

# Fertility and Family Planning Trends in Karachi, Pakistan

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**Context:** *In Pakistan, total fertility rates are high, contraceptive prevalence is low and there is widespread disagreement over whether fertility has begun to decline. It is likely that any drop in births in Pakistan will be seen initially among urban, middle-class women.*

**Methods:** *A cross-sectional survey of 3,301 households in urban Karachi collected information on the reproductive history and family planning knowledge and practices of 2,651 ever-married women aged 54 or younger. Birth-cohort analysis was used to identify time trends in fertility and use of modern contraceptives.*

**Results:** *Respondents had more education and higher socioeconomic status than the national average. Their total fertility rate was 3.0 lifetime births per woman, the general fertility rate was 98.3 births per 1,000 women aged 15–49 and the crude birthrate was 23.2 births per 1,000 population. As recently as 1976, the TFR among the sample population had been 5.7 births per woman. Forty-two percent of married women aged 15–49 currently used a modern contraceptive method. Among women born in 1950–1954, 64% had ever used contraceptives, compared with 37% of women born in 1940–1944. The most commonly used contraceptive method among current users was the condom (40%), followed by tubal ligation (27%) and the IUD (12%). Overall, 53% of users obtained their method at pharmacies or markets, and 24% used private hospitals or clinics. Some 71% of currently married, nonpregnant respondents reported having achieved their desired family size.*

**Conclusions:** *Among a relatively well-educated, middle-class population in urban Karachi, there is a strong trend toward declining fertility and increasing utilization of contraceptives. However, considerable unmet need for family planning is still evident.*

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Controversy exists over the success of the family planning program in Pakistan,<sup>1</sup> a country where the national fertility rate is estimated to be among the highest in the region.<sup>2</sup> The 1990–1991 Pakistan Demographic and Health Survey (PDHS) indicated that fertility had declined modestly since earlier national surveys: The total fertility rate (TFR) in 1990–1991 was 5.4 lifetime births per woman,<sup>3</sup> compared with TFRs of 6.0 in 1985,<sup>4</sup> 6.5 in 1980,<sup>5</sup> and 6.3 in 1975.<sup>6</sup> However, the declines appear to have been substantial only among educated women and those living in urban areas.

The “believability” of the apparent decline has been questioned because of discrepancies between the estimated TFR and the persistence of a high crude birthrate and low contraceptive prevalence.<sup>7</sup> That

the gap between the TFR and the mean number of children born to women aged 40–49 is widening over time provides some evidence of declining fertility. However, this evidence is not strong: Because most of the apparent fertility decline has occurred among the youngest age-groups, critics attribute any change in fertility to increasing age at first marriage, and debate whether the delayed births will resurface as higher age-specific fertility among 20–29-year-olds in later surveys.<sup>8</sup> Most researchers agree that without increasing contraceptive use, substantial declines in the TFR and the population growth rate cannot be expected.

In addition, until the publication of the 1994–1995 Pakistan Contraceptive Prevalence Survey (PCPS), there had been little evidence that family planning utilization had increased over the past several decades.<sup>9</sup> Data from Pakistan’s national demographic surveys between 1965 and 1991 suggest that overall, Pakistani families have been slower to adopt family planning practices than their South Asian neighbors: By 1991, approximately 12% of Pakistani couples were attempting to limit

pregnancies, and 8% were using modern family planning methods.<sup>10</sup> By 1994–1995, these rates had increased to 18% and 13% respectively.<sup>11</sup>

There are few studies demonstrating overall fertility decline in Pakistan, and most authors<sup>12</sup> agree that, in spite of some methodological problems affecting comparability, the best interpretation of the available data is that there has been no substantial change in fertility in Pakistan. In this article, we examine measures of fertility and contraceptive use to explore these fertility trends among a subgroup of urban Pakistani women.

## Methods

### Study Population

The study employs data from a cross-sectional survey designed to provide community-based information to the Aga Khan Health Service of Pakistan (AKHSP).<sup>\*</sup> The study population was defined as those living in the neighborhoods that give rise to 75% of the clients of AKHSP’s three maternity homes. The study boundary did not define an exclusive catchment area, as many other private and government hospitals also function nearby.

