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

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Abstract

This article presents a largely descriptive account of family reproduction among the Palestinian refugee populations in four settings: the West Bank, Gaza Strip, Jordan and Lebanon. Trends and differentials in fertility and contraceptive use are described using high quality household survey data. Comparisons with the non-refugee population in each of the four settings are made. Issues related to family reproduction among Palestinian refugees are of particular policy concerns largely because the demographic future of the Palestinians is largely determined by fertility. On the one hand, refugee status can no longer be considered a fundamental distinguishing feature of Palestinian reproductive behavior. The findings indicate that variations 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 having generally different (socio-economic and demographic) characteristics than their camp counterparts. Thus, the camp, non-camp distinctions are still relevant everywhere, notwithstanding the legal or the circumstantial situation of the refugees residing in the various settings.

Introduction

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 otherwise expelled from, their homes to seek refuge mainly in Jordan, Lebanon, the West Bank, Gaza, and Syria (Morris 1987). During the past 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 (see, 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 2000a).

There is considerable debate concerning the lack of fertility decline among the Palestinian populations despite favorable socio-economic conditions. 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' (Courbge 1995: 215). Pro-natalist ideologies advanced by nationalistic movements and the media during the course of conflict are quite common, and the Palestinian case is no exception. There is evidence pointing to calls for increased 'birthing' during the recent popular uprisings in the Palestinian areas (Tamari and Scott 1991). As Farques (2000: 469) puts it, "fertility was high because it was desired." It is not at all evident however that these ideology-based views square with actual reproductive behaviors of Palestinians. A somewhat related, but perhaps more general account is the child survival hypothesis (Goldscheider 1996). Higher fertility in conflict-ridden context is explained here essentially by war-related mortality: excess children are insurance against expected deaths during war time. 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 behavior. If the political perspective were to hold true, we would expect fertility variations by refugee status to materialize (see Fargues 2000: 474). In other words, fertility of Palestinian refugees would be higher than that of the non-refugee population in every setting.

An alternative account, referred to here as the 'convergence thesis,' posits that the reproductive behavior of refugees tend to converge over time with their respective host country population. The convergence is expected to hold because of three interrelated factors: the structure of the marriage markets, the diffusion of ideas concerning small family norms (and contraception), and national population policy or lack thereof. The three factors are context-specific, leading to differentials across national or regional borders. Of course, these factors are paralleled by context-specific socio-economic conditions. For the past 50 years or so, the economic fortune as well as the overall status of the refugee population has improved considerably. However, many refugees have been living under a precarious situation. This applies especially to the refugees in Lebanon and to those living in refugee camps. Conditions in the camps are generally harsh and camp residents continue to experience relatively high levels of economic hardship almost everywhere. Variations by context are important here as well since most Palestinians in Lebanon and Syria are considered temporary residents, lacking citizenship rights, as compared to those in Jordan (Brand 1988). For, access to the labor market as well as to social services (e.g., health and education) have important bearing on fertility. Taken as a whole, this view predicts significant differences in the reproductive behavior of Palestinians across national borders but not within settings.

The requisite data have not been available to examine these claims, as until recently, little has been known about the demography of Palestinian refugees in general. Previous analyses typically exclude the majority of Palestinians -- "those living outside the former

Palestine" (Fargues 2000: 474). Nor do host countries include the Palestinian refugees in their official statistics (Lebanon, Syria); others do not identify them as a separate group (e.g., Jordan). The only series concerning Palestinian reproductive behavior 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. There are a number of studies conducted in the various countries, but these tend to be either incomplete or small in scale.

The purpose of this paper is to provide a descriptive portrait of the reproductive behaviour among Palestinian refugees with an eye on the rival expectations just outlined above. Thus, an explicit test of the alternative theoretical accounts concerning Palestinian fertility is not attempted here. The analysis reported here do, however, shed light on the relationship between family reproduction and refugee status across countries, providing preliminary evidence to evaluate the convergence (diffusion) and political fertility hypotheses. Our focus on comparing the refugees with the non-refugee population in each of the four settings, but variations within the refugee population according to camp residence are also explored.

Sources and quality of data

Our main sources of data are primarily four household surveys undertaken by local statistical agencies in collaboration with Fafo Institute. The main purpose of three of the surveys is 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 analyses a relatively easy task. In addition, unpublished data on contraceptive use from the 1996 Palestinian Health survey are also used (PCBS 2000). Table 1 displays the main characteristics of the surveys used in the analysis.

(Table 1 about here)

The first of these is the 1995 national demographic survey undertaking 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. A total of 15,683 households were successfully interviewed, together with 16,204 ever-married women aged 15-54. For each ever married woman, a complete birth history was collected and included the age, sex and survival status of all children born alive regardless of their current residence. The birth history file includes data on 78,490 children. While the data contain some inconsistencies, our assessment of the data shows that they are of unusually high quality for a developing area.

The demographic survey lacks data on family planning. Here, we make use of unpublished special tabulations from the 1996 health survey in the West Bank and Gaza. This survey is based on a sub-sample of the Demographic Survey and contains conventional mother and child health data. This survey includes information on 3934 households and 3349 ever married women. Although we have not been able to check the quality of the data collected, PCBS' survey data are known to be of very high quality.

There are two recent living conditions surveys available for Jordan: The 1999 Jordan Camps Survey and the Jordan Living Conditions survey of 1996. The Jordan camps survey employed a representative stratified one-stage sample of about 3100 households selected randomly from 12 camps, with probability proportional to size. The sample frame provided by the Jordan Department of Statistics (DOS), is based on the 1994 census data and updated by detailed maps available at Jordan's the Department of Palestinian Affairs. As with other Living Conditions Survey, there were three questionnaires: one for the household, one for a randomly selected adult from each household, and the third for all ever-married women aged 15 and over at the time of survey. The source of fertility and mortality data collected in the

survey instrument was the birth history provided by each of the ever-married women aged 15-49. A total of 2,590 households were successfully interviewed, with an overall response rate of 95 percent and a refusal rate of less than one percent.

