Contraceptive Use among the Poor in Indonesia

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Key Findings

- **There are significant gaps in modern contraceptive prevalence between the extremely poor, the moderately poor and the better off.**
  Putting the current situation in a time perspective, modern CPR among the extremely poor today is what it was for the general Indonesian population 15 years ago; for the moderately poor the time gap in modern CPR among is about 8 years.

- **Contrary to widespread assumptions, access and cost do not seem to be the major factors causing the lower levels of contraceptive use among the poor.**

- **Attitudinal barriers are as powerful or possibly more powerful deterrents to contraceptive adoption among the poor.**
  The desire for more children, opposition to family planning or concerns about health effects of contraceptive methods are cited more often as the reason for not using methods. Poor families – less educated and less exposed to media than the rest – seem to be lagging behind in adopting family planning and small family "ethos."

- **A successful intervention aiming to increase the CPR among the poor should have lowering cultural and attitudinal barriers and increasing demand as one of its principal objectives.**
  An intervention that focuses only on offering contraceptives at subsidized prices or free of charge would be only partially successful.

- **Increasing CPR among poor women would benefit the Indonesian population program as a whole.**
  If poor women adopted modern contraceptives at a rate equal to that of women in the higher strata, the usage of modern methods for the population as a whole would increase about two percentage points to 59%. This change is roughly equivalent to a five-year growth in CPR. And the TFR would decline to 2.5, getting Indonesia somewhat closer to its goal of achieving replacement fertility.

- **Extremely poor women tend to rely more on traditional contraceptives than moderately poor or better off women.**
  One possible explanation for this is their inability to pay for modern contraceptives at times. There is no empirical data to corroborate this conjecture, but a series of in-depth interviews in poor neighborhoods found a recurrent pattern of poor couples resorting to traditional methods when they were unable to obtain modern contraceptives.

- **There is little difference between the extremely poor, the moderately poor and the others in method mix.**
  Overall, around three quarters of women using modern contraceptives rely on short-term hormonal methods, and

- **Contrary to a common perception, not all poor women depend on the public sector to procure their contraceptives, and**

- **A sizeable proportion of women who are not poor obtain their contraceptives from the public sector.**

- **The public sector offers little comparative advantage for poor woman using short-term hormonals.**
  Women, whether poor or not, pay as much for short-term hormonals in the private sector as they do in the public sector. Furthermore the public sector offers hormonals free of charge to less than one out of ten poor women.

- **The public sector represents a major advantage for users of long-term methods.**
  This advantage is seen in terms of the likelihood of obtaining the method free of charge and in terms of the methods having a lower cost for those who pay for them.

- **The public Sector continues to play an important role as supplier of long-term methods.**
  Even though the public sector lost a major portion of its clients to the private sector, especially to private midwives, it still plays an important role as supplier of long-term methods. A considerable proportion of poor women obtain long-term methods from the public sector either at subsidized prices or completely free.

- **The public sector also pays a key role as the support system private midwives rely on.**
  The rapid expansion of private midwives as family planning providers has been to a great extent supported and subsidized by the public sector. Most private midwives receive their training, establish their client base and obtain their supplies from the public sector.

- **Interventions aiming at reaching the poor should focus primarily on East Nusa Tenggara, South East Sulawesi and West Kalimantan**
  Poverty is not distributed evenly across the country but it is widespread in certain provinces while rare in others. The province with the largest proportion of poor people is East Nusa Tenggara, where eight out of ten people are poor and six out of ten people are extremely poor. South East Sulawesi and West Kalimantan are also poor provinces in the sense that more than half the population is poor.

Temuan-temuan Kunci

- **Terdapat perbedaan yang jelas dalam prevalensi pemakaian kontrasepsi modern antara perempuan dari keluarga yang miskin sekali, yang miskin sedang dan yang lebih mampu.**
  Bila diletakkan situasi sekarang dalam suatu perspektif waktu, CPR kontrasepsi modern di kalangan keluarga yang sangat miskin saat ini adalah sama dengan prevalensi kontrasepsi penduduk Indonesia keseluruhan 15 tahun yang lalu; sedangkan untuk keluarga yang miskin sedang perbedaan waktu dalam CPR modern kontrasepsi sekitar 8 tahun

- **Berlawanan dengan anggapan yang selama ini dianut secara luas, akses dan biaya kelihatannya bukanlah merupakan faktor utama yang menyebabkan rendahnya pemakaian kontrasepsi di kalangan perempuan miskin.**

- **Hambatan sikap adalah penyebab penolakan yang sangat mungkin dan sangat kuat atas penerimaan kontrasepsi di kalangan keluarga miskin.**
  Keinginan untuk menambah anak, tidak menyetujui keluarga berencana atau takut akan efek terhadap kesehatan dari metode kontrasepsi sering disebutkan sebagai penolakan penerimaan kontrasepsi di kalangan orang miskin. Para keluarga miskin – yang kurang tingkat pendidikan dan kurang terpapar terhadap media dibandingkan dengan keluarga yang tidak miskin – kelihatannya cenderung lebih tertinggal di belakang dalam menganut keluaga berencana dan "norma" keluarga kecil.