In Karachi, the AKHSP maternity homes serve a self-referred clientele of wide geographic origin and ethnic composition, and clients travel to the homes from different parts of the city. As Karachi grew, and as the AKHSP expanded, new AKHSP maternity homes were built farther away from the core of the old city harbor. Thus, the survey sample involves an irregular, wedge-shaped territory originating near the harbor and extending to densely populated residential neighborhoods, and it includes

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households from a wide range of socioeconomic circumstances.

### **Sampling**

The goal of the survey was to include a random sample of 3,000 households, 1,000 from within the 75% catchment area of each of the three AKHSP maternity homes. The addresses (or, where addresses were imprecise, the neighborhoods) of the 500 most recent users of each of the three maternity homes were plotted on neighborhood and city maps. A geographical study boundary was then drawn containing 75% of the maternity home clients, and 75 survey sites (25 surrounding each maternity home) were allocated among neighborhoods, in proportion to the number of clients from each area. Within each neighborhood, survey-site starting points were plotted randomly on city maps using a numbered grid, and from an index household at each site, the 40 nearest households were included in the survey sample. Households that refused to participate in the study were replaced with adjacent households until the target number of households at the site was reached.

### **Data Collection**

There were no criteria for excluding households from the survey. Where a household contained no ever-married women 54 years of age or younger, the interview consisted only of a brief demographic survey of household members. At least one return visit was made to each survey site to recontact households where no one was at home or where adult women members were absent at the time of the first visit. Household data were usually provided by women, or by men in the absence of women respondents. No proxy respondents were used for the women's questionnaire.

The survey was conducted over six weeks in January and February 1994. Data were collected with a nine-page questionnaire in Urdu and English that requested information on household composition and wealth, maternal and paternal education, and the complete reproductive history of each ever-married woman younger than 55. Additional questions covered tetanus toxoid immunization, place of prenatal and delivery care, and family planning knowledge and use.

Two survey teams, each consisting of a driver and vehicle, a male supervisor, a female supervisor and eight interviewers, fielded the questionnaire. Three days were spent training in the classroom and two were spent pilot-testing the survey. The driver and male supervisor were present to en-

sure the security of the survey staff, since the survey was conducted in a wide variety of locations, some with known political tensions. The supervisors were instructed to observe at least one interview by each interviewer per day, correct deficiencies in obtaining informed consent and report daily any problems in data coding or quality. Data were analyzed using Epi Info 6.04 software.

### **Results**

The survey included 3,301 households. In 176 households (5%), no one was at home to be interviewed on either visit, and in 228 households (7%), occupants refused to participate. A common reason for refusal was fear of robbery; refusal rates were highest in the wealthiest areas. From the remaining households, 2,651 ever-married women were interviewed. The overall response rate among households in which at least one member was at home was 93%.

### **Survey Reliability**

A random 5% of respondents (n=125) were revisited within two days of the original survey, and a subsample of questions were repeated in order to assess reliability. Agreement between the original sample and the retest subsample concerning the number of persons living in the household and the number of ever-married women younger than 55 occurred in 94% and 96% of cases, respectively. Birth year of the respondent's youngest child was the same in 94% of cases, and birth year of the respondent was similar in 89% of cases. In 85% of cases, respondents agreed as to the birthplace of the youngest child, while their reports on the identity of the person most responsible for choosing this facility agreed in 67% of cases. Agreement regarding current pregnancy status occurred in 98% of cases. Eighty-one percent of responses regarding current use of any family planning method were the same: Respondents reported current use at both survey points in 29% of cases; in 15% of cases, respondents said "no" on the first occasion and "yes" on the second, while in 4% of cases they said "yes" on the first visit and "no" on the second—a net bias of 11% in affirming use of family planning on the second but not the first visit. Among respondents who reported contraceptive use on both occasions, agreement concerning the method used was 93%.