The Jordan Living Conditions Survey, conducted in the spring of 1996, is based on a national cluster sample of 6400 households selected randomly from a sample frame based on the 1994 Jordanian Census of population. The survey is essentially similar in design and content to the Jordan Camps survey, but since it was designed to cover the whole country it does not include enough data on Palestinians living in the camps. A total of 5920 households and 4900 ever-married women aged 15-54 were successfully interviewed, amounting to an overall response rate of 91.5 percent. Each ever-married woman selected was asked to provide a complete birth history of all children ever born alive (23000 in total), similar to the above surveys.

Finally, the Living Conditions Survey of the Refugee Camps in Lebanon is based on a one-stage probability sample of 4000 households living in camps and small gatherings. The sample was drawn from a frame containing complete listings of households, largely constructed as part of the survey preparatory phase. A total of 3500 households were successfully interviewed. In the survey, birth history data on about 12000 children were also obtained form 2,899 ever-married women aged 15 to 54 years. The quality of the demographic data in this survey is not as good as in the other surveys, owing in part to the extremely difficult field situation in Lebanon at the time.

The quality of the age data is of considerable importance in household surveys because the age distribution is needed for various estimates (Rutstein and Bicego 1990). Age is derived from date of birth, although in some cases date of birth will have been imputed, or otherwise calculated, from completed age. As would be expected, the data of day and month

of birth are incomplete, but age in completed years and year of birth, are virtually complete in all the surveys used here.

The current fertility rates are estimated directly from the birth history data. Retrospective birth history data suffer from many problems, particularly omissions and the misstatement of birth-dates of children. 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) of 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.

The estimated fertility rates are also affected by age mis-reporting or omissions of women aged 15-49. Some age shifting out of the 15-49 age range is evident in all surveys used here, but the magnitude of heaping is negligible. Less than perfect age reporting for older women may introduce some downward biases in the estimated TFR, but we have no reason to believe that a spurious decrease in TFR is particular to one specific setting.

Fertility levels and trends

Contrary to common impressions, the refugee population has lower fertility than the non-refugee population everywhere in the region. As shown in Table 2, the differentials in the levels of fertility by refugee status are less marked than those between refugees across settings. The fertility transition is clearly underway in Jordan and, to some extent, the West Bank, with the former having a TFR of 4.9 children per woman and the West Bank with a

TFR of 5.8 during the 1991-94 period. With a TFR of 7.7 children per woman, Gaza lags behind. The refugee population seems to lead the transition, especially 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.

(Table 2 about here)

A steady decline in fertility is observed for Jordan and the West Bank, but not Gaza, during the 1983-94 period. The decline amounts to over one birth in Jordan (1.3 births) and over half a birth in the West Bank (0.6). And the decline appears to be slightly faster among refugees. Fertility in Gaza has actually increased during this period by about 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. In percentage terms, the decline ranges from about 2 percent for non-refugees in Gaza to about 22 percent for refugees in Jordan; the West Bank is in between, averaging about 10 percent decline in fertility. If we use a common rule of thumb of 10 percent 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 populations. The decline in these two setting can be explained largely by nuptiality, and to some degree by their levels of contraceptive use as we shall show below.

Do these conclusions hold for camp and non-camps refugees? Generally, yes. The differences are larger between settings than within settings (Table 2). Current (1991-94) levels of TFR range 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 lie in between, with TFRs ranging from 4.8 for the non-camp refugees in Jordan to 5.7 for the West Bank camps. Refugee fertility is higher (by about half a child) in the camps than outside them in both Jordan and the West Bank.

Gaza appears again as an anomaly also 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, 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, amounting to about 30 percent. The decline is equally remarkable for the non-camp refugees in Jordan -- 23 percent. Refugees in the West Bank lag behind, mainly due to a pause during the Intifada period, but experienced a decline of 15 percent for camp refugees and 9 percent for non-refugees, during the same period. Fertility levels for the more recent 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.

The shape of fertility schedules

The total fertility rate is the most widely used summary measure of current fertility. However, examining fertility by age of mother provides a clearer picture of changes in the pace of childbearing. The age-specific fertility rates for all women, displayed in Figure 1, show some irregularity in country differences across age. Generally, the fertility rate is highest among women aged 20-29, and declines slowly thereafter for both refugees and non-refugees across countries, indicating little parity-specific limitations. This is especially true in the West Bank and Gaza Strip where the differentials are remarkably uniform across all age groups of women. The pattern shows, except for women aged 45-49, very little evidence of age-specific birth limitations. The situation in Jordan is generally similar. However, the age pattern of fertility for refugees in Jordan and Lebanon is somewhat different. The rate for refugee women, aged 25 and over, is essentially identical in Jordan and the West Bank, with the difference in total fertility is entirely due to lower fertility rates for younger women in Jordan. There is no evidence of higher contraceptive prevalence in Jordan than the West

Bank at age 30 and over. The observed difference 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 Jordan, but much lower fertility for women aged 25-44, indicating more frequent birth stopping.

(Figure 1 about here)

Examining changes in the age pattern of fertility by period reveals that the fertility decline is especially evident for older women and those in their prime reproductive age, regardless of refugee status. However, camp refugees in Lebanon seem to be an exception where fertility is declining significantly across all age groups, giving some indication of significant contraceptive use for spacing purposes.

Fertility differentials by education

As would be expected, fertility varies by various socio-economic characteristics in every setting. Here, we report the fertility differentials only by education because education is perhaps the single most important factors behind fertility decline. Other important indicators are either irrelevant for the camp populations (e.g. rural-urban residence) or lacking in some of the surveys used here (e.g., income).

There is overwhelming evidence concerning the depressing impact of education on fertility (see, Cochrane 1979). Conventionally, education is used to index modernisation 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). Yet, anomalies abound, particularly in countries that are at the initial phases of the demographic transition (Bledsoe et al. 1999; Jeffry and Basu 1996; UN 1995; Cochrane 1979). In particular, education often led to higher fertility mainly through the abandonment

of traditional methods of contraceptive such as postpartum abstinence and breastfeeding (Lesthaeghe and Jolly 1995). These are clearly issues of relevance from a population policy perspective.

