in Jordan [*1*].

Contraceptive use

Prevalence of contraceptive use

The level of contraceptive use is one of the most frequently used indicators to assess the success of family planning services. It is also widely used as a measure of determinants of fertility.

First cross-sectional baseline study. The results indicate that 37.5% of the target population were using modern contraceptives, 8.4% were using traditional methods (including the safe period and withdrawal), 27.5% were lactating, 15.6% were pregnant and 11.0% were non-users (Table 1). The prevalence of modern contraceptive use in the baseline study was 37.5%, which is higher than in the DHS conducted in Jordan in 1990, where the overall prevalence was 26.9% [*1*]. This could be because the DHS covered the entire population, including all currently married women in rural and urban areas. Furthermore, the five-year interval between the two studies might have contributed to the difference.

Second cross-sectional follow-up study. The results of the follow-up study indicate that 41.1% of the target population were using modern contraceptives, 10.6% were using traditional methods (including the safe period and withdrawal), 25.2% were lactating, 14.3% were pregnant and 8.8% were non-users (Table 1). The prevalence of modern contraceptive use in the baseline study (37.5%) increased to 41.1% in the follow-up study. Users of traditional methods constituted 8.4% of the women in the baseline study, while they constituted 10.6% in the follow-up study. However, the fact that they were using a method of contraception suggests the possibility of shifting to more effective methods. The percentage of lactating mothers in the target population in the baseline study was 27.5%, while it was 25.2% in the follow-up, a minimal decrease. It seems that mothers still think that they are protected by lactation. Some of the users of this method may shift to more effective methods or could be counselled on breast-feeding practices that affect fertility. The percentage of the non-users of any method decreased from 11.1% in the baseline study to 8.8% in the follow-up.

Table 1 **Distribution of mothers according to use and non-use of contraceptives**

Category	First cross-sectional study (baseline)		Second cross-sectional study (follow-up)	
	No.	%	No.	%
Modern contraceptives	765	37.5	942	41.1
Safe period	57	2.8	79	3.4
Withdrawal	115	5.6	164	7.2
Lactating	560	27.4	577	25.2
Pregnant	319	15.6	327	14.3
Non-users	226	11.1	202	8.8
Total	2042	100	2291	100

Modern contraceptive use by type and source

Table 2 shows that in the baseline study, 67.3% of the mothers using modern methods of contraception were using an intrauterine device (IUD) and 23.3% were using contraceptive pills; condoms, spermicide suppositories and tubal ligation were used by a small percentage. In the follow-up study, 63.0% were using IUD, 23.1% contraceptive pills and then condoms, spermicide suppositories and tubal ligation (which is not offered by UNRWA).

It can be seen that there was almost no change in the method mix in the two studies except for a small decrease in IUD users and an increase in spermicide suppository users. IUD was the most frequently used

Table 2 **Prevalence of modern contraceptive use by type (method mix) and source**

Type and source of contraception	First cross-sectional study (baseline)		Second cross-sectional study (follow-up)	
	No. of users	%	No. of users	%
Type				
IUD	515	67.3	594	63.0
Pills	178	23.3	218	23.1
Condoms	46	6.0	59	6.3
Suppositories	14	1.8	61	6.5
Tubal ligation	12	1.6	10	1.1
Source				
Government	25	3.3	49	5.2
UNRWA	87	11.4	296	31.4
Jordanian Family Planning Association	310	40.5	325	34.5
Other (private and NGOs)	343	44.8	272	28.9
Total	765	100	942	100

contraceptive method in both studies, followed by contraceptive pills, which are the most effective method of contraception.

Regarding the source of contraceptive methods in the baseline study, the Jordanian Family Planning Association (JFPA), private doctors and NGOs were the most usual sources of supply. They served 85.3% of modern contraceptive users, while UNRWA served 11.4% and the government the rest (Table 2). In the follow-up study, the government was the source of modern contraceptives for 5.2% of users, JFPA for 34.5%, private doctors and NGOs for 28.9% and UNRWA for 31.4% of users. These results indicate that there was a shift in the source of supply of contraceptive methods. UNRWA was the source in the baseline study for only 11.4%; this increased dramatically to 31.4% in the follow-up study. There are several possible explanations for this shift. At the time of the baseline study, UNRWA's family planning programme was only 6 months old; at the follow-up study it was 18 months old and had become well established and known. Also, UNRWA offers free family planning services, including contraceptive supplies. Furthermore, the family planning services are an integral part of the MCH services. It might therefore be more convenient for mothers to get all the services for herself and her children at one centre.

Contraceptive use by mother's present age and parity

The proportion of women using modern contraceptives increased with age and then declined after the age of 40 years (Table 3). Contraceptive use was lowest among women aged 13–19 years and was highest among women aged 35–39 years. It then

Table 3 **Distribution of modern contraceptive use by mother's present age and number of living children**

Characteristic	First cross-sectional study (baseline)			Second cross-sectional study (follow-up)		
	Total	No. of users	%	Total	No. of users	%
Mother's age (years)						
13–19	118	19	16.1	157	28	17.8
20–24	668	208	31.1	764	281	36.8
25–29	663	266	40.1	706	307	43.5
30–34	380	170	44.7	432	213	49.3
35–39	142	74	52.1	182	98	53.8
≥ 40	71	28	39.4	50	15	30.0
Total	2042	765	37.5	2291	942	41.1
Parity (living children)						
1–3	1226	360	29.4	1412	481	34.1
4–6	564	292	50.0	620	332	53.5
7–9	182	88	48.4	213	102	47.9
≥ 10	50	25	50.0	46	23	50.0
Total	2042	765	37.5	2291	936	40.9

declined sharply among those 40 years of age and over. The trend was the same in both studies.