### **Sample Demographics**

Socioeconomic status of the survey sample was measured by three indices: reported occupation, ownership of durable household goods (an index of 10 items) and crowding

index (defined as persons per room, excluding kitchen, bath or toilet, verandah and storage space). Per capita income, based on the indirect estimation of wages and occupations of household members, was 833 rupees per month\* (799 in the harbor area and 1,287 in the residential area). The average household owned 4.9 durable goods (4.1 among households in the harbor area and 5.9 among those in the residential area); 56% owned radios and 86% owned televisions (proportions similar to those reported in the 1994–1995 PCPS).

Mean family size was 6.4 persons. Crowding index was 2.8 persons per room, although this index varied by area: In the older, more congested harbor area, the mean crowding index was 3.5, and in the more affluent residential area, it was 2.1.

The educational attainment of respondents in the survey was high compared with the national average for urban areas. Among men, 15% had received no education, 19% had completed primary school, 20% had completed middle school and 46% had at least a secondary education. Among women, 28% had no education, 26% had attained a primary education, 18% had completed middle school and 28% had attained an education at or above the secondary level.<sup>†</sup> On average, men had received 10 years of education and women 7.7 years.

Forty-one percent of respondents spoke Urdu; 8% spoke Sindhi; 12% Gujarati; 7% Balochi; 6% Punjabi; 8% Katchi; 3% Pushto; and 15% other languages. Seventy-three percent were Suni Muslims and 25% were Shia. Fewer than 1% each of respondents were Hindu, Christian or Parsee.

### **Fertility**

The crude birthrate for the sample was 23.2 births per 1,000 population, a rate much lower than the estimate from the 1990–1991 PDHS either for Karachi (36.2 births per 1,000) or for the country as a whole (35.0 per 1,000). The crude birthrate was higher near the harbor (26.7 per 1,000) than in the residential area (19.3 per 1,000). The general fertility rate of 98.3 births per 1,000 women aged 15–49 also was lower than the rate reported in the PDHS for Karachi (173.5 per 1,000) or for the country as a whole (177.0 per 1,000).

\*At the time of data collection, 31 Pakistani rupees were equivalent to one U.S. dollar.

†Corresponding figures for residents of major cities in the PDHS were 27%, 27%, 13% and 32%, respectively, for males and 38%, 29%, 12% and 22% for females. National levels of educational attainment were substantially lower: 68%, 20%, 5% and 7%.

**Table 1. Total fertility rate (TFR), age-specific fertility rate and general fertility rate among ever-married women aged 15–49, 1976–1991, Karachi, Pakistan**

Age-group	1976	1981	1986	1991
<b>TFR†(SE)</b>	<b>5.68 (5.19, 6.15)</b>	<b>4.69 (4.38, 4.99)</b>	<b>3.94 (3.74, 4.14)</b>	<b>3.03 (2.91, 3.14)</b>
15–19	100.0	75.9	60.2	31.5
20–24	234.3	223.9	182.5	151.7
25–29	277.7	233.9	227.5	183.5
30–34	193.5	189.3	161.1	133.3
35–39	194.6	80.6	85.3	61.9
40–44	na	102.7	38.7	21.3
45–49	na	na	32.4	4.8
General fertility rate	190.3	156.6	132.6	98.3

†The standard error (SE) for the TFR was estimated using binomial assumption for the age-specific rates, and ignoring possible covariance between successive age-specific fertility rates. Note: The column headings 1976, 1981, and 1986 refer to the midpoints of five-year intervals. TFRs for 1991 were calculated from a six-year average of births in 1988–1993. Data were partially truncated in 1976 and 1981, and TFRs for these dates were calculated using age-specific fertility rates for the closest time period for which data were available.

By examining the number of reported births by age-group according to birth cohort, we estimated general fertility rates, age-specific fertility rates and TFRs for the study population over approximately 20 years. (Due to the age structure of the survey population, however, these results are partially truncated for the years 1976 and 1981.) There was a strong, consistent downward trend in these fertility measures over time. The general fertility rate appears to have decreased from 190 births per 1,000 in 1976 to 157 per 1,000 in 1981, 133 per 1,000 in 1986 and 98 per 1,000 in 1991 (Table 1). The TFR also has fallen, from a mean of

5.7 births per woman in 1976 to 3.0 in 1991. Declines in age-specific fertility over time are most marked among women aged 15–19 and those aged 35 and older: Among women in these age-groups, current fertility rates were less than one-third of those 20 years prior.