TFR differentials by women's education, displayed in Figure 2, show remarkable similarity between the West Bank and Jordan, with Gaza having much higher levels of fertility regardless of educational group. The differentials are regular as expected 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 do 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. Thus, women with elementary education have higher fertility than those with incomplete elementary, as clearly shown in the graph. 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 appreciatively there. Thus, women with a preparatory education have about 0.6 fewer births than do women with elementary education; the differentials between preparatory and secondary educational levels are even larger, amounting to 1.2 births for both refugees and non-refugees. Most of the reduction occurs with secondary education, which is consistent with recent findings from developing countries (UN 1995).

(Figure 2 about here)

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. The trends documented here are evident for both refugee and non-refugee women. For

refugees, women with secondary education have a TFR similar to those with incomplete elementary. Still however, a substantial reduction occurs with secondary education -- almost two births for refugees and 2.3 birth for non-refugees. It is interesting to note that refugees have higher fertility levels than non-refugees at all educational levels except incomplete elementary. This might be explained by a temporary surge in the marriage of more educated refugee women during the Intifada years, but the same pattern is shown for Jordan. On the other hand, non-refugees in the West Bank have higher fertility levels than refugees, regardless of education.

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. The largest gap is also found among these populations. Jordan's refugee women with secondary education and residing outside the camps have 1.25 fewer births than do women with incomplete basic 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 0.75 less births than do women with incomplete elementary. One overall pattern stands out here as before: most of the reduction occurs at the secondary educational level regardless of the population in question, and this is especially the case for camp refugees.

Surprisingly, the camp women have generally higher fertility levels than their non-camp counterparts, regardless of education. It is unclear why this is so, but could be due to differential access to health and family planning services. For Jordan and the West Bank, only women with the least education (incomplete elementary) in the camps have lower levels of fertility than non-camp women; at higher levels of education, the camp women have substantially higher fertility levels than their non-camp sisters.

Examining the age-specific fertility differentials by education reveals a strikingly similarity between the different groups. Two general 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 birth. The only exceptions are the non-refugees in Jordan, where women with secondary education having 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.

Second, 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 young 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 lowest education are lowest at older ages; but this group is relatively small in size.

These conclusions generally hold for both the camp and non-camp segments of the refugee population. The fertility of women with secondary education is always lower than that of women with lower education, but only at younger ages, 15-24 years. Also, there is a similarity between refugee between residing in and outside of the camps with regard to the higher fertility among women with elementary (or basic) education at lower ages as compared with women having the lowest education.

Some proximate determinants of fertility

Fertility varies not only by socio-economic variables such as education, but also by more direct (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.

Marriage and reproduction

Marriage and family reproduction are of prime importance in a policy-oriented demographic perspective largely because they affect birth rates. This is especially the case in the Arab countries where pre-marital fertility is a cultural taboo. The customary Arab marriage pattern can be generalized as early and universal marriage. More recently, however, there has been a trend towards later marriages and higher rates of celibacy in many countries. This trend is evident among refugees, with a direct bearing on fertility behavior and population growth.

Distribution of the respondents by marital status shows little differences between refugees and non-refugees in terms of exposure to fertility, especially in Jordan and Gaza Strip. Slightly smaller proportions of female refugees are currently married than their non-refugee counterparts in the three settings. More significant however are the differences across countries, corresponding to the differentials in fertility levels. Thus, Gaza stands out as the place with the least proportion of females remaining single, amounting to about 24 percent. On the other extreme, about 37 percent of the female camp-refugees in Lebanon are single. Interestingly, Jordan's refugees (37 percent single) are more closely similar to refugees in Lebanon than to those in the West Bank's (33 percent).

These differences in marital status generally hold across age groups of women, and are especially large during prime reproductive ages, 25-29 years. Camp refugees in Lebanon stand out with the largest proportions of women never married, resembling their Lebanese sisters (Figure 3). By age 25, almost 40 percent of women remain single, and about one out of every five women never marry by age 44 -- 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 age at marriage, it is not so for the West Bank. In other words, if a woman remained single by age 25 her chances of getting married are much greater in Jordan than the West Bank. Male labor 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.

(Figure 3 about here)

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 of celibacy, they tend to marry earlier on average than their sisters in Jordan. In every setting, refugee females are more likely to postpone marriage compared to their non-refugee counterparts.

Changes in the age at first marriage suggest that childbearing is taking place relatively later than previously. A rise in the age at childbearing depresses fertility, implying lower fertility than would have resulted without this "timing" effect (Bongaarts and Feeney 1998). The mean age at childbearing for women (aged 15-45) 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 birth might be considered small. There are noteworthy differences in age at birth over time, however. During the last two decades, age at birth witnessed a net increase in Lebanon and Jordan, but not in the West Bank or Gaza; and this is true for both refugees and non-refugees.

Figure 4 displays trends in the mean age of women at birth for the refugees and non-refugees separately. Among the refugee population, Lebanon stands out as the one with the lowest age at birth until very recently. Thus, for the last two decades, age at birth there increased from 25.8 to 27 years, on average. Age at birth for the other refugee populations

was essentially stable up 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, displaced in the same graph, show a striking similarity between the West Bank and Gaza, where age at birth declined (paused more recently). The non-refugees in Jordan witnessed a consistent increase in age at birth, amounting to 1.6 years during the last two decades. While age at birth increased everywhere during the entire period, it remained more or less stable (and in some cases declining) during the most recent period.

(Figure 4 about here)

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 (see, Khawaja 2000a). Although recent evidence shows that fertility within marriage remains high, it has been declining as a result of contraceptive use for family limitation. In this section, we describe briefly knowledge about and the use of contraceptives among the refugees.