- **Suatu intervensi yang bertujuan meningkatkan CPR di kalangan miskin seharusnya mampu mengurangi hambatan budaya dan sikap serta meningkatkan permintaan sebagai salah satu tujuan utamanya.**
  Intervensi yang hanya memfokuskan kepada pemberian kontrasepsi dengan harga bersubsidi atau secara gratis akan kurang berhasil.

- **Menaikkan CPR di kalangan perempuan dari keluarga miskin akan menguntungkan program kependudukan Indonesia secara keseluruhan.**
  Jika perempuan dari keluarga miskin menggunakan kontrasepsi modern pada tingkat yang sama dengan perempuan dengan golongan keluarga di atasnya, penggunaan metode kontrasepsi modern untuk keseluruhan penduduk akan naik sekitar 2% menjadi 59%. Peningkatan ini secara kasar sama dengan peningkatan 5 tahun dari CPR. Dan TFR akan turun sebesar 2.5, menjadikan Indonesia mendekati tujuannya dalam mencapai *replacement fertility level*.

- **Perempuan dari kalangan keluarga yang sangat miskin cenderung untuk lebih bergantung kepada kontrasepsi tradisional daripada perempuan dari keluarga yang miskin sedang atau yang lebih mampu.**
  Satu kemungkinan penjelasan untuk ini adalah ketidakmampuan mereka untuk membeli kontrasepsi pada waktunya. Tidak ada data empiris yang menguatkan dugaan ini, akan tetapi dari serangkaian wawancara mendalam yang dilakukan di lingkungan keluarga

miskin didapatkan suatu pengulangan pola dari pasangan keluarga miskin untuk pindah ke kontrasepsi tradisional bila mereka tidak mampu mendapatkan kontrasepsi modern.

- **Terdapat sedikit perbedaan antara keluarga yang sangat miskin, miskin sedang dan lainnya dalam jenis metode yang digunakan.**
  Secara keseluruhan, sekitar tiga perempat dari perempuan yang menggunakan kontrasepsi modern bergantung kepada metode hormonal jangka pendek, dan

- **Bertolak belakang dengan pendapat umum, tidak semua perempuan dari keluarga miskin bergantung pada jalur pemerintah untuk membeli kontrasepsinya, dan**

- **Cukup banyak perempuan dari keluarga yang tidak miskin mendapatkan kontrasepsinya dari pemerintah.**

- **Jalur pemerintah hanya memberikan keuntungan yang relatif kecil untuk perempuan dari keluarga miskin yang menggunakan kontrasepsi hormonal jangka pendek.**
  Perempuan, baik dari keluarga miskin ataupun tidak miskin, harus membayar dengan jumlah yang sama untuk mendapatkan hormonal jangka pendek baik dari sektor swasta maupun dari sektor pemerintah. Lebih lanjut, sektor pemerintah hanya menyiapkan kontrasepsi hormonal secara gratis kurang dari satu untuk sepuluh perempuan dari keluarga miskin.

- **Sektor pemerintah memberikan keuntungan besar bagi pengguna jangka panjang.**
  Keuntungan ini dilihat dalam hal kemungkinan untuk mendapatkan kontrasepsi secara gratis dan dalam hal mendapatkan harga yang lebih rendah bagi mereka yang membayar.

- **Jalur pemerintah tetap akan memainkan peranan yang penting sebagai penyedia metode jangka panjang.**
  Walaupun jalur pemerintah kehilangan sebagian besar dari kliennya yang berpindah ke jalur swasta, terutama ke bidan praktek swasta, namun tetap memainkan peranan penting sebagai penyedia metode jangka panjang. Sebagian dari perempuan dari keluarga miskin memperoleh metode jangka panjang dari jalur pemerintah baik yang untuk harga yang disubsidi maupun yang benar-benar gratis.

- **Jalur pemerintah juga berperan penting dalam sistem yang mendukung bidan swasta.**
  Pesatnya pertumbuhan bidan swasta pemberi pelayanan KB telah dimungkinkan sebagian besar karena dukungan dan subsidi oleh sektor pemerintah. Sebagian besar bidan praktek swasta pernah mengikuti pelatihan, membina klien dasar mereka dan memperoleh pasokan kontrasepsi dari sektor pemerintah.

- **Intervensi-intervensi yang bertujuan untuk menjangkau orang miskin sebaiknya diarahkan ke provinsi-provinsi Nusa Tenggara Timur, Sulawesi Tenggara dan Kalimantan Barat.**

Kemiskinan tidak tersebar merata di seluruh negeri akan tetapi tersebar luas di beberapa provinsi tertentu namun jarang di beberapa provinsi lainnya. Provinsi yang mempunyai proporsi penduduk miskin terbesar adalah Nusa Tenggara Timur, dimana delapan dari sepuluh orang adalah miskin dan enam dari sepuluh orang adalah miskin sekali. Sulawesi Tenggara dan Kalimantan Barat adalah juga provinsi-provinsi dimana setengah dari penduduknya adalah miskin.