**Proximate Determinants of Fertility**

According to the 1991 PDHS, the average age at first marriage in Pakistan increased from 16.7 in 1961 to 21.7 in 1990–1991. The mean age at first marriage among ever-married respondents was 19.5 years. Among women aged 15–19 at the time of the survey, however, only 5.4% were currently married, suggesting that age at first marriage may be increasing; 40% of those aged 20–24 were ever-married, as were 71% of those aged 25–29, 86% of those aged 30–34 and 90% of those aged 35–39. (Corresponding figures from the 1991 PDHS were 24%, 60%, 83%, 92% and 92%, respectively.)

The prevalence and duration of breastfeeding is an important determinant of fertility in populations with a low prevalence of contraceptive use. Ninety percent of the 559 infants born to women in this sample between 1989 and 1991\* were breastfed; 65% were breastfed for six months or more, and 52% were breastfed for 12 months or more. The mean duration of breastfeeding was 13.6 months, and the median duration was 12 months.

**Family Planning Knowledge and Use**

Knowledge of contraceptive methods was assessed with open-ended questions followed by prompting. Virtually all respondents (99%) reported knowing of either a modern or traditional method of family planning: Four out of five (79%) knew of at least one modern method, and 47% knew of at least one traditional method.

Knowledge of modern contraceptives

varied by method, with 63% of respondents aware of oral contraceptives, 57% familiar with the condom and 58% familiar with the progesterone injection. In comparison, the 1990–1991 PDHS reported that 77% of the national sample and 94% of the urban sample knew of at least one modern method of family planning.

Table 2 presents the proportion of ever-married women who knew of at least one modern method, stratified by age, education, socioeconomic status and migrant status. The data show that knowledge was higher among women aged 25–39 (81–82%) than among women aged 15–19 (68%), and was higher among women with any education (80–85%) than among women with none (68%).

Among married, nonpregnant women in the study population, 45% reported current use of any family planning method, and 42% reported use of a modern method. Prevalence of modern method use was lower among women who were poor (35%) than among those of higher socioeconomic status (41–43%), and was also lower among women who lacked education (29%) than among women having any education (43–44%). Adolescent women (16%) and women older than 45 (29%) were less likely than women aged 20–44 (33–45%) to use a modern method. Rural migrants had lower rates of modern method use than did those who were Karachi residents (32% vs. 40%).

Tubal ligation was the most prevalent modern method of long-term family planning (27%), and the condom was the most prevalent short-term modern method (40%). Twelve percent of respondents reported current use of the IUD, 8% currently used oral contraceptives, 7% relied on the implant and about 5% used the injectable (not shown).

In all age-groups, the likelihood of modern method use rose with the number of living children. Overall, only 2% of married, nonpregnant women with no living children were using a modern method of family planning, compared with 26% of women with one child, 42% of those with two children and 50% of women with three children. Modern method use did not increase with further increases in parity, however.

Among all ever-married women in the survey population, 54% reported that they had ever used a contraceptive method. We used a historical birth-cohort analysis to

\*To avoid bias resulting from the use of truncated data or difficulty with recall, breastfeeding was assessed only for women's most recent births occurring before January 1992 and after December 1988.

**Table 2. Percentage of ever-married, non-pregnant women aged 15–49 reporting knowledge and current use of modern contraceptive methods, by selected characteristics (N=2,620)**

Characteristics	Knowledge	Current use†
Total	78.9	41.6
<b>Age</b>		
15–19 (ref)	67.7	16.1
20–24	78.8*	32.7*
25–29	81.5*	40.0*
30–34	81.7*	44.6*
35–39	80.6*	44.6*
40–44	74.9	44.8*
≥45	72.5	29.4
<b>Education (in years)</b>		
0 (ref)	68.5	28.5
1–4	81.8*	42.9*
5–10	80.4*	42.9*
≥11	84.6*	43.6*
<b>Migrant</b>		
no (ref)	79.7	40.3
yes	76.1	31.6*
<b>Socioeconomic status‡</b>		
Low (ref)	72.6	35.1
Medium	82.2*	41.4*
High	85.5*	42.5*