There is a very high level of awareness about modern contraceptives, as shown in Table 3. 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 rest, with refugees in Lebanon being much more aware of every other modern method of contraception than those in Jordan or (to a great extent) the Palestinian territories. Still, the vast majority of women are knowledgeable about effective methods such as 'tubal ligation', condoms, abstinence, and breastfeeding. It is interesting to note that Gazan women seem to have more awareness of modern methods than their Jordanian sisters. More remarkable perhaps is the similarity between refugees and non-

refugees in their knowledge of contraceptives, with differences being mainly found between settings.

(Table 3 about here)

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 IUD -- about 40 of refugees residing outside Gaza have used either one at one point in their reproductive lives. Refugee women have not used the other modern 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 do women in the other places. Not surprisingly, women in Gaza Strip, refugees and non-refugees a like, 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 those between the different settings.

Of more immediate relevance is contraceptive use among currently married women. As shown in Table 4, there is an inverse relationship between current contraceptive use and fertility, with refugees in Lebanon are at the higher end and Gaza's are 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 contraceptives. In Gaza, about one-third of women report current use of contraceptives. 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 (36 percent) to use modern methods than non-refugees (31 percent). Traditional methods are the least used in Gaza (10 percent), followed by Lebanon (12 percent), but about 53 percent of currently married women in Lebanon use modern methods as compared with about 25 percent 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 a developing country, suggesting that desired family size is perhaps already part of the "calculus of conscious choice" (Coale 1973: 69) among refugees.

(Table 4 about here)

Surprisingly, contraceptive use does not increase consistently with education. The overall differentials in contraceptive use by educational levels are rather small. Also surprising is the larger prevalence of traditional contraceptive methods among women with secondary education compared to other women. Nor does the gap in contraceptive use between groups (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 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.

In Lebanon, contraceptive use increases from 60 percent among women with less than elementary education to about 72 percent of women with preparatory education, but then declines slightly with secondary education (to 68 percent). The same pattern is found for West Bank non-refugees. On the other hand, Jordan's refugees with basic/preparatory education are less likely (43 percent) to use contraceptives than other women (over 50 percent). The remaining 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 are smaller in the use of modern methods of contraception, but they generally point to the same direction. The only exception is Jordan's refugees, where women with the least educated women are more likely (40 percent) to use modern methods than women with preparatory (32 percent) or secondary education (34

percent). A similar situation is found for camp refugees in Lebanon, where women with preparatory education are more likely to use modern methods (61 percent) than others (50-52 percent). 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 percent of non-refugee women with secondary education in Jordan use modern methods, only 26 percent 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 fifth woman in Jordan and the West Bank uses traditional methods. The use of traditional methods increases more or less consistently with education among four of the groups, and women with secondary education always are more likely to use traditional methods than those with incomplete elementary. It is not clear why this is so; but might be due to health-related factors (see, Bledsoe et al. 1998).

As expected, contraceptive use depends on age. Generally, younger women, especially those aged 15-24, are less likely to use contraceptives than older women. Refugees in Lebanon are more likely to use contraceptives regardless of age, and women in Gaza are the least likely to use them. Also, the age patterns of use for refugees and non-refugees alike are essentially similar. The majority of refugee women in their prime reproductive ages, 20-29, are using contraception in Lebanon, but this is not so in the other contexts. The relatively large proportion of older women aged 40-49, using contraceptives, amounting to around 40 percent (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 spacing purposes.

The family planning programs implemented by UNRWA have enhanced contraceptive use among refugees. UNRWA clinics are the main source of contraceptive methods for first users in the camps of Jordan and Lebanon, accounting for about 30 and 38 percent of all users, respectively. Pharmacies and private doctors are the next main sources of supply, with 28 percent of first users in Jordan's camps and 40 percent of those in Lebanon's camps resorting to them. There are significant differences between these two groups with regard to the other sources -- Jordan's camps refugees rely more (24 percent) on other health clinics much like others in Jordan, compared with Lebanon's camp refugees (9 percent). Unlike camp refugees, Jordan's refugees and non-refugees alike rely first on friends, relatives and other sources for obtaining contraceptives, and these sources account for about 28 and 31 percent, respectively. Apparently, only one percent of refugees in Jordan resort to UNRWA clinics for contraceptives.

For the West Bank and Gaza Strip, there are significant differences between refugees and non-refugees and also between the two areas, in the use of contraceptive suppliers. While a separate category for UNRWA clinics is not included in the Palestinian health survey, these clinics are lumped with other MCH clinics in one category. Refugees in both areas (44 percent in Gaza and 28 percent in West Bank) initially resort to these clinics for their contraceptives, and this much larger than the corresponding percentages (13 and 2 percent, respectively) for non refugees. Still, however, the preferred source for West Bankers, both refugees (40 percent) and non-refugees (44 percent) is the private doctor; for Gazans, it is the pharmacy for non-refugees (50 percent) and the MCH clinic for refugees (44 percent). Thus, unlike Jordan, Gaza and West Bank's refugees differ markedly from non-refugees in the use of contraceptive suppliers, with UNRWA clinics are probably playing a greater role in providing effective, or otherwise safe, contraceptives for refugees in both areas.

Fertility preferences

To what extent are the differences observed in levels of fertility and contraception among refugees (and non-refugees) a reflection of variations in desires for children? According to the conventional demographic view, socio-economic development should reduce the demand for children, which would in turn result in actual family limitations (Kirk 1996). One would therefore expect a decline in desired fertility before a widespread reduction in fertility occurs, but this has not been the case in many situations (Cleland 1985). The underlying motives for high demand for children are numerous, including old-age security, farm work, and son preference. However, actual desired fertility is usually problematic for at least two reasons: women with high parities tend to rationalize unwanted births as desired, based on the number they already have, and the presence of relatively high proportions of non-numeric answers. In order to minimizes the impact of these factors, we report mean desired family size only for ever-married women aged, 20-29.

