The Fertility of Palestinian Women in Gaza, the West Bank, Jordan and Lebanon

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Using original data which cover the Palestinian populations in Jordan, Lebanon, the Gaza Strip and the West Bank, Marwan KHAWAJA *analyses Palestinian fertility by family status (refugee or non-refugee, camp or non-camp residence) and questions the specificity of refugee fertility compared with that of the host populations. On the strength of persistently high levels of fertility the Palestinian Authority is anticipating a rapid increase in its population. Against this background a detailed study of fertility helps to clarify the issues involved in the return of populations living outside the Palestinian territory.*

The 1948 Arab-Israeli war marks an important development in the history of the Middle East. As a result of the war, an estimated 750,000 Palestinians fled or were expelled from their homes and sought refuge mainly in Jordan, Lebanon, the West Bank, Gaza, and Syria (Morris, 1987). During the next 50 years, the Palestinian refugee population grew rapidly. According to the United Nations Relief and Works Agency (UNRWA), there are approximately 3.7 million refugees in these countries — making it one of the largest refugee populations in the world today (Roudi, 2001). The sources of population growth among the Palestinians are well known: mortality declined substantially while fertility remained exceptionally high, and sometimes increased (Khawaja, 2000).

There is considerable debate concerning the lack of fertility decline among the Palestinian populations despite favourable socio-economic conditions. Given the relatively high levels of female education and the low levels of infant mortality, the persistently high fertility among Palestinians, especially in Gaza and the West Bank, is "a demographic

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puzzle" (Randall, 2001). Indeed, research shows that mass schooling is one of the most powerful predictors of fertility change almost everywhere (Caldwell, 1982). In her review of the literature, Cochrane (1979) identified several pathways through which education affects fertility, concluding that in most cases, the net effect is positive. Education is commonly used to index modernization and socio-economic development more generally (Cleland and Wilson, 1987). Higher educational achievement also lowers fertility through later age at marriage and birth, the use of contraception, and the acquisition of small family ideals. Moreover, girls' schooling provides an environment for social interaction and the transmission of modern values (Bledsoe et al., 1999).

However, Mason (1987) and Jeffrey and Basu (1996) have argued that contrary to the conventional demographic transition account, the impact of education and other "modernizing" factors such as non-household employment may not be universal, but is conditional on political, social, and cultural contexts. Despite some qualifications raised by many authors more recently (e.g. Bledsoe et al., 1999; Jejeebhoy, 1995), the socio-economic status of women indexed by education is generally the most salient influence on childbearing in most societies. This is so not merely because of improved employment prospects for educated women, but also because educated women have different outlooks and ideas about family, childbearing and life more generally (Cleland, 1985).

It is known by now that high educational attainment by women did not lead to a fertility decline in many Arab countries (Cleland, 1994). In our context, as we shall see, there is a clear overall relationship between education and fertility in the four settings considered here, but the question remains: how can we account for the persistently high fertility in these settings, particularly in the West Bank and Gaza, despite the high levels of educational attainment of Palestinian women, and especially of the refugees among them?

The political factor, namely the Palestinian-Israeli conflict, has been commonly singled out to account for the persistently high fertility levels among Palestinians. According to one interpretation of this perspective, population numbers are important ideologically and "can be used as weapons against occupation" (Courbage, 1995, p. 215). Pronatalist ideologies advanced by nationalist movements and the media during the course of conflicts are quite common, and the Palestinian case is no exception. Calls for increased childbearing during the recent popular uprisings in the Palestinian areas are well documented (Tamari and Scott, 1991). As Fargues (2000, p. 469) puts it, "fertility was high because it was desired". On the other hand, people in conflict-ridden contexts desire children as an insurance against expected deaths during wartime (Goldscheider, 1996). While it is true that Palestinians have relatively low levels of mortality in the Arab region (Pedersen, 2000), this perspective is anchored in expectations rather than actual behaviour. Not all Palestinians are living under

war conditions, however, and the conflict in the West Bank and Gaza affects the demographic behaviour of refugees and non-refugees alike.

Until recently, the requisite data have not been available to examine the fertility of Palestinian refugees. Previous analyses typically exclude the majority of Palestinians, namely, "those living outside the former Palestine" (Fargues, 2000, p. 474). Some host countries largely exclude Palestinian refugees from their official statistics (Lebanon, Syria)[1]; others do not identify them as a separate group (e.g. Jordan). The only series concerning Palestinian reproductive behaviour has been available from Israel and the West Bank and Gaza Strip. However, the Israeli official statistical series do not provide separate estimates for refugees and non-refugees in the various settings. While there are a number of studies conducted in the various countries, these tend to be either incomplete or small in scale.

This article provides a largely descriptive portrait of the reproductive behaviour of Palestinian women with an eye on the "political fertility" thesis. Our focus is on comparing levels and trends of fertility and contraception among refugees currently living in the West Bank, Gaza, Jordan and Lebanon, with their non-refugee counterparts in each of the four settings, but variations within the refugee population according to camp residence are also explored. The article addresses three kinds of questions. First, to what degree does the fertility behaviour of refugees differ from that of the host population in the various settings? Are the levels and trends of fertility-related indicators such as contraceptive use and nuptiality among the refugee population similar to those of non-refugees? Second, are variations in fertility levels and fertility-related indicators greater between groups (refugees and non-refugees) than across settings? Third, what is the role of education in affecting fertility and fertility-related variables among refugee and non-refugee women? Do educational levels help explain fertility differentials by refugee status and across settings? Answers to these group-level questions should provide a basis for future research designed to test the political fertility argument using micro-data, which are now readily available.

Although our analyses are exploratory in nature, we began our research with some preliminary expectations. We expect fertility variations by refugee status to materialize in every setting (see Fargues, 2000, p. 474). In other words, the fertility of Palestinian refugees should be higher than that of the non-refugees in the West Bank, Gaza, Jordan and Lebanon. And this should hold despite the heterogeneity of, and the circumstances facing, the Palestinian populations in the various settings. We expect differences in fertility levels, and fertility-related indicators, across settings, but these should not exceed those between (refugee, non-refugee) groups. Consistent with previous findings, we expect women's education

[1] Only in the population censuses does Syria include Palestinians among many other nationality groups.

to play a critical role in influencing fertility and contraceptive behaviour both within and across settings. The education of women, being a major force behind fertility change over time and across settings, is not expected to depress (or neutralize) the impact of refugee status on fertility levels in the various settings. In other words, the fertility of refugees should be higher than that of non-refugees, regardless of education. Finally, fertility levels in the West Bank and Gaza should be especially high regardless of refugee status, owing to the prolonged occupation and conflict there. We note here that both the refugee and non-refugee populations in the West Bank and Gaza included in the analysis are Palestinians; the non-refugee (host) population in Jordan and Lebanon is largely non-Palestinian.

I. The settings

The populations in the four settings of Jordan, Lebanon, Gaza and the West Bank share a common culture, language and (to a large extent) history. However, the settings included here exhibit some significant topographic, political, and socio-economic heterogeneity. Although the four settings could be considered Islamic in terms of population composition, Lebanon is ethnically more diverse and has a significantly larger proportion of Christians[(2)]. On the other hand, all can be considered small in size, but they have varying population sizes and structures, with obvious consequences for fertility dynamics. Despite their small sizes however, or perhaps because of them, the four settings have all been affected profoundly by the flow (and later displacement) of Palestinian refugees, changing their population sizes, structures and dynamics as well as their political and economic fortunes (Brand, 1988).

Jordan and Lebanon are new sovereign states while the Palestinian areas of Gaza and the West Bank are not. Although the four areas have been largely affected by the Arab-Israeli wars of 1948 and 1967, Gaza and the West Bank have a unique history. During the 1948-1967 period, Gaza was under the administration of Egypt while the West Bank was annexed to Jordan prior to the Israeli occupation of 1967. The two regimes as well as the 1948 war had a lasting impact on the two areas, changing their population (through refugee exodus) as well as their socio-economic structure. While the Palestinian areas were subjected to direct military rule from 1967 until the signing of the Oslo peace accords in 1993, they remained separate entities both geographically and economically. At present, there are significant differences between the two Palestinian areas.