\*Difference from reference category is statistically significant at p<.05. †Among married, nonpregnant women. ‡Socioeconomic status was categorized according to number of durable goods owned by household, with low=0–4, medium=5–7 and high=8–10. Note: ref=reference category.

approximate time trends in ever-use of family planning in the study population. The results show a marked trend of increasing use over time: Whereas 37% of women born in 1940–1944 reported ever having used contraceptives (95% confidence interval, 29–45%), this proportion increased to 48% among the 1945–1949 birth cohort and to 64% among the 1950–1954 birth cohort (95% confidence intervals, 42–55% and 59–70%, respectively). Among women currently aged 35–39 (the 1955–1959 birth cohort), 60% had ever used contraceptives (95% confidence interval, 55–64%). This slight decrease, in comparison to the prevalence in the previous birth cohort, probably reflects that women in this age-group are still becoming first-time method users.

### *Fertility Preference and Unmet Need*

Women in the sample were asked: “Is your family now as large as you would like it to be, or do you wish more children?” Of the 2,355 currently married, nonpregnant respondents, 22% stated that they wanted more children, 71% said they had their desired number of children, 5% responded that the size of their family was the “will of Allah,” and 3% did not respond or did not know. Fertility preference was strongly related to the number of living children: Some 67% of women with two children and 84% of those with three children stated they had achieved their desired family size, while among women with four or five children, this proportion increased to 91% and 94%, respectively.

Thus, 71% of currently married nonpregnant women reported having achieved their desired family size, yet only 42% reported use of a modern contraceptive method. This suggests that perhaps as many as one-third of married women have an unmet need for contraceptives.

### *Source of Family Planning Methods*

Overall, 26% of current contraceptive users did not know the source of their family planning method, possibly because in Pakistan men tend to make family purchases. Of those who reported a source, 23% obtained their method from a government source (such as a hospital or family planning clinic), 24% reported a private medical source and 53% obtained their method from a pharmacy or market.

Of the 262 women who had undergone tubal ligation and had reported the source, 53% had used private medical clinics or hospitals; the remainder said that government hospitals and family planning centers were their providers. Among users

of nonpermanent methods of family planning, the largest proportions (62% of condom users and 58% of pill users) cited a pharmacy or market as their source; fewer than 10% obtained their method from government clinics. Among women using the IUD, the implant or the injectable, the proportions using private medical or government sources were evenly distributed among the different methods.

## **Discussion**

Our study has two important limitations that affect the interpretation of the results: data quality and reliability; and the socioeconomic and educational status of the study population.

First, while every effort was made to reduce bias in the data—through training, close supervision and use of historical event and age charts—it is probable that some bias was incorporated.

Historically, survey results from Pakistan have been skewed by the custom among Pakistanis of overstating the ages of children (spuriously lowering fertility rates)<sup>13</sup> and the tendency of interviewers to inflate the ages of children to avoid having to ask additional questions.<sup>14</sup> In our survey, for example, for the year 1989, 435 births were reported—an unexpectedly low number, and 46 fewer than the average of the two prior and subsequent years. This number falls outside the 95% confidence interval for random variation (445–525 births). A possible explanation is interviewer bias: Interviewers reporting births that occurred after January 1989 required the completion of 10 more questions than those reporting births that occurred before this date. Interviewers may have misreported birth dates to avoid having to ask these additional questions. Similar problems were documented in the 1991 PDHS survey. The importance of interviewer training and close field supervision in future studies cannot be overemphasized.

To compensate for the misclassification of births, we recalculated the most recent fertility estimates for 1989–1993 as a six-year average, including all births in 1988; misclassified births were thus included in the most recent interval. This recalculation led to a modest elevation of the estimated TFR for the interval 1988–1993, from 2.96 to 3.03 lifetime births.

Our data generally can be described as showing moderate to high retest reliability,<sup>15</sup> but with variation according to question type. In particular, we are concerned about the reliability of age reporting and its effect on fertility measures. In this survey, agreement on retesting was 94% for

birth year of infants and 89% for birth year of mothers (without net age bias). However, bias in favor of reporting additional knowledge and use of family planning methods on retesting was apparent, and not unexpected, considering the sensitivity of the subject in Pakistan.