Contraceptive Use among the Poor in Indonesia

1 Introduction

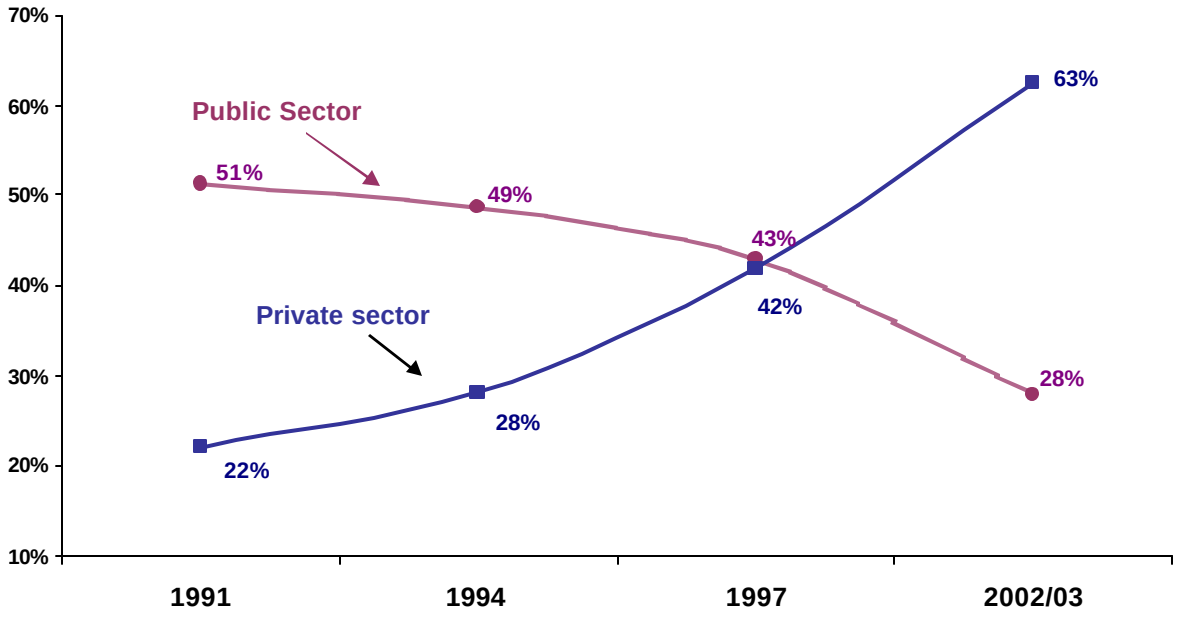
Indonesia has had a very successful family planning program. Since its creation in 1970 the National Family Planning Coordinating Board (BKKBN) spearheaded the effort to make contraceptive methods accessible to Indonesian families and to promote smaller families ethos. This program contributed to the rapid increase in contraceptive prevalence rate (CPR) from 26% in 1971 to 60% in 2002, and the drop in the total fertility rate (TFR) from 5.6 to 2.6 during the same period (*Badan Pusat Statistik* and ORC Macro, 2003). The program has been heavily dependent on government subsidies and contributions from foreign donor agencies. The monetary crisis that hit Indonesia and South East Asia in 1997 triggered a severe fiscal crisis in Indonesia and caused significant reductions in funds allocated for family planning.

Contrary to the expectation of experts and program managers working in the field of family planning, the reduction of funds did not cause a drop in contraceptive prevalence rates. Data from the recent Indonesia Demographic and Health Survey (IDHS) series suggest that as free-of-cost methods have become less available in the public sector, women simply switched to the private sector.

As one can see in Figure 1, the switch of users into the private sector, which was already discernible between 1991 and 1994, gathered speed between 1997 and 2002/03. The proportion of women obtaining contraceptive methods from the private sector jumped from 42% to 63% during that period, while the proportion obtaining methods from the public sector dropped from 43% to 28%. This is a surprising result, because this shift to the private sector gathered momentum during a period when the cost of living and the prices of contraceptives doubled, as result of the financial crisis that hit Indonesia in 1997 (Molyneaux, 2000), when one would expect more couples were in need of subsidized contraceptives.

Figure 1:

Percentage of contraceptive users that obtained their last contraceptives from the public and private sector, 1991 – 2002/03



Because women switched to the private sector instead of giving up from family planning as government subsidies shrunk, the modern contraceptive prevalence rate (CPR) did not recede but increased slightly from 55% to 57%.

While the data suggests that the shrinking in government subsidies did not affect the ability of the general population to obtain contraceptives, it is not clear what the effect was on the more vulnerable population. The purpose of this article is to ascertain whether couples in the low-end of the socio-economic spectrum have difficulty obtaining contraceptives and to determine if factors unrelated to their lack of money, namely cultural and attitudinal impediments may prevent them from using contraception. This article is based on the evidence provided by the 2002/03 Indonesia Demographic and Health Survey (IDHS) data.