[(2)] There is no credible estimate of religious composition of the Lebanese population in recent times. The “politically correct” estimate is half Christians and half Muslims.

Table 1 displays selected population and socio-economic indicators for the four settings. Gaza, with an estimated population of about one million in 1998, is the only place where a decline in fertility has not been recorded despite favourable socio-economic conditions. With about 3,400 inhabitants per square kilometre, Gaza is one of the most densely populated areas of the world, owing to the influx of refugees on the eve of the 1948 war. Indeed, the majority (about 65%) of Gaza's population consists of refugees. The West Bank is larger and exhibits greater socio-economic heterogeneity than Gaza. It has a relatively low population density and about a fourth of its population are refugees.

TABLE 1.– SELECTED INDICATORS BY SETTING

Indicator	Jordan	Lebanon	West Bank	Gaza Strip
Population size in 1998	5.0 million	4.3 million	2.2 million	1.3 million
Surface area (000 sq. km)	89,0	10,0	5,6	0,4
Proportion urban (%)	74.2	89.7	60.9	95.9
Adult illiteracy rate (%)	10.3	14.0	6.3	7.3
GNI per capita ($US)	1,710	4,010	1,933	1,368
GDP per capita ($US)	1,500	2,470	1,691	1,232
Registered refugees in 2000 (000)	1,570	376	583	825
Proportion in camps (%)	18.0	56.0	27.0	55.0
Number of official camps	10	12	19	8

Note: The reference year for the population and socio-economic data is 1997-98.
Sources: PCBS, 2002; UNRWA, 2002; World Bank, 2002.

In spite of their rather unique position, the Palestinian areas share many features with Jordan and Lebanon. A common characteristic is that the population is predominantly urban, ranging from 61% in the West Bank to 96% in Gaza. Furthermore, mass education has been rising rapidly and consistently in the four settings since the early 1970s, and primary education is now almost universal. Among the adult population aged 15 years and over, illiteracy levels are lower in the Palestinian areas (6.5%) than in Jordan (10%) and Lebanon (14%).

In economic terms, Lebanon has a per capita GDP of $2,470 that puts it among the "upper middle income" economies (World Bank, 2002). The other three areas are ranked in the "lower middle income" category. With an estimated per capita GDP of about $1,200, Gaza is the poorest of the four settings. Despite the occupation, the West Bank remained slightly richer than Jordan until the very recent economic crises in the Palestinian areas caused by the *Intifada*. Although per capita income is highest in Lebanon, other welfare indicators are more favourable in the Palestinian areas. For example, infant and child mortality levels are slightly lower in the Palestinian areas than in Lebanon or Jordan (Pedersen, 2000).

The refugee population is distributed unevenly among the four areas (Table 1). According to UNRWA (2002) statistics, Jordan hosts the largest

number of refugees at 1.6 million, exceeding those of the West Bank and Gaza combined. However, Lebanon and Gaza have the largest proportion (about 55%) of refugees living in camps, and hence a larger share of "poor" refugees. It should be pointed out that Lebanon is the only setting where Palestinian refugees are treated as foreigners and largely excluded from participating in the labour market and from public services, including educational and health services.

II. Data and measures

Our main sources of data are four household surveys undertaken by local statistical agencies in collaboration with the Oslo-based Fafo Institute. The main purpose of three of the surveys was to obtain a wide range of data relevant to living conditions, including demographic characteristics. The Fafo living conditions surveys are remarkably similar in design, content, and definition of variables, making comparative analysis a relatively easy task. In addition, unpublished data on contraceptive use from the 1996 Palestinian Health survey are also used (PCBS, 2000). Table 2 displays the main characteristics of the surveys used in the analysis.

The first of these is the 1995 National Demographic Survey undertaken in cooperation with the then newly established Palestinian Central Bureau of Statistics. The survey employed a multi-stage stratified sample design, using a specially constructed sampling frame derived from population estimates and household listing of the selected clusters in small areas (PCBS, 1997). A total of 15,683 households were successfully interviewed, including 16,204 ever-married women aged 15-54. However, this survey lacks data on family planning. Here, we make use of unpublished special tabulations from the 1996 Palestinian Health Survey, which is based on a sub-sample of the Demographic Survey and contains conventional maternal and child health data. This survey includes information on 3,934 households and 3,349 ever-married women.

There are two recent living conditions surveys available for Jordan: the 1996 Jordan Living Conditions survey 1996 (Hanssen-Baur et al., 1998) and the 1999 Jordan Camps Survey (Khawaja and Tiltnes, 2002). The first is based on a national cluster sample of 6,400 households selected randomly from a sample frame based on the 1994 Jordanian population census. A total of 5,920 households and 4,900 ever-married women aged 15-54 were successfully interviewed, amounting to an overall response rate of 91.5%. Since this survey was designed to cover the whole population in Jordan, it does not include enough data on Palestinians living in the camps. The Jordan Camps Survey was undertaken to fill this gap, employing a representative sample of about 3,100 households

TABLE 2.– SUMMARY OF DATA SOURCES

Survey	Year	Sample			
		Coverage	House-holds	Women 15-54	Number of births
West Bank and Gaza Strip Demographic Survey	1995	West Bank and Gaza Strip	15,683	16,204	78,490
West Bank and Gaza Strip Health Survey	1996	West Bank and Gaza Strip	3,934	3,349	–
Jordan Living Conditions Survey	1996	Jordan	6,472	4,975	23,974
Jordan Camps Survey	1999	12 Camps	2,590	2,266	9,851
Lebanon Camps Survey	1999	All camps and communities of Palestinians	3,629	2,899	11,977

selected randomly from 12 camps. The 1994 census provides the sampling frame for the Camps Survey, after an update using maps available at Jordan's Department of Palestinian Affairs.

Finally, the 1999 survey of the refugee camps in Lebanon is based on a one-stage probability sample of 4,000 households living in camps and "small communities". A small community is defined as any agglomeration of at least 25 Palestinian households. The sample was drawn from a frame containing complete listings of households, largely constructed as part of the survey's preparatory phase. About 3,500 households were successfully interviewed.

The source of fertility and mortality data collected in all the surveys is the birth history provided by each of the ever-married women aged 15-49. Retrospective birth history data suffer from many problems, particularly omissions and the misstatement of the dates of birth of children (Rutstein and Bicego, 1990). Systematic displacement of children's birth dates is especially serious in surveys where age-based filtering of children is used. Specifically, children born in the last five years before the survey date have their dates of birth shifted backward by interviewers in order to avoid asking numerous questions (relating to health) about children born after this date (Arnold, 1990). Blacker (1994) cautioned that such age shifting of children might result in erroneous conclusions regarding fertility trends. An examination of the year-of-birth distributions in the Lebanon and Jordan data — where filtering is used — reveals evidence of slight displacement. While the results do not have serious implications for fertility estimation, we have chosen to calculate the rates for periods of four years before the survey instead of the conventional five-year periods. Given the purpose of this study, we rely on bivariate tabulations and simple graphs to describe group differentials in various fertility-related measures by refugee status. We measure refugee status by the respondents' straightforward self-identification. The Demographic Survey includes a question on whether each person in the household is a registered refugee, a non-registered refugee, or a non-refugee. The first two categories are collapsed into a single group of refugees, regardless of current registration status with UNRWA. A similar procedure was used in the Jordan and Lebanon surveys, but the categories were expanded to include persons displaced by the 1967 war. Specifically, the respondents were asked to classify each person in the household as: 1) Refugee from Palestine in 1948, 2) Displaced from the West Bank in 1967, 3) Both refugee from 1948 and displaced in 1967, 4) Displaced from Gaza, and 5) None of the above. The last group is relevant in the Jordan surveys, and consists primarily of Jordanians. Although there are other choices for identifying refugees[3], the criterion used here is the most defensible one and allows for compari-

[3] One alternative is to use UNRWA registration. Yet, registration with UNRWA is voluntary and many Palestinian refugees, especially in Jordan and Palestinian territories of Gaza and West Bank, are not registered.

sons with previous studies of refugees both in Jordan and elsewhere. A related variable is camp residence, measured by the type of locality included in the sampling list regardless of the official status of the camp[4]. Three types of locality are distinguished in all surveys: camp, village and urban area (town/city). However, for parsimony's sake, we distinguish here only between camps and other localities.

