Contraceptives Used By Palestinian Women In The Past Five Decades

Fahmi M.S. Mahmoud
Department of Medical Technology
Applied Science University

ملخص

جرى بحث تطور استخدام وسائل منع (تنظيم) الحمل عبر العقود الخمسة الماضية في الضفة الغربية، وذلك بدراسة عينة مكونة من 1218 امرأة فلسطينية متزوجة.

أظهرت الدراسة أنّ قرابة ثالثي النساء (51.6%) يستعملن مواد الحمل، حيث تبين أن 70.5% من مجموع العينة يستعملن الوسائل الحديثة (حبوب منع الحمل، اللولب).

بينما استعملت 21.2% الوسائل التقليدية (تنظيم الدورة الشهرية، العزل، التنظيم بالإرضاع). أما التعقيم (ربط قنوات فالوب) فقد استعملته 2.2%، والطرق الاجتماعية الإجبارية (زوج غائب لفترة طويلة، الترمل، الطلاق) فقد ذكرت 3.1% من النساء في هذه الدراسة. وفيما يتعلق باستعمال الحواجز الصناعية لتنظيم النسل (الواقي، الكوب، الاستئصال، والغشاء) فلم تستخدمها أية امرأة.

هناك علاقة قوية بين القيم الاجتماعية ونوع وسائل منع الحمل المستخدمة. حيث كانت نسبة من استخدمت التعقيم من النساء محدودة جداً بسبب الرفض الاجتماعي.

Dr. F.M.S. Mahmoud is a lecturer at the Department of Medical Technology, Applied Science University, Amman, Jordan.
لهذه الوسيلة. إضافة إلى ذلك، فقد ظهرت فوارق بين المعلِّميت و غير المعلِّميت، وساكنات المدينة والقرويات: فكانت نسبة استعمال وسائل منع الحمل بين المعلِّميات أكثر من أقرانهن من غير المعلِّميات، ونسبة الاستعمال بين المدنين أعلى منها بين القرويات. لكننا نعتقد أن الفروقات بين المدنين والقرويات لا يمكن عزوها إلى مكان السكنى وإنما تعود إلى الفوارق الاقتصادية والتعليمية بين الفتيين من النساء.

**ABSTRACT:**

The developmental use of contraceptives over the past five decade (1940 - 1988) has been studied among 1218 married Palestinian women residing in the West Bbank.

Nearly two-thirds (61.5%) of the women in this study reported using contraceptives. Modern types of contraceptives (-pills and intra-uterine device) were used by 45.7% of the women; traditional methods (rhythm, withdrawal and breast feeding) accounted for 12.2%; sterilization constituted 2.3%; and the "social" methods (husband's absence, widowhood, divorce) were reported by 1.3% of the sample. Barrier contraceptives (condom, cap, sponge and diaphragm) were not reported, however, by any of the women.

A strong relationship was found between the social values and the type of contraceptives employed by women (only a negligible percentage resorted to sterilization for birth control). Educated women used contraceptives more than their uneducated counterparts. Moreover, regional differences between urban and rural users are quite substantial. However, these difference can be attributed to economic and educational variances rather than real regional ones.
Introduction

A growing number of women in the Developing countries are using contraceptives to control childbirth. Studies conducted in the early 1960’s indicated that only 9% of married women in the Developing countries used contraceptives. This percentage doubled five times over the next 20 years, to 45% in the early 1980’s\(^\text{1}\). The worldwide use of contraceptives, however, is influenced by regional, religious, cultural, educational, social and economic factors\(^\text{2-9}\). A 1983 study, for instance, showed that 74% of the women in East Asia used contraceptives, compared with 55% in Latin America, and only 14% in Africa\(^\text{10}\). Forty percent of urban Bolivian women reported using contraceptives, compared with 19% of the women in the rural areas\(^\text{11}\). Likewise, Vietnamese women with primary education used contraceptives twice as much as their uneducated counterparts\(^\text{8,12}\).

On the other hand, women from several countries reported large differences in contraception prevalence and type of method used\(^\text{8,12-13}\). Whereas sterilization and intra-uterine device (IUD) accounted for 65% of the contraceptives used by East Asian women, both methods constituted only 3% in Africa\(^\text{10}\). In another study which covered 15 Developing countries representing 3 continents, modern methods (pills, IUD and injectables) dominated in 8 Asian and North African countries; traditional methods (breast feeding, withdrawal and rhythm) dominated in Bolivia and Peru; barrier methods (condom, cap, sponge and diaphragm) prevailed in Trinidad and Tobago; while married women of Guatemala, Sri Lanka and the Dominican Republic preferred sterilization\(^\text{8, 11, 14}\).