While every effort was made to assure the comfort and privacy of respondents during questioning (e.g., family planning questions were asked at the end of the questionnaire, when rapport with the interviewer was highest), there is evidence from these data that some “shy” users (15% in this sample) do not immediately report either knowledge or use to interviewers. The net positive bias<sup>16</sup> of 11% (the increase in the percentage of women who stated they were currently using family planning from the first to the second interview) leads us to conclude that our reported estimate of current modern family planning use (42%) is in fact a substantial underestimate. If we were to add the estimate of the proportion of women who are “shy” users, the level of current use might be closer to 53%.

To our knowledge, the reliability of family planning questions in other studies conducted in Pakistan has not been routinely assessed; it is possible that due to respondent bias, family planning knowledge and use in Pakistan has been substantially underestimated. Clearly, future studies of family planning in Pakistan, as elsewhere, should report reliability measures routinely.

The urban, middle-class character of this study population is a strong limitation in generalizing the findings to other parts of Pakistan. Clearly, this Karachi sample, deliberately chosen to reflect the catchment area of private maternity homes, was better educated and wealthier than the average Pakistani household, and at least slightly better off than the average urban resident. Because of differences in wealth and education, the results of this survey can not be generalized to the country, or to Karachi as a whole. A better interpretation of the findings is that they are specific to this urban, largely middle-class subpopulation.

With these caveats in mind, the main findings of the survey remain substantial and convincing: A dramatic change in fertility has occurred within the study population over the past 20 years. We believe that the effects shown—a TFR that has fallen from 5.7 to 3.0 births per woman, strong internal consistency in the data and clear separation of the confidence intervals around each estimate—are of a magnitude

that argues against an explanation based on bias or sampling error alone. Clearly, there are strong parallel trends toward increased utilization of family planning in urban, middle-class Karachi and a drop in fertility. The contraceptive prevalence (45%) is the highest level reported from any community survey in Pakistan to date, and may even be somewhat underestimated. Taken together, these data suggest that for this urban subgroup at least, the demographic transition in Pakistan is underway.

The high proportion of family planning users who obtain their supplies from private sources such as pharmacies or medical clinics is notable. Although 23% of users who reported a source attended government family planning clinics or hospitals, the bulk of sterilizations and temporary methods were obtained through private sources. This finding is in agreement with other data<sup>17</sup> indicating that this population uses private maternity homes for the majority of prenatal and delivery services. Clearly, more research into client preferences for private health care services in both maternal health and family planning services is called for.

## Conclusions

The women surveyed in this study had lower fertility than the national population and showed strong declining fertility trends over time. The significance of this data is considerable in Pakistan, where evidence of fertility change has been limited (and controversial). At least for an urban, relatively well-educated subgroup, contraceptive use and fertility appear to be changing rapidly. The contraceptive prevalence seen in this population is not solely accounted for through the government's provision of family planning supplies: Contraceptives were obtained from government clinics or hospitals in less than a quarter of the cases where the source was known. Markets and pharmacies are common sources of the most easily accessible methods, and families frequently turn to private doctors for both sterilization and methods of birth spacing. In spite of the increased use of family planning reported by survey respondents, however, there remains a considerable "unmet need" for family planning—perhaps as many as one-third of our respondents.

Overall, our findings suggest that the urban population of Pakistan is moving toward widespread use of family planning. Whether government clinics will encourage user confidence by providing services of perceived high quality, and whether the private clinics that serve an

increasing proportion of the urban middle-class will move to address the need, are important subjects for institutional audit and policy review.

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## Resumen

**Contexto:** En Pakistán, las tasas globales de fecundidad (TGF) permanecen elevadas, la prevalencia del uso de anticonceptivos es baja y hay desacuerdo con respecto a que la fecundidad haya comenzado a declinar. Es probable que si hay alguna disminución de la fecundidad en Pakistán, esto ocurra al principio entre las mujeres de clase media de las zonas urbanas.