Similarly, the measurement of education is also comparable across surveys. Completed level of education is measured by a four-category ordinal variable: less than elementary, elementary, preparatory, and secondary. The elementary level of education corresponds to the completion of 6 years of schooling, the preparatory level to 9 years, and the secondary educational level to 12 years. However, the recent official classification of educational levels adopted in the Jordan surveys includes "Basic education" corresponding to the preparatory level without a separate category for elementary education. The highest category used in our analysis includes those with secondary, community college and university education. We decided to regroup these levels into one category in order to simplify the analysis and preserve enough cases in the secondary and higher educational level.

The measurement of other variables used in the analysis, including marital status and method of contraceptive use, is straightforward, corresponding to the definitions and categories commonly found in DHS-type surveys.

III. Fertility levels and trends

We first examine recent levels and trends in fertility by refugee status both within and across the West Bank, Gaza, and Jordan. Our main interest here is to compare the fertility behaviour of refugees with the host populations in the receiving settings. While the non-refugee populations in the West Bank and Gaza are Palestinians, their counterparts in Jordan are largely non-Palestinians. Then, we compare levels and trends of fertility for the refugee population by type of residence, distinguishing between camp and non-camp refugees in the West Bank, Gaza, Jordan and Lebanon. This dimension is important for at least two reasons: 1) camp residence is clearly a stratifying variable in our context, and many of the economically better-off refugees live outside refugee camps; and 2) camp residents have better access to UNRWA services, including family planning and other reproductive health services, than non-camp refugees.

Contrary to our expectations and the common belief, the refugee population has similar fertility levels to the non-refugee population every-

[4] Some refugee camps are not officially recognized by UNRWA.

where in the region, except in the West Bank, where it is lower. As shown in Table 3, the differentials in levels of fertility by refugee status are less marked than those between refugees across settings. The refugee population seems to lead the transition in the West Bank where refugee women have almost 0.4 of a child less than non-refugees. The corresponding differences between refugees and non-refugees within Gaza and Jordan are negligible. However, there are clear variations across countries. The fertility transition is clearly under way in Jordan and, to some extent, the West Bank, with the former having a total fertility rate (TFR) of 4.9 children per woman and the latter a TFR of 5.8 during the period 1991-94. With a TFR of 7.7 children per woman, Gaza lags behind. The remarkably high level of fertility in Gaza, despite favourable socio-economic conditions, poses a problem for conventional views regarding the fertility transition. Gaza is essentially urban and a larger proportion of its female population is educated than elsewhere in the region. It has been shown, however, that such a high level of fertility is primarily due to early marriage as well as to restricted opportunities for female participation in the formal labour force (Khawaja, 2000).

TABLE 3.– TOTAL FERTILITY RATE BY PERIOD, REFUGEE STATUS, AND SETTING

Setting and status	Period				Absolute change	Percentage change
	1983-86	1987-90	1991-94	1995-98		
Gaza Strip	7.42	7.79	7.71		0.29	3.91
Refugees	7.15	7.63	7.69		0.54	7.55
Camp	6.89	7.27	7.47		0.58	8.42
Non-camp	7.48	8.10	7.95		0.47	6.28
Non-refugees	7.95	8.10	7.76		– 0.19	– 2.39
West Bank	6.39	5.91	5.77		– 0.62	– 9.70
Refugees	6.17	5.64	5.50		– 0.67	– 10.86
Camp	6.67	5.63	5.68		– 0.99	– 14.84
Non-camp	6.00	5.64	5.44		– 0.56	– 9.34
Non-refugees	6.47	6.02	5.88		– 0.59	– 9.12
Jordan	6.21	5.43	4.89		– 1.32	– 21.26
Refugees	6.20	5.04	4.85		– 1.35	– 21.77
Camp*	6.92	6.11	5.25	4.33	– 1.67	– 29.13
Non-camp	6.16	4.91	4.77		– 1.39	– 22.56
Non-refugees	6.25	5.71	4.91		– 1.34	– 21.44
Lebanon						
Camp refugees		4.49	3.90	3.03	– 1.46	– 32.52

* Jordan camps survey; estimate for the earliest period is based on women aged 15-44.
Source: Household survey micro data, see Table 2.

A steady decline in fertility was observed in Jordan and the West Bank, but not Gaza, during the 1983-94 period. The decline amounted to over one birth in Jordan and over half a birth in the West Bank. On the other hand, fertility in Gaza has actually increased during this period by

about a third of a child, and the increase is due only to a surge in the fertility of refugee women. Thus, while fertility of refugee women increased by about half a child, the fertility of non-refugees underwent a modest decrease of about 0.2 of a child. The circumstances of the first uprising were favourable to early marriage, especially among the disadvantaged refugees, leading to higher fertility in Gaza (Khawaja, 2000). If we use a common rule of thumb of 10% reduction in TFR to indicate the occurrence of fertility transition (Coale and Watkins, 1986; Kirk, 1996), then the refugees in Jordan and the West Bank are already transitional. The decline in these two settings can be explained largely by nuptiality, and to some degree by the levels of contraceptive use, as we shall show below.

Do these conclusions hold for camp and non-camp refugees? Generally, yes. The differences between refugees living in camps and the others are larger between settings than within settings (Table 3). In 1991-94, levels of TFR ranged from a low of 3.9 children per woman in Lebanon to almost 8 among the non-camp refugees in Gaza. Jordan and the West Bank lay in between, with the TFR ranging from 4.8 for the non-camp refugees in Jordan and 5.7 for the West Bank camps. Refugee fertility was higher (by about half a child) in the camps than outside them in both Jordan and the West Bank, as those living in the camps are generally poorer and less educated.

Gaza appears again as an anomaly with regard to trends in fertility, increasing for both camp and non-camp refugees by about half a child during the 1983-94 period. Refugees in Jordan, the West Bank, and Lebanon (camps only) show a consistent decline in fertility, especially rapid for camps, confirming the incidence of the fertility transition. Fertility in the camps of Jordan and Lebanon declined by about one and a half children during a 10-year period, or by about 30%. Fertility levels for the period 1995-98 for Jordan and Lebanese camps provide further evidence of a continuing fertility transition, reaching TFRs of 4.3 and 3.0, respectively. Although these rates are still high when compared to recent estimates at the national level in Jordan and Lebanon, they are much lower than those observed for groups with similar socio-economic conditions in these countries. The active involvement of UNRWA and other non-governmental organizations in providing family planning services for the camp population may be behind the observed patterns.

IV. The age pattern of childbearing

The total fertility rate is the most widely used summary measure of period fertility. However, examining fertility by age of the mother provides a clearer picture of changes in the pace of childbearing. Ideally, a cohort perspective provides the best approach to examine changes in

fertility timing. Here, we focus on period fertility since our concern is with changes in current fertility, especially during the most recent period. We ask: do different age groups of women respond to period-related changes in the same manner across settings? More specifically, do refugees have distinct age patterns of fertility when compared to non-refugee populations, regardless of period?