2. Data and Methodology

The analysis is based on the most recent IDHS survey data. The survey was carried out in Indonesia between October 2002 and April 2003, obtaining complete interviews for a total of 29,483 ever married women 15 – 49 years old. Most of the variables used in this article are self-explanatory, but the definition and construction of the wealth index requires a more detailed explanation because we classify respondents as poor or not poor based on this wealth index.[1]

The wealth index is an indicator representing the level of material wealth that the individuals living in a given household have, based on the household's possessions and on the dwelling's physical conditions. Using principal components analysis "asset factor scores" are calculated for each asset, such as electricity, television, water piped into the residence, and household possessions. The resulting asset scores are standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. For dichotomous "have-don't have" variables, the score calculation is done assigning a value of 1 to households that have a given asset and a value of 0 to households that do not have it. For one non-dichotomous variable, the number of persons sleeping per room, the score was calculated as a function of the number of people per room in the household compared to the mean number in the sample as a whole. The sum of these standardized scores constitute a single "wealth index" variable, which is assigned to all the individuals living in the household.[2] The possession of durable goods represents the "stock" of the family and constitutes a more stable indicator of household's long-term welfare than consumption data. The latter is highly volatile and may rise and fall significantly along with seasonal variations and fluctuations in the economy, whereas the stream of benefits from durables tends to be steadier (Deaton and Muellbauer, 1980). People in the extremely poor and the moderately poor categories are the especially vulnerable to economic downturns and the ones more likely to be in situations where they face difficulties obtaining contraceptives and accessing to health services in general.

The wealth index is included in the standard 2002/03 IDHS data file as a continuous variable and as an ordinal variable broken down into quintiles "Lowest," "Lower middle," "Middle," "Upper middle," and "Highest". In this article we mainly focus on women in the lowest quintile, described herein as "poor," and we split them further into two deciles. The lowest decile is "Extremely poor" and the second lowest decile is "Moderately poor." Women in the other quintiles are referred to as "Better-off."

We use the two-tailed *z* test for the logistic regressions and the corrected *F* statistic to determine the statistical significances of the results. The corrected *F* *p*-value can be

[1] The government of Indonesia does not have a single official definition of what level of income or wealth constitutes "poverty". The Central Bureau of Statistics (BPS) and BKKBN use different criteria, which produce significantly different results as to the proportion of poor in the general population.

[2] For a more detail explanation of the wealth index calculation, see Gwatkin et al., 2000

interpreted the same way as the *p*-value of the X^2 statistic, but it has the advantage of taking into account the survey design effect. Only percent differences at significance levels of .05 or less ($p \leq .05$) were considered significant and treated as such in the description of results.

3. Who Are the Poor?

In addition to having little purchasing power and few possessions, being poor means having less access to education, less exposure to mass media and to information about family planning, and less access to basic health services. Table 1 compares the education, area of residence and exposure to media of respondents in the two lowest deciles – the extremely poor and the moderately poor – and those in the other deciles. Not surprisingly, the extremely poor women are worse off than the poor women and the latter are significantly worse off than those in the better off categories. The poorer they are, the less educated, less exposed to mass media in general and to family planning messages in particular, and the more likely they are to be living in rural areas. Almost half of the extremely poor women (48%) have not completed their primary education compared to 42% of the moderately poor and 24% of those in the other wealth quintiles. The mean number of years of education is 4.7, 5.4 and 7.9 respectively for the extremely poor, the poor and the others ($p<.01$).

Exposure to family planning messages through broadcast media is drastically less among extremely poor and poor women. Only 20% of the extremely poor recall having seen or heard a family planning message either on the radio or on television in the six months preceding the survey, compared to 32% of the poor and 56% of those who are better off ($p<.001$). This difference is explained to a large extent by the disparity in exposure to radio and television in general. The disparities are especially large in the case of exposure to television: 32% of the extremely poor watch television at least once a week, compared to 56% of the moderately poor ($p=.001$) and 85% of the better off population ($p=.001$).

Despite the fact that the poor lag far behind in education and exposure to family planning messages, the gap between the poor and the better off as regards to knowledge of modern family planning methods is surprisingly narrow, because even among the extremely poor women the vast majority (94%) knows at least one modern method.

Table 1
Percent distribution and percentage of ever-married women 15-49 years old in the extremely by poor, moderately poor and other categories based on wealth index deciles, by basic background characteristics. Indonesia, 2002/03.

Background characteristics	Extremely poor	Moderately Poor		Other		All
Education						
Incomplete Primary	47.6	42.2		23.6		27.9
Complete Primary	38.6	440		34.6		35.9
Junior HS or higher	13.8	13.8		41.8		36.2
Total	100.0	100.0		100.0		100.0
Design-based F = 119.6, p=.001						
Mean number of years of education	4.7	5.4	[a]	7.9	[ab]	7.1
Place of residence						
Urban	3.8	11.1		55.2		45.7
Rural	96.2	88.9		44.8		54.3
Total	100.0	100.0		100.0		100.0
Design-based F = 205.7, p=.001						
Media exposure and knowledge of FP						
% that has heard a FP messages on the radio	10.9	14.3	[a]	20.6	[ab]	19.0
% that has seen a FP messages on TV	15.2	28.1	[a]	54.6	[ab]	48.0
% exposed to broadcast FP messages	19.7	32.1	[a]	55.9	[ab]	49.9
% that listens to the radio at least once a week	27.3	35.4	[a]	39.9	[ab]	38.2
% that watches TV at least once a week	32.2	56.0	[a]	84.5	[ab]	76.5
% that knows at least one modern method	**93.8**	97.5	[a]	99.1	[ab]	98.4
Number of cases	4,846	3,316		20,705		28,867