Actual desired family size among refugees is generally low, at least as compared to current levels of fertility. Mean desired family size ranged between 5 children in Gaza to 4.17 children in Jordan (Table 5). The difference of less than one child should be considered unduly small, given the wide disparity in levels of fertility between Gaza and Jordan. The differentials by refugee status are even smaller, if not negligible; but refugees report slightly higher desires for children than non-refugees, except in Jordan, regardless of educational attainment. This is somewhat unexpected since refugees have generally lower fertility levels. Furthermore, the camp refugees in Lebanon have higher desires than current fertility levels, and exceed those reported for Jordan's refugees.

(Table 5 about here)

Small educational differentials are found in desired fertility, especially for women below secondary education. The difference between refugee women with no schooling and those

with secondary education is merely about 0.6 of a child in Gaza and the West Bank; the corresponding ones are even smaller in Jordan and Lebanon, amounting to about 0.4 of a child. This is probably due to the larger presence of family planning services in Lebanon and Jordan compared to the Palestinian territories.

Conclusions

General features of the Palestinian refugee population are well known. The growth rate has been high, and has accelerated in the West Bank and Gaza during the Intifada years, as fertility remained high (or increased in Gaza) and mortality has fallen to low levels. Recently, fertility has begun to drop as well everywhere but Gaza, owing mainly to a postponement of marriage and an increase in the proportion of women remaining single. While age at marriage and birth is still low, it has 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 in every field by Arab standards. Fertility is lower among the refugees than the non-refugees in every setting, with the proportion married generally lower and age at marriage higher among the former as compared to the latter. Yet, the refugees have higher 'desire' for children than the non-refugees.

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 behavior of refugee women seems to converge with that of their non-refugee sisters everywhere. It is suggested that context-specific socio-economic conditions 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 diffusion of ideas of both contraception and small family norms. Further research is needed to determine the relative

strength of each of these factors in impacting family reproduction among Palestinians across settings.

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Table 1: Summary of data sources

Survey	Year	Sample			
		Coverage	House-holds	Women 15-54	Events in birth history
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 Condition 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

Table 2: Total fertility rate by period and country

Country and group	Period				Absolute change	Percent change
	1983-86	1987-90	1991-94	1995-98		
Gaza	**7.42**	**7.79**	**7.71**		**0.29**	**3.91**
Refugee	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 refugee	7.95	8.10	7.76		-0.19	-2.39
West Bank	**6.39**	**5.91**	**5.77**		**-0.62**	**-9.70**
Refugee	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 refugee	6.47	6.02	5.88		-0.59	-9.12
Jordan	**6.21**	**5.43**	**4.89**		**-1.32**	**-21.26**
Refugee	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 refugee	6.25	5.71	4.91		-1.34	-21.44
Lebanon						
Camp refugee		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.

GS refugee		GS non refugee		WB refugee		WB non refugee		Jordan refugee		Jordan non refugee		Lebanon	
Knows	Ever used	Knows	Ever used	Knows	Ever used	Knows	Ever used	Knows	Ever used	Knows	Ever used	Knows	Ever used
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
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
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
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
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
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
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
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
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
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
6.5	0.6	5.6	0.3	15.3	1.7	7.8	0.0	--	8.1	--	9.9	--	20.9

Table 4 :Percentage of currently married women using contraception by education

Method and country	Less than elementary	Elementary	Preparatory	Secondary	Total
Modern					
Lebanon camp refugee	50.6	50.2	60.8	52.2	53.2
Jordan refugee	39.9	-	31.6	33.9	**35.7**
Jordan non-refugee	26.0	-	31.2	37.4	30.9
WB refugee	34.4	33.3	26.5	44.0	**34.6**
WB non-refugee	32.9	37.1	38.7	33.8	35.8
GS refugee	17.1	20.5	28.4	28.2	**25.0**
GS non-refugee	20.0	19.7	29.7	36.3	27.3
Traditional					
Lebanon camp refugee	9.8	14.6	10.8	15.9	12.5
Jordan refugee	11.9	-	11.7	21.2	15.1
Jordan non-refugee	17.0	-	19.9	23.7	19.9
WB refugee	10.1	16.4	24.4	20.0	17.9
WB non-refugee	14.8	15.3	19.8	22.1	17.6
GS refugee	6.6	8.3	8.2	13.8	9.8
GS non-refugee	5.3	14.1	9.2	11.7	9.4
Any method					
Lebanon camp refugee	60.3	64.8	71.5	68.1	65.6
Jordan refugee	51.9	-	43.3	55.1	50.8
Jordan non-refugee	43,0	-	51.1	61.2	50.8
WB refugee	44.5	49.7	50.9	64.0	52.5
WB non-refugee	47.7	52.4	58.5	55.9	53.4
GS refugee	23.7	28.8	36.6	42.0	34.8
GS non-refugee	25.3	33.8	38.9	48.0	37.4

Table 5: Mean ideal number of children, women aged 20-29

Country	None	Elementary	Preperatory /Basic	Secondary +	Total
Gaza Strip					
Non refugee	5.03	4.97	4.81	4.59	4.82
Refugee	5.44	5.16	4.95	4.85	5.00
West Bank					
Non refugee	5.09	4.43	4.23	4.11	4.36
Refugee	4.89	4.94	4.43	4.21	4.54
Jordan					
Non refugee	4.46	--	4.45	4.02	4.28
Refugee	4.36	--	4.30	3.99	4.17
Lebanon					
Refugee (camps)	4.21	4.40	4.58	3.80	4.33