The age-specific fertility rates for all women, displayed in Figure 1, show some irregularity in age differentials by setting**.** As previously, the non-refugee population in Jordan includes non-Palestinians. Unlike previously, however, we include the refugee group in Lebanon with the other refugee populations in the same graph, although the former is based largely on those living in camps.

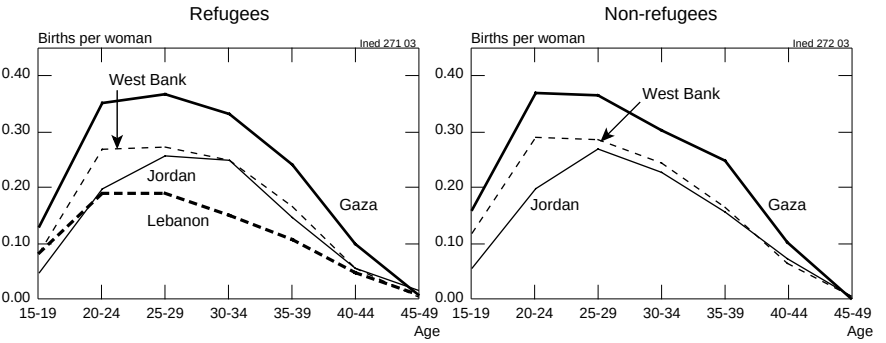

Figure 1.– Age-specific fertility by setting and refugee status, 1991-1994

Source: Household survey micro data, see Table 2..

Generally, the fertility rate is highest among women aged 20-29, and declines slowly thereafter for both refugees and non-refugees across countries. The rate for refugee women aged 25 and over is essentially identical in Jordan and the West Bank, with the difference in total fertility being entirely due to lower fertility rates for younger women in Jordan. Here, the observed differences at younger ages might be due to contraception, nuptiality, or both. This conclusion holds true for non-refugee women as well. Lebanon's refugees experience higher teenage fertility than those of Jordan, but much lower fertility for women aged 25-44. Arguably, the recent decrease in age at first marriage, and hence fertility, among Lebanon's refugees might be behind the observed pattern (Khawaja, 2003). Overall, the shape of fertility schedule for both refugees and non-refugees follows a traditionally Asian (and European) pattern rather than an African one where fertility declines (when it does) across all ages (Caldwell et al., 1992).

Examining changes in the age pattern of fertility by period (data not shown) reveals that the fertility decline is especially evident for older women and those in their prime reproductive ages, regardless of refugee status. Again, however, refugees in Lebanon seem to be an exception: fertility among them is declining significantly across all age groups, giving some indication of contraceptive use for spacing purposes.

V. Fertility differentials by education

As would be expected, fertility varies by various socio-economic characteristics in every setting. Here, we report fertility differentials only by education because it is perhaps the single most important factor behind the fertility decline. Other important indicators of social status are either irrelevant for the camp populations (e.g. rural-urban residence, religion) or lacking in some of the surveys used here (e.g., income). In this section, we initially examine educational differentials in fertility across the four settings, distinguishing between refugees and non-refugees and between camp and non-camp refugees. Next, a brief examination of educational differentials in fertility by age group will be attempted for the four settings. A note is warranted concerning the uniqueness of the Palestinian situation with regard to the theoretical links between education and fertility.

There is overwhelming evidence concerning the depressing impact of education on fertility almost everywhere in the world (Cochrane, 1979). Although the negative impact of women's education on fertility is well established, anomalies abound, particularly in countries that are in the initial phases of the demographic transition (Bledsoe et al., 1999; Jeffrey and Basu, 1996; United Nations, 1995). In particular, education often led to higher fertility mainly through the abandonment of traditional methods of contraception such as postpartum abstinence, and through truncated periods of breastfeeding (Lesthaeghe and Jolly, 1995). Another explanation is that schooling widens the gender gap in roles and responsibilities, confining the educated woman to the roles of wife and mother during the early stages of the demographic transition (Fargues, 1989, p. 165); if increased mass schooling favours men, which is usually the case, then gender inequalities also increase more generally. These are clearly issues of relevance to the Palestinian case from the perspective of population policy.

We begin by providing a profile of educational achievements of both refugee and non-refugee women, aged 15 years and over, in the four settings. Here, data for Lebanon are available only for refugees. The distribution of the respondents by educational level shows that refugees have some advantage in terms of women's education over non-refugees in every setting except Lebanon[5], and this is especially true for the younger

[5] Our data for Lebanon pertain to refugees residing in camps and small Palestinian communities. There is evidence that Palestinian refugees residing outside the camps may have similar education to their host Lebanese population, or better.

cohorts (Table 4)[6]. And yet, despite the extraordinary investment in education by UNRWA over the past fifty years or so, the educational differentials are larger between settings than within settings. Jordan ranks first, with about 29% and 27% of refugee and non-refugee women, respectively, completing secondary education. It is followed by Gaza, where about 27% of refugee women completed secondary education as compared to about 22% of non-refugees. As in Jordan, refugees and non-refugee women in the West Bank had similar educational levels at, respectively, 19% and 16% with at least secondary education. These proportions are much smaller than in Jordan, however. Lebanon's refugees had the lowest educational profile with only about 12% completing secondary education or more, owing partly to the migration of better educated Palestinian refugees during or after the 1975-1990 civil war.

TABLE 4.– PROPORTION OF FEMALES WITH AT LEAST SECONDARY EDUCATION BY AGE AND REFUGEE STATUS (IN %)

Age	Jordan refugees	Jordan non-refugees	Lebanon refugees	West Bank refugees	West Bank non-refugees	Gaza Strip refugees	Gaza Strip non-refugees
15-19	12.4	11.3	4.0	8.2	8.4	14.2	10.5
20-24	49.7	46.3	14.9	36.0	29.5	43.8	34.8
25-29	51.0	45.2	15.3	33.1	28.4	47.2	30.1
30-34	41.4	39.3	18.2	28.5	26.0	41.5	27.2
35-39	34.2	35.1	11.8	18.3	17.8	28.7	29.3
40-44	21.6	22.4	12.2	14.9	12.0	32.5	25.2
45-49	17.9	15.8	4.8	13.2	11.7	26.1	25.4
50-54	12.0	12.8	2.9	7.7	6.8	6.5	12.8
55-59	7.5	8.8	2.0	4.5	2.5	1.7	3.1
60-64	0.6	–	–	0.4	1.3	0.4	3.3
65 +	1.9	0.6	–	0.2	0.8	0.3	2.2
Total	29.2	27.4	9.5	18.5	16.4	27.3	21.5

Source: Household survey micro data, see Table 2.

These overall proportions mask important differences in educational attainment by refugee status among the younger generations in the various settings. The distribution of educational achievement by age shows that refugee advantage in terms of education is mainly a characteristic of post-1948 birth cohorts, and that all refugee women aged less than 50 years had better education than their non-refugee counterparts in every setting (except Lebanon). Although the differences between refugees and non-refugees are generally small, those pertaining to the younger cohorts aged 20-34 are quite significant, with direct bearing on fertility behaviour.

The differences in total fertility by women's education, displayed in Table 5, show remarkable similarity between the West Bank and Jordan,

[6] Data displayed in this table were extracted from the individual schedule instead of from the ever-married women file.

with Gaza having much higher levels of fertility regardless of educational group. Consistent with previous findings in the Arab countries, education does not seem to explain fertility differentials between settings (Fargues, 1989). Otherwise, one would expect Gaza to have relatively low levels of fertility, other things being equal. Moreover, the TFR differentials are regular for Jordan's refugees; but they are irregular in Gaza and the West Bank. In Jordan, refugee women with a secondary education or more have about 1.3 fewer births than women with incomplete elementary education; a larger difference of nearly two births is found for non-refugees there. While the same TFR differentials are found among these educational groups in the West Bank and Gaza, the overall relationship is non-linear. The picture is mixed in the West Bank: non-refugee women show somewhat regular TFR differentials by education, but not refugee women. However, it is not until preparatory education that fertility begins to fall appreciably there. Most of the fertility reduction occurs after elementary education, which is consistent with recent findings from developing countries (United Nations, 1995).