Although the overall prevalence of modern contraceptive use only increased from 37.5% to 41.1% (about 3.5%), there was an increase in the prevalence of contraceptive use in each age group except for the age group 40 years and above. However, this should be interpreted with caution as the number of women of this age group in the sample was very small. The lowest prevalence of contraceptive use was among young mothers because they believe, as ascertained through the interviews, that they will become infertile if they use contraceptives, while mothers over 40 years have a low prevalence because they believe that they will not get pregnant at this age.

The prevalence of women using contraceptives in the baseline study was 29.4% for women with 1–3 living children, while it was about 50% among mothers with more than 3 living children (Table 3). This percentage remained the same even for women who had 10 or more children.

In the follow-up study the prevalence of contraceptive use among women with 1–3 living children increased to 34.1%, and to 53.5% for women with 4–6 living children. It can be concluded that there was a shift in contraceptive use towards women with a fewer number of living children. Since these two groups constituted 88.7% of the total target population, it might indicate that the Agency's family planning programme was starting to have a positive impact on the attitudes and practices of the population.

Contraceptive use by age of youngest child

Table 4 shows the difference between the use of modern contraceptives and the use of traditional methods by the target population in relation to the age of the youngest child. The use of contraceptive pills, condoms and suppositories remained fairly constant

Table 4 **Contraceptive use among mothers by age of the youngest child (1995)**

Method used	Age of youngest child (years)					
	<1		1		2	
	No. of users	%	No. of users	%	No. of users	%
Modern methods						
IUD	282	25.4	224	45.3	88	9.5
Pills	131	11.8	67	13.5	20	13.5
Condoms	35	3.1	16	3.2	8	5.4
Suppositories	40	3.6	15	3.0	6	4.1
Tubal ligation	7	0.6	3	0.6	0	0
Traditional methods						
Safe period	48	4.3	29	5.9	2	1.4
Natural/withdrawal	88	7.9	56	11.3	19	12.8
Lactation	481	43.3	85	17.2	5	3.4
Total users	1112	100	495	100	148	100

Table 5 **Overall prevalence of modern contraceptive use by sex of children**

No. of living male children	Prevalence of contraceptive use (%)	No. of living female children	Prevalence of contraceptive use (%)
0	25.6	0	31.9
1	33.2	1	36.5
2	52.2	2	49.1
3	55.5	3	50.7
>3	51.4	>3	42.2

regardless of the age of the youngest child, while the use of IUD increased from 25.4% of mothers whose youngest child was in the first year of life to 45.3% among mothers whose youngest child was in the second year of life and to 59.4% among mothers whose youngest child was in the third year of life.

Regarding traditional methods, the use of the safe period decreased from 4.3% in the first year to 1.4% in the third year, while the withdrawal method increased from 7.9% for mothers whose youngest child was in the first year to 11.3% for mothers whose child was in the second year to 12.8% for mothers whose child was in the third year. The use of lactation as a contraceptive method started with 43.2% and decreased dramatically to 17.2% in the second year and to 3.4% in the third year.

The delay in the use of IUDs by mothers in the first year might require further investigation to assess the reasons behind this. Possible explanations could be that mothers usually depend on lactation in the first year as shown before or it could be due to lactation amenorrhoea, because the practice is to insert the IUD during menstruation, or due to the attitude of some medical officers in inserting IUDs, or because the mother was not reached at the proper time.

Contraceptive use by sex of children

It is known culturally that there is a relationship between contraceptive use and sex of surviving children. This usually affects the couple's decision on whether to use contraception or not. The study explored this aspect and the findings are outlined in Table 5.

If a family had no living male child, regardless of the number of living female children, the prevalence of contraceptive use was only 26%. This increased to 33% with one male and rose sharply to > 52% with two males or more. This might indicate that the number of male children that a family desires is two, after which they use contraceptives, regardless of the number of females. The prevalence of contraceptive use in relation to the number of surviving female children, regardless of the number of males in the family, increased steadily from one category to the next.

Conclusion

Although the study was conducted in one health centre, the baseline data on the prevalence of contraceptive use concurs with the results of the KAP family planning study which was conducted in the West Bank and Gaza in collaboration with

the Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America in 1993 (McCarthy BJ and Atrash HK, unpublished data, 1993). The results were also in accord with the findings of the DHS overall prevalence for the total population in Jordan [*1*].

The follow-up study was conducted 1 year after the baseline one. The one-year duration might be too short to assess the progress made by UNRWA's FP programme. If an Agency-wide baseline study is to be conducted, it would be preferable to conduct the follow-up study after 2 years. It would be also useful to analyse the results again by age and parity to study changes in specific age and parity prevalence. Despite the increase in the prevalence of modern contraceptive use from 37.5% in the baseline study to 41.1% in the follow-up, there is still an unmet need for different categories of non-users of modern methods.

References

1. *Jordan Population and Family Health Survey, 1990. Demographic and Health Surveys.* Amman, Jordan, Department of Statistics, Ministry of Health, 1990.

In the World Health Organization, we are concerned with family planning from a health perspective. Too many and too frequent pregnancies and deliveries, particularly for the poor, constitute a physical burden and increase the risks to a woman's health. Breast-feeding is beneficial to mother and baby alike. Hence, it should be encouraged. It should also be continued for an appropriate period. For this it must be ensured that the mother is well nourished, so that she can feed her baby well and so that breast-feeding does not overburden her own health. We should remember that breast-feeding has the added effect of helping to delay new pregnancies and is an effective method of family planning.

Source: Regional Director's Message, World Health Day, 1998