Figure 1: Age-specific fertility by country and refugee status

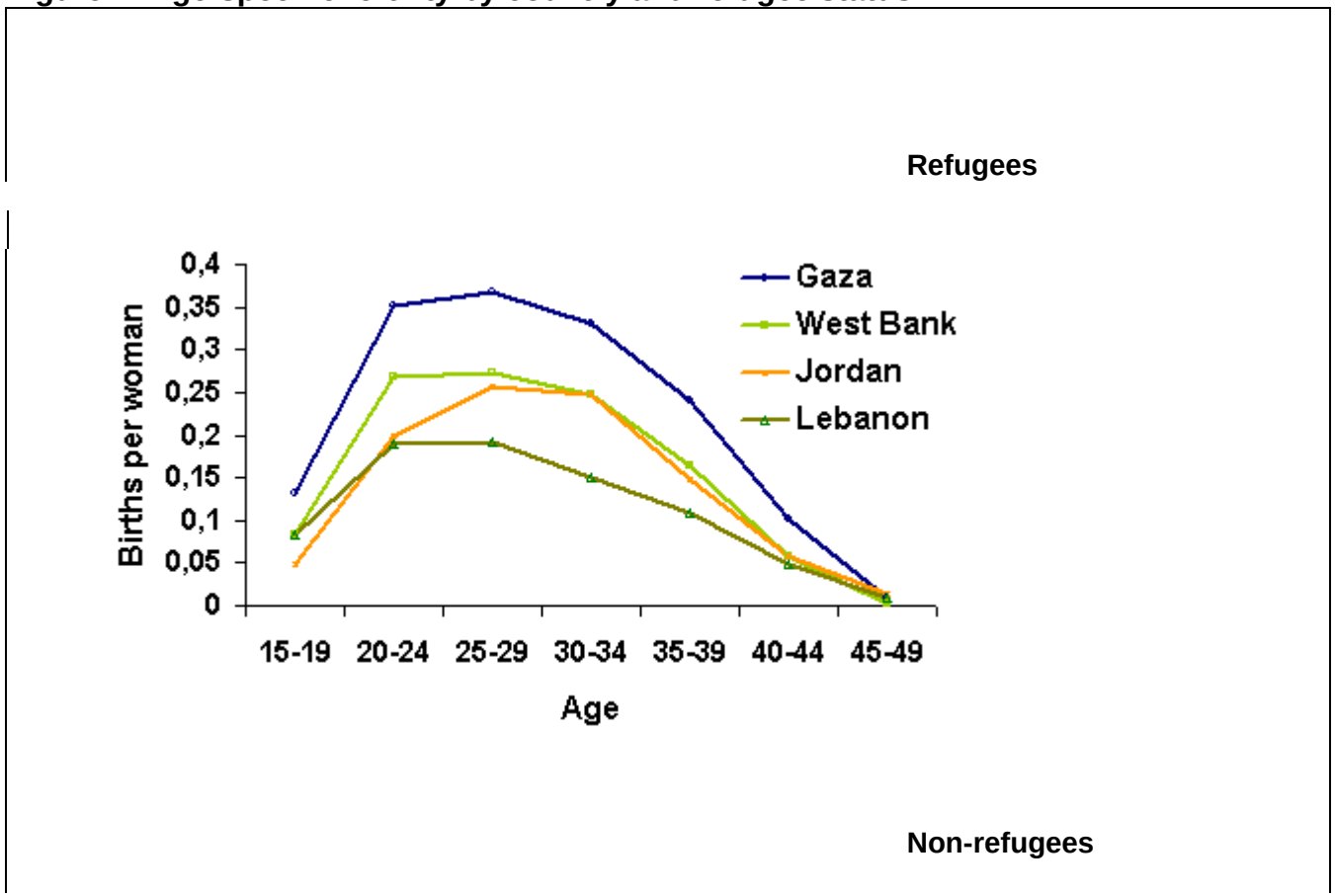
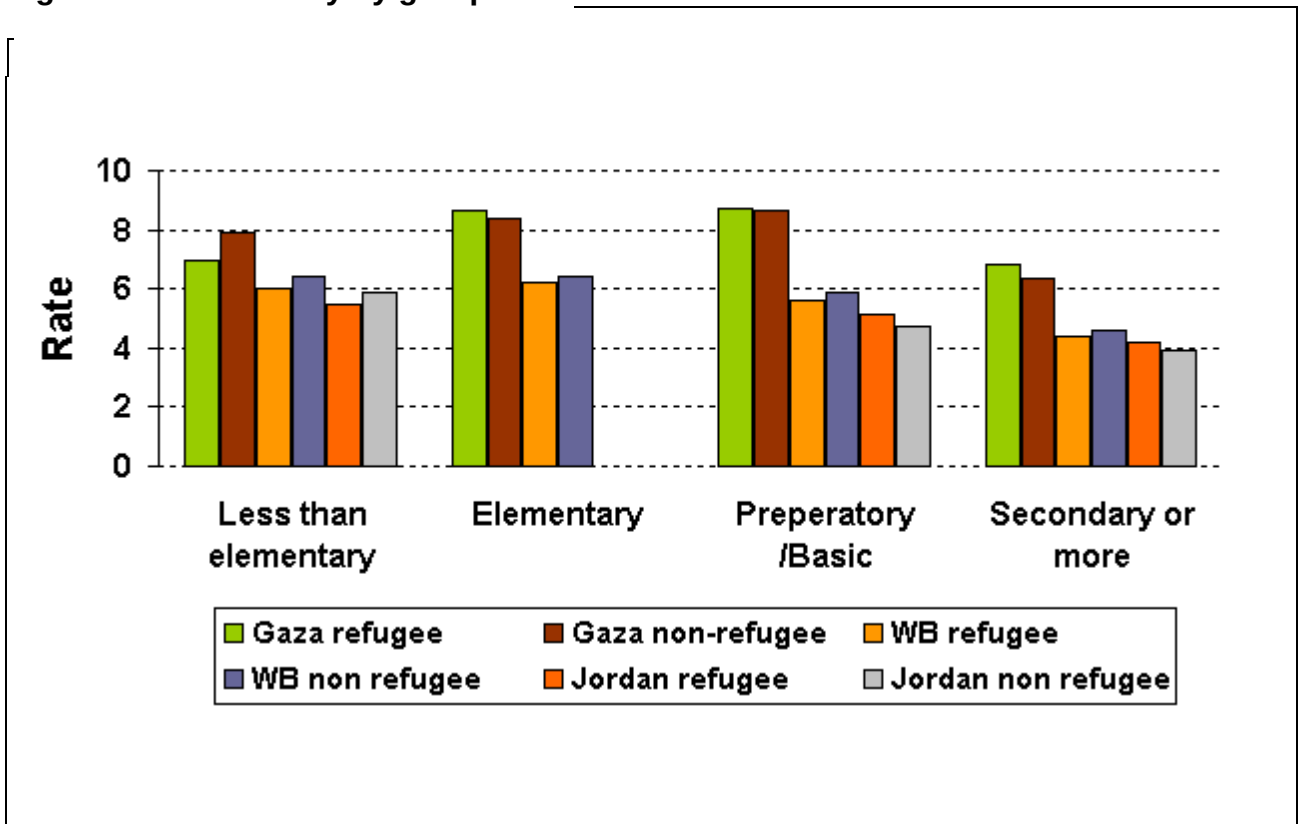