TABLE 5.– TOTAL FERTILITY RATE BY EDUCATION, SETTING AND REFUGEE STATUS

Setting and status	Education			
	Less than elementary	Elementary	Preparatory / Basic	Secondary or more
Gaza Strip				
Refugees	6.95	8.67	8.72	6.84
Camp	6.40	8.57	8.54	6.86
Non-camp	7.58	8.79	8.98	6.83
Non-refugees	7.89	8.40	8.65	6.36
West Bank				
Refugees	6.01	6.22	5.60	4.40
Camp	5.26	7.37	6.13	4.84
Non-camp	6.34	5.85	5.40	4.37
Non-refugees	6.41	6.39	5.85	4.62
Jordan				
Refugees	5.45		5.16	4.22
Camp*	5.70		4.92	5.86
Non-camp	5.45		5.16	4.22
Non-refugees	5.90		4.75	3.91
Lebanon				
Camp refugees	3.63	4.24	4.47	3.05

**** Appel non défini.***
Note: To ensure comparability, all figures refer to the 1991-94 period.
Source: Household survey micro data, see Table 2.

This is particularly the case in Gaza, but the overall pattern is quite unusual. Fertility increases there consistently with education up until the preparatory level — only women with at least a secondary education have lower fertility than those with incomplete elementary education. The

trends documented here are in evidence for both refugee and non-refugee women. It is interesting to note that refugees have higher fertility levels than non-refugees at all educational levels, except the incomplete elementary one. This might be explained by a temporary surge in the marriage of more educated refugee women during the *Intifada* years, but Jordan shows the same pattern. On the other hand, non-refugees in the West Bank have higher fertility levels than refugees, regardless of education. Differential in residence might be behind this pattern, since a larger proportion of non-refugees live in rural areas of the West Bank.

Irregularity of the TFR differentials by education holds for all camp refugees. In fact, only the non-camp refugees in Jordan and the West Bank show a regular relationship between fertility and education. Jordan's refugee women with secondary education and residing outside the camps have 1.2 fewer births than women with less than elementary education; the differentials in the West Bank are more substantial, amounting to about 2 births. In Gaza, the TFR differentials by education are only found among non-camp refugees — women with secondary education have about 0.8 fewer births than do women with incomplete elementary education. One overall pattern stands out here as before: most of the reduction occurs at the secondary educational level, and this is especially the case for camp refugees. Furthermore, the camp women have generally higher fertility levels than their non-camp counterparts, regardless of education. It is unclear why this is so, but it could be due to differentials in socio-economic status, to variations in the access to health and family planning services, or to both.

Examining the age-specific fertility differentials by education reveals a striking similarity between the different groups (Figure 2). Two main conclusions can be drawn here. First, women with secondary education or more have generally lower fertility rates only at younger ages, 15-29 years. This pattern implies that educated women achieve lower fertility mainly through the postponement of marriage and the first birth. The only exceptions are the non-refugees in Jordan, where women with secondary education have lower fertility than other women regardless of age. But even here, the rates seem to converge gradually at older ages. For refugees in Jordan, levels of fertility of women with less than secondary education are quite similar, owing in part to the diversity of this population according to camp residence, as we shall see below.

A second conclusion is that the higher levels of TFR observed for women with incomplete elementary education as compared to women with higher education (elementary or preparatory levels) are due mainly to the fertility of women aged 15-24. Levels of fertility of older women with lower education are generally higher at older ages, the only exception being refugees in Gaza. For the latter, levels of fertility for women with the least education are lowest at older ages, but this group is relatively small in size.

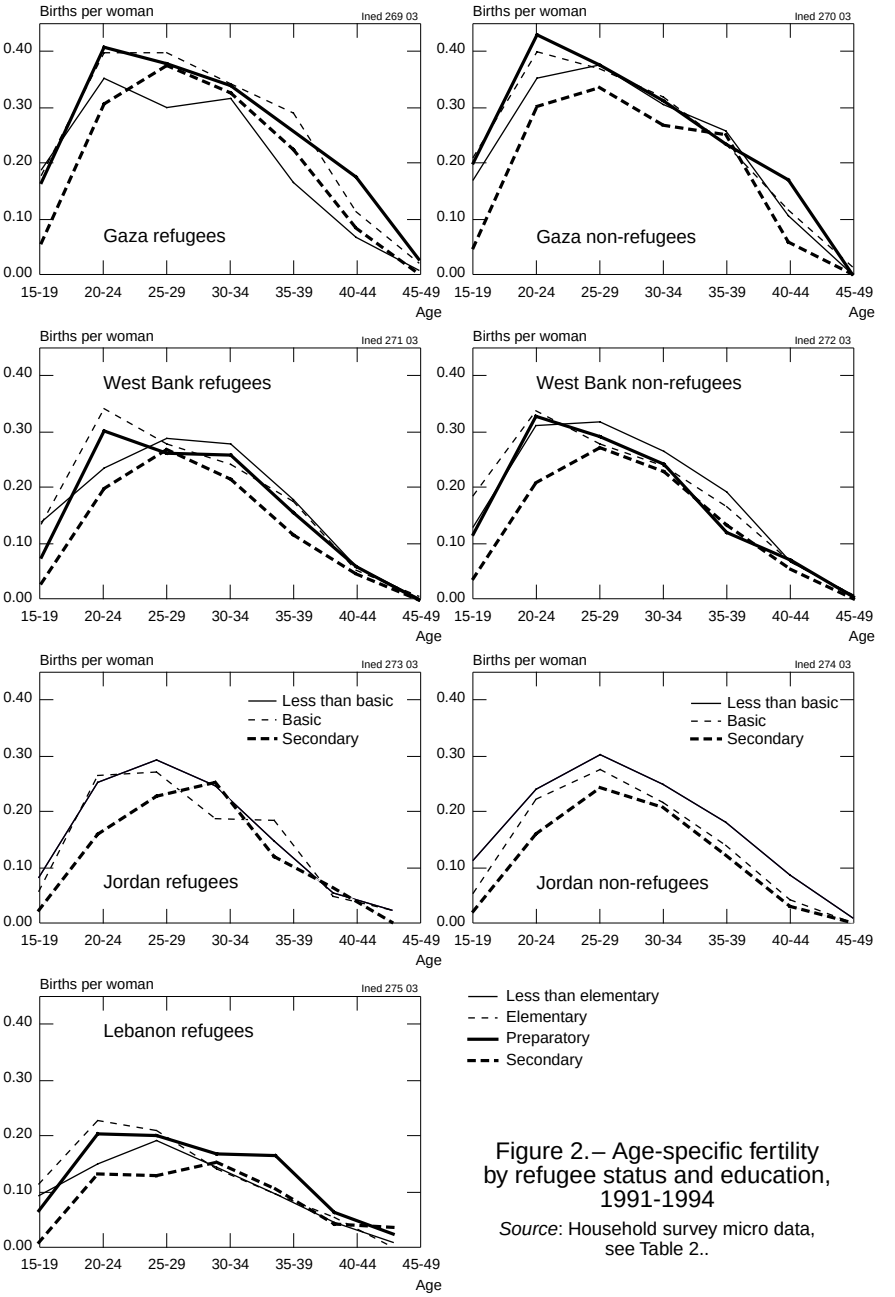

Figure 2.– Age-specific fertility by refugee status and education, 1991-1994

Source: Household survey micro data, see Table 2..

These conclusions generally hold for both the camp and non-camp segments of the refugee population (data not shown). The fertility of women with secondary education is always lower than that of women with less education, but only at younger ages. Also, there is a similarity between refugees residing inside and outside of the camps with regard to the higher fertility among women with elementary (or basic) education at lower ages than among women having the least education.