The present work aims to study the patterns of contraceptive methods used by Palestinian women over a period of five decades.
(1940-1988), and the factors influencing their use.

**Materials and Methods**

Over a nine month period (November 1987 until August 1988), a questionnaire including the necessary information was distributed to a total of more than 1500 married or once-married (windowed or divorced) women living in urban, rural and refugee camps in the West Bank, of whom 1218 responded. Women without any formal education were interviewed, and their answers were written down. The age of women raged from 15-65 years.

Women were grouped into 6 cohorts, according to their year of marriage. Cohort (1) included women who had married over the years 1940-1949; Cohort (2) 1950-1959; Cohort (3) 1960-1969; Cohort (4) 1970-1979; Cohort (5) 1980-1984; and Cohort (6) comprised women who got married during the years 1985-1988. Breaking the 1980-1988 group into two separate cohorts was necessary in order to examine the effects of social values on the use of contraceptives.

Women in this study were also categorized, according to the type of contraceptive method used, into the following categories: not using any contraceptives; using modern contraceptives (pills or IUD); traditional methods (breast feeding, withdrawal or rhythm); sterilization; and women using other methods.

Women’s formal education was measured as the highest level of schooling they had attended. Women were classified into five levels: Level (0) comprised women without any formal education; Level (1) women with primary education (1-6 years of schooling); Level (2) women who attended intermediate schooling (7-9 year of
education); Level (3) women with high school education (10-12 years); and Level (4) included women attaining university degree or higher education.

The subjects were further divided according to their place of residence into two groups: Those living in urban areas (cities and large towns), and those living in rural areas (villages and refugee camps).

**Results**

*Mean Age of Marriage.*

The mean age of marriage for the different cohorts of married women is shown in Table (1). There was an overall rise over the past five decades; from 15.84 years in the first cohort (1940-9) to 18.21 years in the next one (p < 0.001). The rise in the third cohort was insignificant. The mean age of marriage continued to rise in the next two cohorts, reaching a maximum of 22.06 years in the 1980-4 (p < 0.001), but declined sharply to 20.95 years in the last cohort.

**Table (1): Mean age of marriage by marital cohorts**

<table>
<thead>
<tr>
<th>Year of marriage</th>
<th>Sample No.</th>
<th>Marriage age (year + SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First cohort (1940-9)</td>
<td>58</td>
<td>15.84 + 2.61</td>
</tr>
<tr>
<td>Second cohort (1950-9)</td>
<td>114</td>
<td>18.21 + 4.18</td>
</tr>
<tr>
<td>Third cohort (1960-9)</td>
<td>192</td>
<td>18.91 + 3.82</td>
</tr>
<tr>
<td>Fifth cohort (1980-9)</td>
<td>258</td>
<td>22.06 + 3.45</td>
</tr>
<tr>
<td>Sixth cohort (1985-9)</td>
<td>230</td>
<td>20.95 + 3.60</td>
</tr>
</tbody>
</table>
Prevalence of Contraceptives.

The percentage of contraceptive users and their distribution by type of method used by each marital cohort, are shown in Table (2) and Figure (1).

Slightly less than two-thirds of the women in our sample reported using contraceptives. However, variations were evident among the different cohorts. While 44.8% of the women in the first cohort reported using contraceptives, more than two-thirds reported a similar thing in the second cohort. The percentage of users continued to rise, reaching a maximum of 73.8% in 1970-9 cohort. This was followed by two successive declines in the percentage of users; a moderate one in 1980-4 cohort, followed by a sharp one to a minimum of 30.5% in the last cohort (Table 2).

Table (2) : Distribution of contraceptive users / non users by marital cohorts.