Figure 2: Total fertility by group and education



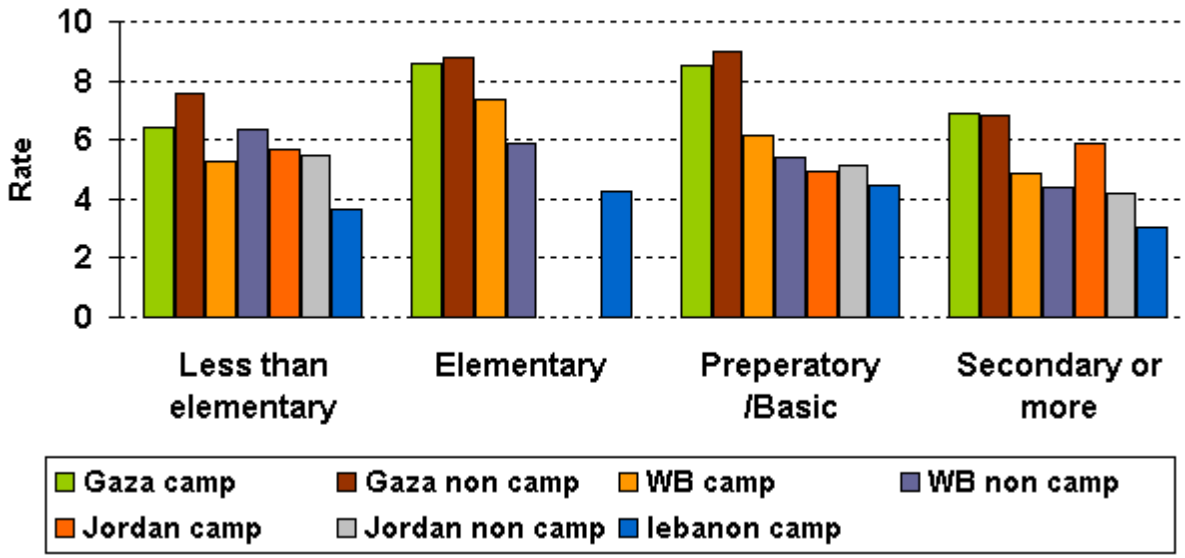

10
8
6
4
2
0
Rate
Less than elementary
Elementary
Preperatory /Basic
Secondary or more
Gaza camp
Gaza non camp
WB camp
WB non camp
Jordan camp
Jordan non camp
lebanon camp