Although secondary education makes a difference in fertility reduction within settings for both refugees and non-refugees, it remains true that the most educated groups have extremely high fertility levels compared to other populations, including Arabs. A TFR of 6 or above among women with secondary or college degrees in Gaza is well above the average of about 2.5 for their Arab sisters. Another analysis referred to this finding as a "demographic puzzle" (Randall, 2001). This remains an anomaly, and difficult to explain in this descriptive analysis. High desire for children among this highly educated group due to ideological or political reasons cannot be ruled out. It should be noted that the levels observed in other comparable groups (Jordan) are also remarkably high.

VI. Some proximate determinants of fertility

Fertility varies not only by socio-economic variables such as education, but also by proximate determinants including the proportion of women married, contraceptive prevalence, sterility, abortion, coitus frequency, and breastfeeding (Bongaarts, 1978). In our context, the most important determinants are the proportion of women married and the level of contraceptive use. Here, we only consider these two determinants of fertility across groups in the four settings.

1. Marriage and reproduction

Marriage is of prime importance in a policy-oriented demographic perspective largely because it affects birth rates. This is especially the case in the Arab context where pre-marital fertility is culturally taboo. The customary Arab marriage pattern can be generalized as early and universal. More recently, however, there has been a trend towards later marriages and higher proportions single in many countries (Rashad, 2000). This trend is evident among refugees, with a direct bearing on fertility behaviour and population growth.

Distribution of the respondents by marital status shows little difference between refugees and non-refugees in terms of exposure to fertility, especially in Jordan and the Gaza Strip[7]. Slightly smaller proportions of

female refugees are currently married than their non-refugee counterparts in the three settings. Urban residence, improved education and restricted employment opportunities, especially among the young, may have discouraged early marriage among the refugees. More significant, however, are the differences across countries, corresponding to the differentials in fertility levels. Thus, Gaza stands out as the place with the smallest proportion of females remaining single, amounting to about 24%. The existence of work opportunities for men in the Israeli labour market coupled with unpromising avenues for female participation in the Gaza labour market are probably behind the observed pattern. At the other extreme, about 37% of the female camp refugees in Lebanon are single, owing to the extensive labour migration of men during or after the Lebanese civil war as well as to the restricted work opportunities for Palestinian refugees in Lebanon. Interestingly, Jordan's refugees (37% single) are more closely similar to refugees in Lebanon than to those in the West Bank (33%). It is not clear why this is so, but it might be due to recent nation-wide economic hardships in Jordan impacting negatively on household economic resources as well as to labour migration of men to the Gulf in the most recent past.

These differences in marital status generally hold across age groups of women, and are especially large during the prime reproductive ages, 25-29 years. Camp refugees in Lebanon stand out with the largest proportions of women never married, resembling their Lebanese sisters (Table 6). By age 25, almost 40% of women remain single, and about one out of every five women does not marry by age 45. These figures are comparatively high for a developing country. Also, the West Bank has surprisingly larger proportions of women remaining single, beginning with age 30, than Jordan, and this is true for both refugees and non-refugees. Thus, while the pattern for Jordan appears to be due to delayed marriage, it is not so for the West Bank. In other words, if a woman remains single at age 25 her probabilities of getting married are much greater in Jordan than the West Bank. Male labour migration and the policy of sex-selective family reunification during the years of Israeli occupation might explain the uniqueness of the West Bank marriage market.

The mean age at first marriage varies between 18.4 years for non-refugee females in Gaza and 19.3 years for refugee females in Jordan. Thus, while refugees in Lebanon have the lowest fertility levels and the highest proportions single, they tend to marry earlier on average than their sisters in Jordan. The fact remains, however, that in every setting, refugee females are more likely to postpone marriage than their non-refugee counterparts.

Changes in the age at first marriage mean that childbearing is taking place later than previously. A rise in the age at childbearing depresses fer-

(7) Here, we rely on the surveys' individual schedule to report findings on marital status for all those aged 15 years and over

tility, implying lower fertility than would have resulted without this "timing" effect (Bongaarts and Feeney, 1998). The mean age at childbearing for women aged 15-44 in the different settings ranged from a low of 25.6 years for Lebanon's refugees to a high of 26.5 for Gaza's refugees. Given the large differentials in the fertility rates between the settings, the observed differences in age at childbirth might be considered small. There are noteworthy differences in age over time, however. During the last two decades, the age of childbearing witnessed a net increase in Lebanon and Jordan, but not in the West Bank or Gaza; this was true for both refugees and non-refugees.

TABLE 6.– PROPORTION OF FEMALES NEVER MARRIED BY AGE AND REFUGEE STATUS (IN %)

Age	Jordan refugees	Jordan non-refugees	Lebanon refugees	West Bank refugees	West Bank non-refugees	Gaza Strip refugees	Gaza Strip non-refugees
15-19	90.4	92.1	88.8	80.7	78.0	70.8	67.9
20-24	56.3	56.8	54.3	45.4	37.7	27.6	27.7
25-29	30.8	30.4	37.7	25.5	22.1	15.5	11.5
30-34	16.6	13.9	32.5	20.4	18.5	12.4	10.1
35-39	7.1	7.4	25.0	14.9	12.9	9.3	7.7
40-44	5.4	6.6	19.9	11.2	10.4	7.4	3.9
45-49	4.4	3.9	17.4	10.8	7.9	6.1	5.6
50-54	2.5	2.6	11.1	8.0	10.6	5.7	6.0
55-59	4.4	2.2	5.2	7.8	6.5	0.7	4.6
60-64	1.3	1.0	2.9	4.2	5.3	0.8	3.3
65 +	0.0	0.3	4.4	0.9	4.0	1.3	3.3
Total	36.9	35.5	36.7	32.5	30.0	23.9	23.5

Source: Household survey micro data, see Table 2.

Figure 3 displays trends in the mean age of childbearing for the refugee and non-refugee women separately in the four settings. Among the refugee population, Lebanon stands out as the setting with the lowest age at childbirth until very recently: during the last two decades, it increased there from 25.8 to 27 years on average. Age at birth for the other refugee populations was essentially stable until the *Intifada* period. During the last two periods, it increased in Jordan (by 0.4 years) but declined in the West Bank (by 0.8 years) and Gaza (by 0.1 years). The trends for the non-refugee women, displayed in the same graph, show a striking similarity between the West Bank and Gaza (although the decline stopped there more recently). The non-refugees in Jordan witnessed a consistent increase in mean age of childbearing, amounting to 1.6 years during the last two decades. While it increased everywhere during the entire period, it remained more or less stable (and in some cases declined) during the most recent period.

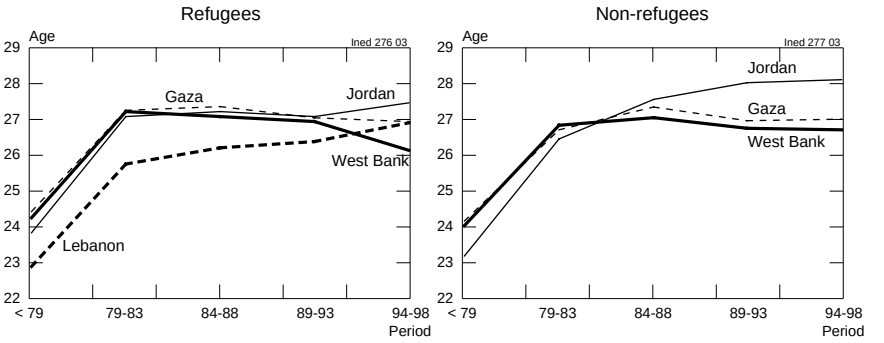

Figure 3.– Mean age of women at child birth by period and refugee status

Note: Last period for the West Bank and Gaza refers to 1994-95; for Jordan, 1994-96.
Source: Household survey micro data, see Table 2..