<table>
<thead>
<tr>
<th>Marital cohort</th>
<th>No. of sample</th>
<th>% users</th>
<th>% non-users</th>
</tr>
</thead>
<tbody>
<tr>
<td>First cohort (1940-9)</td>
<td>58</td>
<td>44.8</td>
<td>55.2</td>
</tr>
<tr>
<td>Second cohort (1950-9)</td>
<td>114</td>
<td>68.4</td>
<td>31.6</td>
</tr>
<tr>
<td>Third cohort (1960-9)</td>
<td>192</td>
<td>72.9</td>
<td>27.1</td>
</tr>
<tr>
<td>Fourth cohort (1970-9)</td>
<td>366</td>
<td>73.8</td>
<td>26.2</td>
</tr>
<tr>
<td>Fifth cohort (1980-9)</td>
<td>258</td>
<td>64.3</td>
<td>35.7</td>
</tr>
<tr>
<td>Sixth cohort (1985-9)</td>
<td>230</td>
<td>30.5</td>
<td>69.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1218</strong></td>
<td><strong>61.5</strong></td>
<td><strong>38.5</strong></td>
</tr>
</tbody>
</table>
Figure 1. Percentage distribution of women cohorts using / not using contraception, by type of method used.
There was a clear preference of modern types of contraceptives by West Bank women, with 45.7% of the sample adopting such methods. Traditional methods and sterilization accounted for 12.2% and 2.3%, respectively. However, barrier methods were not reported by any of the women in our sample (Table 3).

The distribution of birth control users by the type of method used, differed from one cohort to another (Table 3 and Figure 1). The ratios of women using modern contraceptives had increased progressively during the first 4 decades, from 34.4% in the first cohort to 60.1% in the fourth. The ratio of modern contraceptives users departed dramatically in the last two cohorts from that reported by the fourth cohort, dropping down to the lowest value of 16.6% in the 1985-8 cohort (Table 3).

Table (3): Distribution of contraceptive users by cohort and contraceptive method

<table>
<thead>
<tr>
<th>Martial cohort</th>
<th>Percentage of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Modern</td>
</tr>
<tr>
<td>1940-9</td>
<td>34.4</td>
</tr>
<tr>
<td>1950-9</td>
<td>42.5</td>
</tr>
<tr>
<td>1960-9</td>
<td>57.4</td>
</tr>
<tr>
<td>1970-9</td>
<td>60.1</td>
</tr>
<tr>
<td>1980-4</td>
<td>41.9</td>
</tr>
<tr>
<td>1985-8</td>
<td>16.6</td>
</tr>
<tr>
<td>Total</td>
<td>45.7</td>
</tr>
</tbody>
</table>
Ratio variations among women employing traditional methods of contraception were much smaller than those reported by women using modern contraceptives. The fifth cohort reported the highest employment of traditional contraceptives (20.2%), while the lowest (8.2%) was reported by the fourth cohort.

Sterilization was reported by a very small percentage of the women in our study (Table 3 and Figure 1). Some 3-5% of those who had been married for longer than 8 years preferred this method to control childbirth. Only 0.8% of Palestinian women who have been married for 4-8 years carried out sterilization, but none of the 1985-8 cohort reported such method.

Women's Educational Level.

Table (4) shows the distribution of Palestinian women cohorts according to their level of education. Of the women in our sample, 12.3% were uneducated; 19.9% had primary education; 24.3% had intermediate education; 25.3% had high school education; and 18.2% reported college or university education.

There were large differences between the cohorts regarding their educational level. Whereas more than half of the subjects in the 1940-9 cohort were uneducated, less than 1% of the women who married in the 1980's were so. Of the 1940-9 cohort subjects, none reported having high school education. By contrast, 58.9% of the 1980-4 cohort subjects and 72.2% of those in the last cohort reported having high school or university education.

The average level of education showed a significant continuous rise (p < 0.01-0.001) in all the martial cohorts (Table 4); with the lowest value (0.62) being reported by the first cohort, and the highest (3.03) by the last cohort.
Table (4): Distribution of marital cohorts according to the level of education

<table>
<thead>
<tr>
<th>Marital cohorts</th>
<th>Percent of women in each educational level</th>
<th>Average Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(0)</td>
<td>(1)</td>
</tr>
<tr>
<td>1940-9</td>
<td>51.7</td>
<td>34.5</td>
</tr>
<tr>
<td>1950-9</td>
<td>36.8</td>
<td>36.8</td>
</tr>
<tr>
<td>1960-9</td>
<td>25.0</td>
<td>39.6</td>
</tr>
<tr>
<td>1970-9</td>
<td>7.7</td>
<td>15.8</td>
</tr>
<tr>
<td>1980-4</td>
<td>0.8</td>
<td>12.4</td>
</tr>
<tr>
<td>1985-9</td>
<td>0.0</td>
<td>6.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12.3</strong></td>
<td><strong>19.9</strong></td>
</tr>
</tbody>
</table>

* The average educational level is calculated out of 4.