Figure 3: Proportion of female never married by refugee status

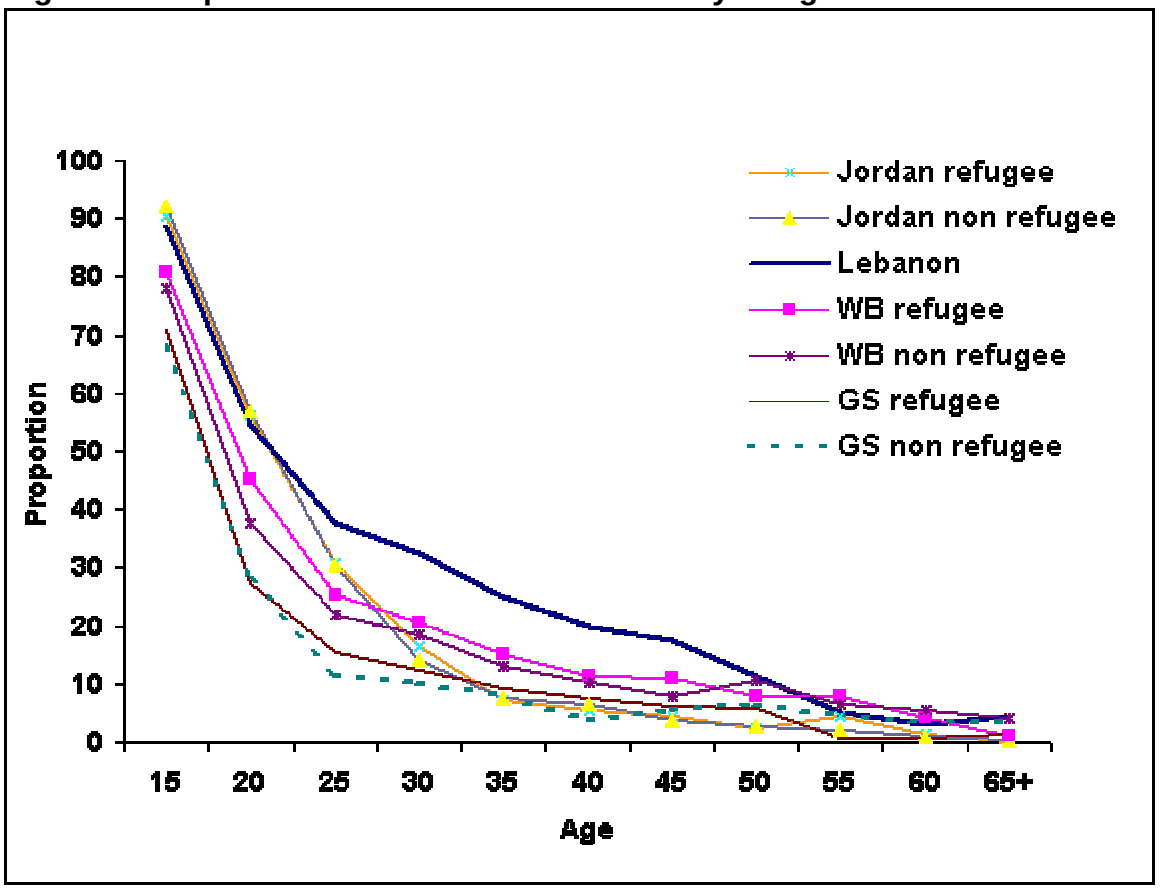
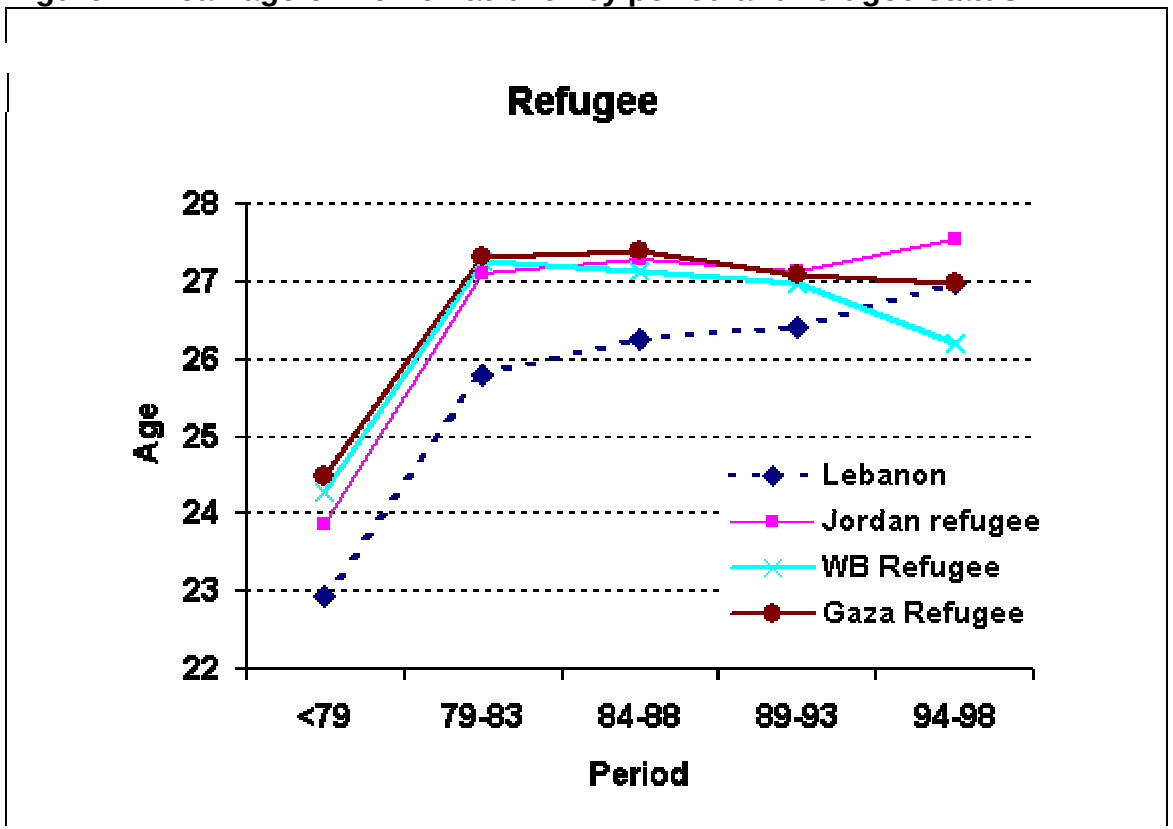
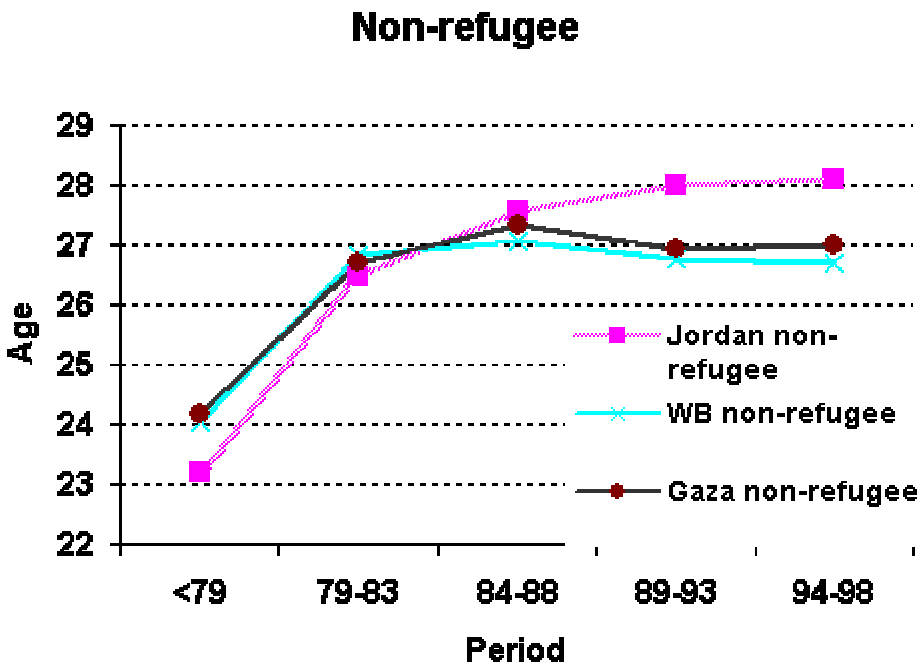


Figure 4: Mean age of women at birth by period and refugee status




Non-refugee
29
28
27
26
25
24
23
22
Age
<79
79-83
84-88
89-93
94-98
Period
Jordan non-refugee
WB non-refugee
Gaza non-refugee