[a] Difference with the extremely poor statistically significant at p=.01

[b] Difference with the moderately poor statistically significant at p=.01

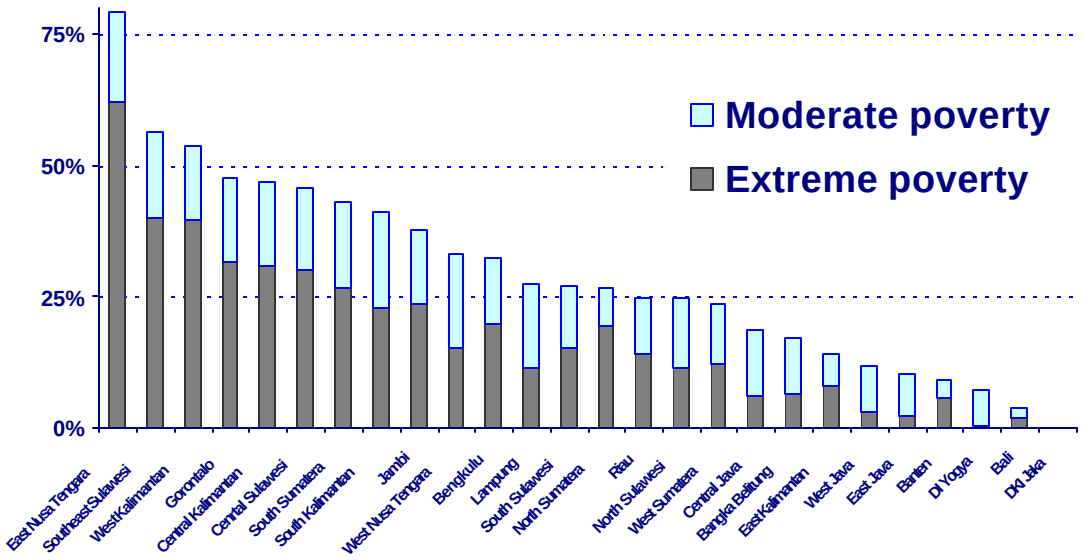
Source: IDHS 2002/03

The majority of the poor lives in rural areas reflecting the fact that in Indonesia the wealth tends to concentrate in urban centers. Thus, 96% of the extremely poor and 89% of the moderately poor live in rural areas, compared to 45% of those in the other quintiles (p=.001). As in many developing countries wealth and public investment in infrastructure tends to concentrate in large urban centers

In terms of geographical distribution of the poor, a vast disparity exists among provinces. As one can see in Figure 2, the area with the lowest proportion of poor is DKI Jakarta, where less that 1% of the population fall into that category. Less than 10% of the women in Bali, DI Yogyakarta and Banten classify as poor. On the opposite extreme, the province with the largest proportion of poor is East Nusa Tenggara, with close to 80% classifying as poor and 63% classifying as extremely poor. This level of poverty is due in part to the presence of large numbers of refugees resettled in that province. More that half of the population is poor in South Sulawesi and West Kalimantan.

Figure 2:

Percentage of women living in extreme poverty and in moderate poverty by province



The percentages in Table 2 illustrate that women living in extreme poverty tend to have less access to basic health services than those who are still poor but somewhat less deprived, and the latter in turn have less access to services than women above the poverty level. This pattern of disparity is persistently evident for antenatal care, for assistance during delivery or for immunization.

Table 2
Selected health-care indicators based on last-born child among women who had a live birth during the five years preceding the survey. Indonesia, 2002/03

Health care indicators	Extremely poor	Moderately poor	Other	All	Number of cases
% of mothers who received Tetanus Toxoid prior to the birth of the last child	52.6	61.5 [a]	76.6 [ab]	72.4	13,291
% of mothers that received antenatal care from health professional during last pregnancy[1]	28.2	41.7 [a]	67.8 [ab]	60.7	13,303
% of mothers that delivered the last child in a public or private health facility	4.4	6.2 [a]	22.6 [ab]	18.9	13,303
% of mothers whose last child is one month or older and have already received the BCG vaccine[2]	60.3	67.8 [a]	81.9 [ab]	78.1	12,797
% of mothers whose last child is four months or older and have already received the DPT3 vaccine[2]	37.1	47.4 [a]	57.2 [ab]	53.9	11,886
% of mothers whose last child is nine months or older and have already received the measles vaccine[2]	57.3	67.3 [a]	75.1 [ab]	72.3	10,500

[a] Difference with the extremely poor statistically significant at p =.01

[b] Difference with the moderately poor statistically significant at p=.01

[1] "Health professionals" consist of doctors, obstetricians, nurses and midwives

[2] According to the Indonesian Department of Health's guidelines, children should receive the BCG, DPT3 and measles vaccines when they are one, four and nine months old, respectively.

Source: IDHS 2002/03

4. Contraceptive Use and Unmet Need

As it is the case for basic health services, women living in extreme poverty are less likely to have used modern contraceptives or to be currently using than moderately poor women, and the latter in turn are less likely to be have used them or to be currently using than women above the poverty level, as on can see in Table 3. Forty three percent of women living in extreme poverty were using a modern contraceptive, compared to 53% of the moderately poor and 59% of the better off population. Correspondingly, unmet need for modern family planning is more common among extremely poor than among moderately poor women (19% vs. 12%, p=.001). The difference between the moderately poor and the other wealth categories (12% vs. 11%), however, is not statistically significant.