2. Contraceptive use

In the Arab context, nuptiality is largely responsible for the differential decline in fertility (Rashad, 2000), and the Palestinian population is no exception (Khawaja, 2000). Although recent evidence shows that fertility within marriage remains high, however, it has been declining as a result of contraceptive use for family limitation. In this section, we describe briefly our second fertility-related indicators: knowledge about and use of contraceptives in the four settings. For each setting, we compare the refugee with the non-refugee populations, except Lebanon where data on contraceptive knowledge and behaviour are available for Palestinian refugees only. Following previous studies based on World Fertility Survey and Demographic and Health Survey data, we distinguish between "modern" and "traditional" methods of contraception. Traditional methods include abstinence, breastfeeding, and withdrawal[8].

There is a very high level of knowledge of modern contraception, as shown in Table 7. Almost every woman knows the pill and IUD, and there is an overall convergence among the various groups regarding knowledge of the other methods. Otherwise, there is a difference between Lebanon and the other sites, with refugees in Lebanon being much more aware of every other modern method of contraception than those in Jordan or (to a large extent) the Palestinian territories. Still, the vast majority of women are knowledgeable about effective methods such as "tubal ligation", condoms, abstinence, and breastfeeding. Gazan women seem to be more

[8] Strictly speaking, breastfeeding is not a contraceptive method. However, it is often used for the purpose of spacing or delaying births.

TABLE 7.– KNOWLEDGE AND EVER USE OF CONTRACEPTION BY METHOD, REFUGEE STATUS AND SETTING (IN %)

Method	Gaza Strip refugees		Gaza Strip non-refugees		West Bank refugees		West Bank non-refugees		Jordan refugees		Jordan non-refugees		Lebanon refugees	
	Known	Ever used	Known	Ever used	Known	Ever used	Known	Ever used	Known	Ever used	Known	Ever used	Known	Ever used
Pill	99.0	16.8	98.6	15.9	99.7	26.8	97.0	41.3	98.4	42.1	97.6	36.6	99.3	49.9
IUD	99.3	33.9	98.3	30.2	99.7	46.2	98.2	56.8	98.6	43.3	97.5	42.0	98.9	40.0
Injections	81.8	2.3	72.9	0.6	62.0	1.7	77.0	0.0	48.7	2.1	41.7	2.4	67.3	1.3
Diaphragm	72.3	5.8	70.4	8.8	46.2	4.9	58.6	1.4	11.1	0.0	10.1	10.1	81.2	6.2
Condom	82.0	1.7	71.1	8.1	72.4	9.0	73.0	10.3	51.1	0.0	47.4	10.3	91.9	6.2
Tubal ligation	69.0	1.5	66.8	2.1	95.1	4.6	92.5	0.0	83.6	3.5	80.8	4.6	91.0	2.5
Male sterilization	21.3	0.0	23.5	0.0	25.0	0.2	20.3	0.0	13.8	0.0	14.5	1.3	65.0	0.4
Abstinence	67.1	10.8	65.8	9.8	81.6	18.4	82.7	15.7	73.2	37.4	75.1	37.7	89.6	15.0
Withdrawal	64.0	7.1	66.9	9.0	78.5	17.7	77.4	46.5	67.6	37.9	62.5	35.8	81.0	12.7
Breastfeeding	91.6	8.7	91.1	8.4	92.3	17.4	95.0	10.7	85.9	33.4	84.4	34.3	93.6	13.4
Other methods	6.5	0.6	5.6	0.3	15.3	1.7	7.8	0.0	–	8.1	–	9.9	–	20.9

Source: Household survey micro data, see Table 2.

aware of modern methods than their Jordanian sisters. More remarkable perhaps is the similarity between refugees and non-refugees in their knowledge of contraception, with differences being mainly found between settings.

Likewise, the groups are quite similar in their use of modern methods of fertility control. The most widely ever used modern methods in every context are the pill and the IUD, and about 40% of refugees residing outside Gaza and the West Bank have used one of these methods at one point in their reproductive lives. Refugee women have not used the other modern contraceptive methods much, especially in comparison with traditional methods. Refugees as well as non-refugees in Jordan are more likely to have used traditional methods than women in the other places. Not surprisingly, women in the Gaza Strip, refugees and non-refugees alike, rank lowest in their ever-use of almost every contraceptive method. Again, while the pattern of use is quite similar among the various groups, the similarity between refugees and non-refugees is generally more striking than that between the different settings.

Of more immediate relevance is contraceptive use among currently married women. As shown in Table 8, there is an inverse relationship between current contraceptive use and fertility, with refugees in Lebanon at the higher end and Gaza at the lowest end of contraceptive use. Almost two-thirds of currently married (non-pregnant) refugee women in Lebanon, and half of those in Jordan and the West Bank, report current use of contraception. On the other hand, only about one-third of women in Gaza report current use. The overall contraceptive prevalence in Jordan, the West Bank and Gaza is essentially the same for refugees and non-refugees, but as shown in the graph, only in Jordan are refugees more likely to use modern methods than non-refugees. Traditional methods are least used in Gaza, followed by Lebanon, but about 53% of currently married women in Lebanon use modern methods as compared with about 25% of Gaza's refugees. Obviously, a large gap exists between knowledge of family planning methods and current use. However, the contraceptive prevalence rates are comparatively high for developing countries, suggesting that desired family size is perhaps already part of the "calculus of conscious choice" (Coale 1993, p. 69) among refugees.

Surprisingly, contraceptive use does not increase consistently with education. The overall differentials in contraceptive use by educational level are rather small. Also surprising is the larger prevalence of traditional contraceptive methods among women with secondary education than among other women. Nor does the gap in contraceptive use between settings decline, as would be expected, with increasing education. Still, however, women with secondary education are more likely to use contraception than women with incomplete elementary education in every context. It should be mentioned here that these general conclusions are

somewhat consistent with the "erratic" relationship between education and fertility discussed above.

TABLE 8.– PROPORTION OF CURRENTLY MARRIED WOMEN USING CONTRACEPTION BY EDUCATION, SETTING AND REFUGEE STATUS (IN %)

Method and setting	Less than elementary	Elementary	Preparatory / Basic	Secondary or more	Total
Modern methods					
Lebanon camp refugees	50.6	50.2	60.8	52.2	53.2
Jordan					
Refugees	39.9	–	31.6	33.9	35.7
Non-refugees	26.0	–	31.2	37.4	30.9
West Bank					
Refugees	34.4	33.3	26.5	44.0	34.6
Non-refugees	32.9	37.1	38.7	33.8	35.8
Gaza Strip					
Refugees	17.1	20.5	28.4	28.2	25.0
Non-refugees	20.0	19.7	29.7	36.3	27.3
Traditional methods					
Lebanon camp refugees	9.8	14.6	10.8	15.9	12.5
Jordan					
Refugees	11.9	–	11.7	21.2	15.1
Non-refugees	17.0	–	19.9	23.7	19.9
West Bank					
Refugees	10.1	16.4	24.4	20.0	17.9
Non-refugees	14.8	15.3	19.8	22.1	17.6
Gaza Strip					
Refugees	6.6	8.3	8.2	13.8	9.8
Non-refugees	5.3	14.1	9.2	11.7	9.4
All methods					
Lebanon camp refugees	60.3	64.8	71.5	68.1	65.6
Jordan					
Refugees	51.9	–		55.1	50.8
Non-refugees	43,0	–	51.1	61.2	50.8
West Bank					
Refugees	44.5	49.7	50.9	64.0	52.5
Non-refugees	47.7	52.4	58.5	55.9	53.4
Gaza Strip					
Refugees	23.7	28.8	36.6	42.0	34.8
Non-refugees	25.3	33.8	38.9	48.0	37.4

Note: Traditional methods includes abstinence, withdrawal, breastfeeding, and other.
Source: Household survey micro data, see Table 2.