The figures in Table (5) indicated a direct relationship between the subject’s level of education and the use of contraceptives. While 66.7% of the women with high school/college education reported using contraceptives, only 45% of those with no education did so. Moreover, the subjects differed widely regarding the type of contraceptive method they preferred most.

While 47.1% of the uneducated reported using pills to control childbirth, only 18.9% of high school/college graduates reported a similar practice. The picture for IUD use was completely opposite that of the pill. The percentage of IUD users among subjects with high school or college education was 3 times greater than that recorded for their uneducated counterparts.
Table (5) : Percent distribution of contraceptive users by type of method and level of education.

<table>
<thead>
<tr>
<th>Educational level (No.)</th>
<th>Percent users</th>
<th>Percent distribution of users by method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>pill</td>
</tr>
<tr>
<td>0(150)</td>
<td>45.3</td>
<td>47.1</td>
</tr>
<tr>
<td>1(242)</td>
<td>58.7</td>
<td>46.5</td>
</tr>
<tr>
<td>2(296)</td>
<td>60.1</td>
<td>37.1</td>
</tr>
<tr>
<td>3(308)</td>
<td>67.5</td>
<td>26.9</td>
</tr>
<tr>
<td>4(222)</td>
<td>66.7</td>
<td>18.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61.4</strong></td>
<td><strong>33.3</strong></td>
</tr>
</tbody>
</table>

**Regional Differences:**

Urban-rural variation regarding contraceptive use is shown in Table (6). The data shows that 71.8% of the women living in urban areas were using birth control methods, compared to 46% of those living in the rural areas.

Table (6): Contraceptive prevalence by users’s place of residence

<table>
<thead>
<tr>
<th>Area</th>
<th>Sample No.</th>
<th>% Users</th>
<th>%Non-users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>712</td>
<td>71.8</td>
<td>28.2</td>
</tr>
<tr>
<td>Rural</td>
<td>506</td>
<td>46.0</td>
<td>54.0</td>
</tr>
</tbody>
</table>
Discussion

Mean Age of Marriage:

There is an obvious correlation between mean age of marriage and Palestinian women’s educational level, over the 1940-1980 period. A comparison between Table (1) and (4) clearly indicates this correlation. During the 1940s and 1950s, education for women was not considered a necessity, and hence a large portion of the women were uneducated. However, this attitude changed during the 1960s and afterwards, with growing numbers of girls enrolled into schools. In such situation, marriage is often postponed until after high school or even after college. This explains the sharp increase in the mean age of marriage from 15.84 years in 1940 upto 22.06 years in 1980 (see Table 1).

Apparently, such a postponement has diminished the chances of marriage, particularly for college or university educated women. The negative consequences of marriage delaying seems to have brought about some social changes, which might explain the 1.11 year drop in the mean age of marriage during the years 1980 and 1985.

Prevalence of Contraceptive Methods:

There was a continuous rise in the employment of birth control methods between 1940 and 1979; from 44.8% upto 73.8%. This was followed by two consecutive falls over the 1980-1988 period, the second of which was very sharp; from 64.3% in 1980-4 down to 30.5% in 1985-8. This sharp drop may be attributed to the fact that newly married Palestinian women are expected to give birth to one or two children during the early years of
marriage before considering the use of any contraceptive methods.

In this respect, Palestinian women are similar to women in other Developing societies who refrain from using contraceptives during the first two years or so after marriage\(^{(15)}\), but depart completely from the trend in Developed societies where women delay child-bearing for a few years after marriage, or even choose to stay childless\(^{(16, 17)}\).

On the other hand, the ratio of Palestinian women who are not using any contraceptive method (Table 2) is substantially higher than that reported by women in Developed countries, but is quite below the ratio of non-users in some Developing states. Some 38.5% of the women in this sample did not use any birth control method, compared with 19% of the women in Central and Southern Italy\(^{(18)}\), 12% of Swedish women aged 23-29 years\(^{(19)}\), 2% of American women\(^{(20)}\), and 59-64% of Indian women in Gujarat State\(^{(21)}\).