Table 3
Percentage of women who ever used modern contraceptives, currently using modern contraceptives and in unmet need for modern family planning. Indonesia, 2002/03.

Contraceptive use indicators	Extremely poor	Moderately Poor	Other	All	Nº of cases
% of ever married women who ever used a modern contraceptive method	62.5	73.0 [a]	80.2 [ab]	77.7	29,483
% of currently married women using a modern contraceptives	43.4	53.2 [a]	58.8 [ab]	56.7	27,784
% of currently married in unmet need for modern family planning[1]	19.1	12.4 [a]	11.4 [a]	12.2	27,771

[a] Difference with the extremely poor statistically significant at p =.01
[b] Difference with the moderately poor statistically significant at p=.01

Source: IDHS 2002/03

Comparing Tables 2 and 3 it becomes apparent that the differences between the poor and non-poor, as well as the differences between the extremely and moderately poor are larger for basic health services indicators than for contraceptive use. This suggests that family planning programs have been more accessible to poor people and poor people have been more willing to use them than other basic health services. It is also worth noting that the gap between the extremely poor and the moderately poor in contraceptive use is wider that the gap between the moderately poor and the better off social strata. This may be an indication that the barriers to the adoption of modern contraceptives – be it related to access or to attitudinal factors – become particularly strong for women living in extreme poverty. From the methodological point of view, these results underscore the usefulness of splitting up the large "poor" quintile into two finer categories, to capture behavioral differences between those who are extremely poor and those who are moderately poor.

In this analysis we consider that a woman is protected against an unwanted pregnancy only if she is using a modern contraceptive; we treat women currently using traditional or folkloric methods as being in unmet need because these methods are do not provide reliable protection against unwanted pregnancies.[3] In the United States the 1995 National Survey on Family Growth indicate that the failure rate is 21% for periodic abstinence and 24% for withdrawal (Fu et al., 1999). Clinic-based studies also reveal that 25% of periodic abstinence users and 19% of withdrawal users experienced an accidental pregnancy within the first year of using the method (Health Learning Systems. 1998). In the case of Indonesia, the 2002/03 IDHS data shows that method failure is the reason for discontinuation among 29% of women using periodic abstinence and 28% of women using withdrawal (*Badan Pusat Statistik* and ORC Macro, 2003). This means that about three out of ten Indonesian women using periodic abstinence or withdrawal will have an unwanted pregnancy each year.

5. Method Mix

Overall, around three quarters of women using modern contraceptives rely on short-term hormonal methods, and the difference by socioeconomic strata is slight, though statistically significant: 76% of those in extreme poverty use short-term hormonals, compared to 75% of the moderately poor and 72% of the others (Table 4, first panel). Because short-term hormonal methods require recurrent restocking of commodities, the widespread dependence on these methods means that a substantial proportion of users are in a vulnerable position in terms of contraceptive security. Disruptions in the supply chain and of lack disposable income could seriously impair their ability to prevent unwanted pregnancies. Such disruptions have been rare in Indonesia, but there is a concern among program managers that the supply network for subsidized contraceptives may be more easily disrupted now that BKKBN became decentralized.

The second panel in Table 4 shows the contraceptive method mix including traditional methods, such as withdrawal, periodic abstinence and breastfeeding (lactational amenorrhea method, LAM). The use of traditional methods is significantly larger among the extremely poor women (11%) compared to 5% and 6% of the moderately poor and the better-off, respectively. The higher proportion of extremely poor women relying on traditional methods suggests that an important proportion of these women cannot afford to purchase contraceptives so they rely on traditional methods. There is no empirical data to corroborate this, but an initial assessment carried out in low-income quarters and among health providers serving them found that poor couples often resort to traditional contraception when they were unable to obtain modern contraceptives (Menayang, 2004).

[3] Failure rate is the proportion conceiving in a group of women who continue to practice contraception during the reference period unless they experience an unplanned pregnancy.

Table 4:
Percent distribution of women currently using any contraceptive by type of method. Indonesia, 2002/03

Method mix including modern methods only	Extremely poor	Moderately Poor	Other	All
Short-term hormonals (Pill and injectables)	76.1	74.5	72.1	72.7
Long-term (IUD, sterilization, implant)	23.4	25.4	26.1	25.8
Barrier (condoms, vaginal methods)	0.5	0.1	1.8	1.5
Total	100.0	100.0	100.0	100.0
Number of cases	2,003	1,669	11,663	15,335
Design-based F = 3.1, p < 0.05				
Method mix including all methods	**Extremely poor**	**Moderately Poor**	**Other**	**All**
Short-term hormonals (Pill and injectables)	67.9	70.5	67.9	68.2
Long-term (IUD, sterilization, implant)	20.9	24.0	24.6	24.2
Barrier (condoms, vaginal methods)	0.5	0.1	1.7	1.4
Traditional (withdrawal, periodic abstinence, LAM)	10.8	5.3	5.9	6.2
Total	100.0	100.0	100.0	100.0
Number of cases	2,152	1,766	12,540	16,458
Design-based F = 3.3, p < 0.05				

Source: IDHS 2002/03

6. Reasons for not Using and for Discontinuing Family Planning among the Poor.

The strong correlation between socioeconomic status and contraceptive use is one of the most consistently corroborated facts in the demography of developing countries. However, the explanation for such an association has been subject to debates for a few decades. According to the "supply-side" school of thought, the lower contraceptive prevalence in low-income populations should be attributed to the fact that low income couples have more difficulty obtaining contraceptives, either because of financial constraints or because of geographic isolation. From the "demand-side" point of view, cultural and attitudinal factors, such viewing children as potential assets as old age security or attaching high value to large families may induce women to have large families and to keep away from contraceptives. In looking into the relative importance of the supply and demand factors, one simple way of looking for the answer is to examine the reasons women themselves give for not using family planning. In the IDHS survey non-users who reported they did not want any more children or they wanted to wait at least two years to have another child were asked to give their reasons for not using a contraceptive method. The results are presented in Table 5.