In Lebanon, contraceptive use among refugees increases from 60% among women with less than elementary education to about 72% among women with preparatory education, but then declines slightly with secondary education (to 68%). The same pattern is found for West Bank non-refugees. On the other hand, Jordan's refugees with basic/preparatory education are less likely to use contraception than other women. The remain-

ing refugee groups in Gaza and the West Bank as well as the non-refugees in Jordan and Gaza follow the conventional pattern, where the use of contraceptive methods increases consistently with education.

The corresponding differences in the use of modern methods of contraception are smaller, but they generally point in the same direction. Jordan's refugees are an exception, as the least educated women among them are more likely to use modern methods than women with preparatory or secondary education. A similar situation is found for camp refugees in Lebanon, where women with preparatory education are more likely to use modern methods than others. Non-refugees in Jordan, and to a large extent Gazans, have an expected pattern of increased use of modern methods by educational attainment. While 37% of non-refugee women with secondary education in Jordan use modern methods, only 26% of women with incomplete elementary education do so. The same difference between the two education groups is found for Gaza's refugees.

The proportions of women using traditional methods are relatively large. This is especially true for women with secondary education — over one out of every five women in Jordan and the West Bank use traditional methods. Their use increases more or less consistently with education among four of the groups, and women with secondary education are always more likely to use traditional methods than those with incomplete elementary education. It is not clear why this is so, but it might be due to health-related factors (Bledsoe et al., 1998).

Contraceptive use is a function of age (Figure 4). Generally, younger women, especially those aged 15-24, are less likely to use contraception than older women. Refugees in Lebanon are more likely to do so regardless of age, and women in Gaza are the least likely to use them. Moreover, the age patterns for refugees and non-refugees are essentially similar. The majority of refugee women in their prime reproductive ages, 20-29, are using contraception in Lebanon, but not in the other contexts. The relatively large proportion of women aged 40-49 using contraception, amounting to around 40% (save Gaza's refugees), is quite surprising and might reinforce the conclusion that women in this context tend to use contraceptives essentially for family limitation rather than for spacing purposes.

The family planning programmes implemented by UNRWA since 1993 have promoted modern contraceptive use among refugees, and easy access is probably one of the most important factors behind the recent fertility decline in the camps. UNRWA clinics provide effective and safe contraception for married refugee women in Gaza and the West Bank, and for camp refugees in Jordan and Lebanon. Other refugees in the latter countries rely on private doctors and government maternal and child health (MCH) clinics like the rest of the population.

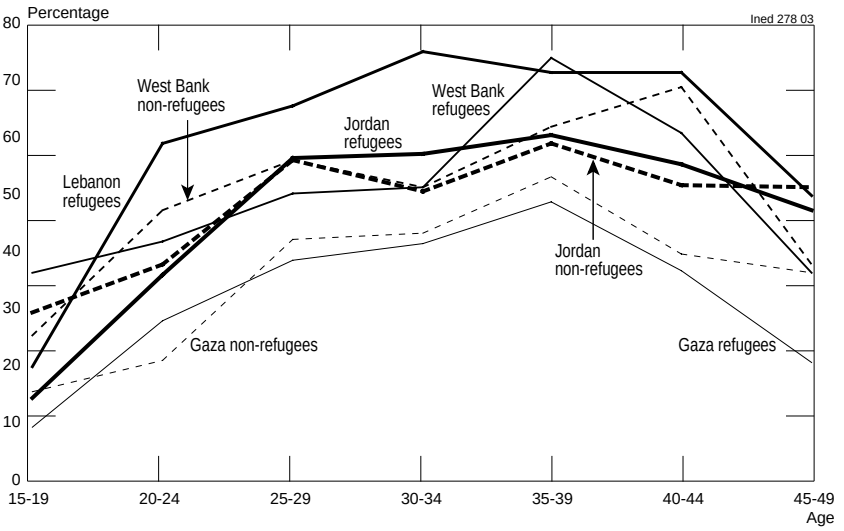

Figure 4.– Current contraceptive use by age and refugee status, 1991-1994

Source: Household survey micro data, see Table 2..

Conclusions

The main purpose of this paper has been to document and analyze fertility and fertility-related behaviour among Palestinian women in four different national settings, with a focus on refugee status. To our knowledge, this is the first attempt to systematically describe Palestinian fertility differentials at the group level using household micro-data. The findings show that fertility levels have been relatively high (even by Arab standards) among Palestinian women, and have increased in the West Bank and Gaza during the *Intifada* years. Recently, fertility has begun to drop everywhere but in Gaza, owing mainly to a postponement of marriage and an increase in the proportion of women remaining single. While ages at marriage and childbirth are still relatively low, they have been increasing in recent years. Rapid adoption of modern contraceptives and expansion of family planning services have paralleled the fall in fertility. With the exception of Gaza, contraceptive use is pervasive, by Arab standards, in every setting. Fertility is lower among refugees than non-refugees in every setting, with the proportion married generally lower and age at marriage higher among the former than among the latter.

High desire for children, especially among the educated and the young, might be behind the persistently high levels of fertility in Gaza. Despite favourable demographic (e.g., lower mortality) and socio-

economic changes (e.g., education, urbanization), high fertility has persisted in Gaza, and increased during the most recent period. With a reported TFR of about 8 children per woman in 1995, Gaza had one of the highest fertility levels in the world. One of the striking findings reported here is the recent shift towards younger patterns of fertility among Gazan women, with obvious health consequences. It has been shown (Khawaja, 2000) that the rise in fertility in Gaza was probably due to nuptiality, especially during the *Intifada* period when the cost of marriage underwent a dramatic reduction, but also to increased marital fertility among younger women. However, levels of fertility in Gaza are well above the desired number of about 5 children, suggesting a substantial amount of unwanted fertility, or unmet need for contraception. As documented in this paper, the observed levels of contraceptive prevalence are strikingly low there, with important implications for the health and well-being of women.

The picture concerning female education and fertility is mixed. We found a relationship between education and fertility decline among refugees as well as non-refugees in the various settings. However, the negative relationship between fertility and education is rather erratic, and most of the fertility reduction occurs (when it does) at the secondary levels of education. Surprisingly, educational levels cannot explain fertility differentials across settings.

Taken as a whole, the findings reported here do not support the widely held view of heightened "political fertility" among Palestinian refugees. Rather, the reproductive behaviour of refugee women seems to converge with that of their non-refugee sisters everywhere. It is suggested that context-specific socio-economic conditions, or population and health policies, might be behind this convergence. The convergence can also be generated by various demographic mechanisms, including sex-selective migration affecting the marriage market, as well as the ideational diffusion of both contraception and small family norms (Montgomery and Casterline, 1996). Further research is needed to determine the relative strength of each of these factors in affecting family reproduction among Palestinians, including refugees, within and across settings. This requires the utilization of appropriate multivariate statistical techniques and micro-level household data, which have now become available.

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KHAWAJA Marwan.– **The Fertility of Palestinian Women in Gaza, the West Bank, Jordan and Lebanon**

This article presents a largely descriptive account of reproduction among Palestinian populations in four settings: the West Bank, the Gaza Strip, Jordan and Lebanon. Trends and differentials in fertility and contraceptive use are described using high-quality household survey data. Comparisons are made between the refugee and non-refugee populations. Issues related to family reproduction among Palestinian refugees are of particular policy concern because the demographic future of the Palestinians is largely determined by fertility. The findings show that refugee status can no longer be considered a fundamental distinguishing feature of Palestinian reproductive behaviour. On the one hand, variations in fertility-related indicators across countries far exceed those between refugees and non-refugees within the same setting. On the other hand, the refugee population has become more differentiated over the years, with those residing outside the camps generally having a different reproductive behaviour from their counterparts in camps. Thus, the camp versus non-camp distinctions are still relevant everywhere, notwithstanding the legal or circumstantial situation of the refugees residing in the various settings.

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