**Distribution of Contraceptive Methods:**

The distribution of contraceptive users by type of method used shows that West Bank women, like many other women elsewhere in the world, tend to rely on modern contraceptives of birth control. In the present sample, 33.3% of the women used the pill, while 36% relied on IUD (Table 5). These results can be matched with studies which indicated that women in the USA, Germany, Sweden and Australia relied more on modern contraceptives\(^{(19, 20, 22, 23)}\). However, the percentage of women using the pill in Palestine was quiet lower than that reported in the USA (59%) and Sweden (43%)\(^{(19, 20)}\), but substantially higher than that reported by Italian or Russian women. In Central and
southern Italy pills or IUD were used by 25% of the women\textsuperscript{(18)}, while 1-3% of Russian women used pills\textsuperscript{(24)}.

As to the use of IUD, our results seems to follow the general trend that prevails in the Developing countries, but departs widely from that of the Developed countries. Nearly 23% of the married women in Developing countries used IUD, compared with 7.8% in the Developed societies\textsuperscript{(1)}. In Russia, IUD was used by 10%\textsuperscript{(24)}, while some 19-27% of Indian women living in Gujarat State reported using IUD\textsuperscript{(21)}.

The ratio of Palestinian women using traditional methods of birth control (breast feeding, withdrawal, and rhythm) is two times greater than that reported in a number of Developed countries, but quit lower than that in Africa or Asia\textsuperscript{(1, 12, 25-27)}.

Sterilization is very unpopular among married Palestinian women; accounting for only 2.3% of the women in this study (Table 3). Vasectomy is even more unpopular than women sterilization in Palestine. By contrast, sterilization has been carried out by 58% of married American women aged 35-39 years\textsuperscript{(16)}, as well as being the most popular method used by women in several Latin American and Asian countries\textsuperscript{(12, 16)}. In Developing countries, more spouses are turning to vasectomy for birth control\textsuperscript{(28)}. The unpopularity of sterilization among Palestinian women is strongly influenced by traditional and religious factors which encourage large family size in the West Bank.

Barrier methods were not reported by any of the women in this study. This does not differ much from the situation in some Indian states where condom were used by 3-4% of the spouses\textsuperscript{(21)}. Our data, however, differ widely from those
reported in Sweden where 22% used barrier methods\(^{19}\).

Abortion, as a mean of birth control, has not been reported by any Palestinian woman in this study. This is due to religious belief and the judicial law which strongly discourage abortion and consider it a crime punishable by law. This is contrasted by the liberal legislations which encourage abortion in many Developed countries. For example, abortion is easily available as a contraceptive mean in Russia\(^{24}\), Spain\(^{29}\), Sweden\(^{19}\), and some other countries\(^{30}\).

Other methods reported by the women in this sample included: Husbands travelling long periods of time (six months or longer) to work abroad, deceases husband, or divorced women. These women do not need to use contraceptives until the husband returns, or they re-marry again. The Islamic Law strictly prohibits sexual relationships outside marriage, and the social values in Palestine severely punish women who have premarital or extramarital sex, contrary to the values prevailing in the Western societies, where sexual relationships outside marriage are common\(^{31-36}\).

Effect of Educational Level:

Women with no formal education recorded the least use of contraceptives, while those who attended high school recorded the highest ratio (Table 5). Whether these differences are real, or are merely due to the late introduction of birth control techniques in Palestine has yet to be determined, since more than 80% of the women with no formal education belong to the 1940s, 1950s and 1960s cohorts, and that modern contraceptives were introduced into the Palestinian market sometime during the mid - 1960s.
Regional Variations:

The present study shows a signification regional difference in the use of contraceptives between women living in urban areas and those living in rural areas (Table 6). However, it is difficult to attribute this difference to mere rural-urban variations, as most rural areas in the West Bank lie within 10-20 miles from the main urban centers, and most rural residents frequent these centers regularly. We believe that these differences could be largely due to economic and educational factors. The standard of living and the educational levels are generally higher in urban regions than in rural areas. Reports in other countries have pointed out to the role of economic and regional variations in determining the use of birth-control methods\(^9, ^{37}\).

In conclusion, the use of contraceptives in Palestine is influenced by: women's level of education, standard of living, and traditional values. Policy makers in Palestine should therefore consider these parameters whenever birth-control policies are contemplated.

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References