Judging from the women's own assertions, the two reasons related to supply - access to a source of contraceptives and cost of methods - are the least important reasons for not using contraception. Slightly less than 1% cites lack of access as the reason for not using, and the difference among the three social strata is insignificant. On average 5% of women mention cost as the reason for not using contraception. Again, only a small difference exists between poor and better-off women. By contrast, attitudinal reasons such as opposition to family planning or religious prohibitions are as important if not more important in influencing a poor woman's decision not to use family planning than reasons related to costs. Twelve percent of the extremely poor and 9% of the moderately poor mention attitudes such as opposition to family planning, religious prohibition or lack of knowledge as the reason for not using, compared to 6% of women in the better-off social strata ($p=.05$).

The most frequently cited reasons for not using a method are those related to fertility, which in most cases means women do not believe to be at risk of pregnancy because they do not have sex regularly, they believe themselves to be infecund, they are in post-partum amenorrhea, or other similar reasons. Around 40% of women, poor or not poor alike, cite these as the reason for not using contraception.

Table 5
Among women who want to space or limit but who are not using a contraceptive method, percent that report specific reasons for not using. Indonesia, 2002/03

Contraceptive use indicators	Extremely poor	Moderately Poor		Other		All
Fertility-related reasons (not having sex, menopausal , in fecund or sterile or in post-partum amenorrhea)	37.6	46.5	[a]	43.7	[a]	43.2
Attitudinal reasons (respondent or spouse opposed to family planning, religious prohibition or lack of knowledge about methods)	11.8	8.8		5.5	[ab]	6.7
Health-related reasons (health concerns or fear of side effects)	23.6	21.0		26.7	[b]	25.6
Reasons related to access (delivery point too far)	1.4	1.6		0.5		0.8
Reasons related to cost (method costs too much)	6.3	9.7		4.2	[b]	5.1
Other reasons	28.6	28.4		28.0		28.1
Number of cases	1,216	673	[a]	3,467	[ab]	5,356

[a] Difference with the extremely poor statistically significant at p =.01
[b] Difference with the moderately poor statistically significant at p=.01
Source: IDHS 2002/03

In the same manner, cost and access are not the reasons for discontinue contraceptive use either. Table 6 shows that even among extremely poor women, only 5% state that the reason for discontinuation was cost and only 2% say that the reason was lack of access. Method failure (11%) and reasons related to the woman's health (18%) are both much more important reasons for discontinuation than access and cost factors combined. Because the discontinuers represent a group of women who for the most part approve of family planning, only a very slight proportion of them discontinue because of attitudinal reasons.

Table 6
Percent distribution by reason for discontinuation among women who have discontinued the use of a family planning method. Indonesia, 2002/03

Reason for discontinuation	Extremely poor	Moderately Poor	Other	All
Method Failure	11.0	10.1	10.6	10.6
Fertility-related reasons	46.2	53.0	45.0	45.9
Attitudinal reasons	0.8	0.6	1.0	1.0
Health-related reasons	18.3	18.2	23.8	22.9
Method switch	9.1	5.3	9.3	8.9
Access	1.8	1.3	0.8	1.0
Cost	4.6	4.1	2.2	2.6
Other reasons	8.1	7.3	7.2	7.3
Total	100.0	100.0	100.0	100.0
Number of cases	1,353	1,046	7,132	9,531

Design-based $F = 3.1$, $p < 0.001$
Source: IDHS 2002/03

The results from the multivariate logistic regression presented in Table 7 are consistent with the premise that contraceptive costs do not constitute a major impediment to contraceptive use among poor women. They also support the assertion that attitudinal factors are as important or more important that monetary factors. The odds ratio for the wealth index variable indicates that women's relative likelihood of using a modern contraceptive increases as her rank in the wealth index categories improves. After other intervening variables are controlled for, women in the higher socioeconomic strata are 1.3 times more likely to use modern contraceptives than the ones in the lower strata. However, wealth is not as important as attitudinal factors in determining contraceptive use.

Women who want to have more children are significantly less likely to use modern contraceptives, as are women whose ideal number of children is three or more. It is worth noting that exposure to family planning messages is as strong a correlate to contraceptive use as the wealth index is. Thus women who were exposed to family planning messages either through broadcast media, print media or personal communication with health providers are 1.3 more likely to be using a modern contraceptive than women who were not exposed to such messages.