**Métodos:** Se realizó una encuesta transversal de 3.301 hogares en la zona urbana de Karachi, la cual recopiló información sobre los antecedentes reproductivos y sobre el conocimiento y prácticas de planificación familiar de 2.651 mujeres que se habían casado alguna vez, de 54 años de edad o menores. Se utilizó un análisis de cohortes para identificar las tendencias temporales de la fecundidad y del uso de anticonceptivos modernos.

**Resultados:** Las entrevistadas tenían un mejor nivel de educación y de condición socioeconómica que el promedio nacional. Su TGF era de 3,0 hijos por mujer, la tasa general de fecundidad era de 98,3 nacimientos por cada 1.000 mujeres de 15–49 años y la tasa bruta de natalidad era de 23,2 nacidos por una población de 1.000. Tan recién como en 1976, la TGF entre la población de la muestra había sido de 5,7 hijos por mujer. El 42% de las mujeres casadas de 15–49 años, actualmente usan un método anticonceptivo moderno. Entre las mujeres nacidas entre los años 1950 y 1954, 64% había usado anticonceptivos alguna vez, en comparación con 37% de las nacidas entre 1940 y 1944. El método más corrientemente usado por las entrevistadas era el condón (40%), seguido de la ligadura tubaria (27%) y el DIU (12%). En general, 53% de las usuarias obtuvieron su método en las farmacias o mercados, y 24% utilizó hospitales privados o clínicas. Alrededor del 71% de las mujeres casadas y no embarazadas indicaron que habían logrado el número deseado de hijos.

**Conclusiones:** Entre la población urbana de clase media de Karachi, con niveles relativamente altas de escolaridad, hay una gran tendencia hacia la disminución de la fecundidad y el mayor uso de anticonceptivos. Sin embargo, aún es evidente la necesidad insatisfecha que existe en materia de planificación familiar.

## Résumé

**Contexte:** Au Pakistan, l'indice synthétique de fécondité est élevé, la prévalence contraceptive est faible et la question de savoir si la fécondité a commencé à baisser est loin d'être résolue. Les premiers signes de déclin de la natalité y seront vraisemblablement observés parmi les femmes des classes moyennes urbaines.

**Méthodes:** Une enquête transversale menée auprès de 3.301 ménages de la région urbaine de Karachi a recueilli des informations sur les antécédents procréateurs et la connaissance et

pratique du planning familial de 2.651 femmes mariées ou l'ayant été, jusqu'à l'âge de 54 ans. L'analyse de cohorte de naissances a été utilisée pour identifier les tendances temporelles de fécondité et de recours à la contraception moderne.

**Résultats:** Les répondantes étaient plus instruites et de rang socio-économique supérieur à la moyenne nationale. Leur indice synthétique de fécondité était de 3,0 naissances finales par femme, l'indice général de fécondité étant de 98,3 naissances par millier de femmes, âgées de 15 à 49 ans, et le taux brut de natalité, de

23,2 naissances par millier d'habitants. En 1976 encore, l'indice synthétique de fécondité s'élevait à 5,7 naissances par femme. Quarante-deux pour cent des femmes mariées, âgées de 15 à 49 ans pratiquaient une méthode de contraception moderne au moment de l'enquête. De celles nées entre 1950 et 1954, 64% avaient déjà pratiqué la contraception, par rapport à 37% de celles nées entre 1940 et 1944. La méthode la plus pratiquée parmi les utilisatrices courantes était le préservatif (40%), suivi de la ligature des trompes (27%) et du stérilet (12%). Dans l'ensemble, 53% des uti-

lisatrices se procuraient leurs méthodes en pharmacie ou au marché, et 24% s'adressaient à des cliniques ou hôpitaux privés. Quelque 71% des répondantes mariées ou l'ayant été et non enceintes ont déclaré avoir atteint leur nombre d'enfants désiré.

**Conclusions:** Il existe, au sein de la classe moyenne relativement bien instruite du centre urbain de Karachi une forte tendance au déclin de la fécondité et un recours croissant à la contraception. Un besoin considérable de planning familial non satisfait n'en demeure pas moins évident.