Table 7:
Logistic regression coefficients and odds ratios: current use of a modern family planning method among currently married women by selected sociodemographic and attitudinal variables. Indonesia, 2002/03

Independent variables	Coefficients	Odd ratios	
Respondent's age 15 – 34 years = 0, 35 – 49 years = 1	-0.652	0.521	c
Desire for (more) children Do not want = 0, Want =1	-0.490	0.613	c
Number of living children Less than 3 = 0, 3 or more =1	0.455	1.576	c
Ideal number of children Less than 3 = 0, 3 or more = 1	-0.378	0.685	c
Exposure to FP messages in the preceding six months Not exposed = 0, Exposed =1	0.283	1.327	c
Wealth Index Extremely poor =1, moderately poor =2, other = 3	0.266	1.305	c
Area of residence Rural = 0, Urban = 1	-0.190	0.827	b
Respondent's education Less than primary = 0, Complete primary or more =1	0.157	1.170	a
Constant	1.005		c
Number of cases	27,542		

Source: IDHS 2002/03

a = p=.05; *b* = p=.01; *c* = p=.001

Note: The independent variables (regressors) in this model were tested for co-linearity.

7. Attitudes towards Childbearing and Family Planning

Given the importance of attitudes in shaping a woman's decision to use or not to use contraceptives, in this section we take a closer look at attitudes toward childbearing and the attitudinal differences between poor and better-off women.

The results shown in Table 8 supports the common opinion that the poorer the women are, the more children they want. The mean ideal number of children for extremely poor, moderately poor and better-off women is 3.4, 3.0 and 2.8, respectively (p=.01). And among women with two or more living children 28% of the extremely poor women want another child, compared to 24% of moderately poor women (p=.001) and 18% of better-off women. Because poorer women want larger families one sees an apparent paradox contrasting the results in Table 8 with those in Table 3. Women living in extreme poverty, who use contraceptives less and who have a higher unmet need are less likely to have had an unwanted or a mistimed pregnancy than women who are only moderately poor or better: 13% of extremely poor women report that their current pregnancy or the last birth was mistimed or not wanted at all, compared to 16% of moderately poor women (p=.05) and 17% of better off women.[4]

Furthermore, poorer respondents have a less favorable opinion about family planning and are more likely to believe that their spouses have a less favorable opinion as well. Thus the proportion of women who approve of family planning increases from 87% to 91% and 93%, among extremely poor women, moderately poor and better-off women, respectively. The same pattern is observed in reference to what women believe to their husbands' opinion. Another conclusion one can draw from these figures is that the approval of family planning is fairly widespread in Indonesia. Even among the extremely poor, nearly 90% express that they approve of it.

The proportion of women who had discussed family planning with their husbands during the six months preceding the survey is included as an indicator in Table 8 because spousal communication is believed to be one important precursor to family planning adoption. Research shows that in sub-Saharan African countries women who discussed family planning with their husbands during the preceding year were significantly more likely to use family planning (Lasee and Becker, 1997). Spousal communication is also positively associated with contraceptive use in Nigeria (Feyisetan, 2000), and in Bangladesh the frequency of spousal communication is one of the most significant determinants of modern family planning use (Kamal, 1999).

The results in Table 8 include only women less than 40 years old who were not using a modern contraceptive at the time of the survey. Most women over 40 years old have reached

[4] Women with an unwanted pregnancy are those who declared their current pregnancy or their last child born during the five years preceding the survey were not wanted. Women with a mistimed pregnancy are those who declared they would have preferred to wait two or more years before getting pregnant.

the end of their reproductive lives therefore they have little need to talk to their spouses about family planning.[5] Among these women, those who live in extreme poverty or in moderate poverty tend to discuss family planning with their husbands significantly less than those who are better off (42% and 46%, compared to 52%, respectively, p=.05).

Table 8
Indicators of fertility preferences and attitudes toward family planning among ever married women 15 – 49 years old. Indonesia, 2002/03

Contraceptive use indicators	Extremely poor	Moderately Poor	Other	All	Nº of cases[2]
Mean ideal family size[1]	3.4	3.0[a]	2.8[ab]	2.9	25,300
% of women with two or more children who want more children	28.0	24.0[a]	18.0[ab]	19.6	18,909
% of women with two or more children who do not want another child	61.4	65.7[a]	70.4[ab]	69.0	18,909
% of respondents who report last birth or current pregnancy was mistimed or unwanted[2]	13.1	15.7[a]	17.2[a]	16.3	14,354
% of respondents who approve of family planning	87.2	91.0[a]	93.4[ab]	92.5	29,457
% of respondents who believe their husbands approve of FP	80.4	86.8[a]	90.6[ab]	89.2	27,727
% of non-users less than 40 years old who discussed FP with their spouse in last 6 months	41.7	46.2	51.8[ab]	49.9	8,220

[a] Difference with the extremely poor statistically significant at p =.05

[b] Difference with the moderately poor statistically significant at p=.05

[1] Women who gave a non-numeric answer and those who were unsure are excluded from the calculation.

[2] It includes only women who were pregnant at the time of the survey or who had at least one live birth during the five years preceding the survey.

Source: IDHS 2002/03

[5] Women 40 – 49 years old contribute to less than 5% of the total fertility rate.

8. Sources of Contraceptive Methods

The general assumption among program managers is that the poor rely almost exclusively on subsidized contraceptives. Under this assumption, if local governments fail to bring subsidized contraceptives to the poor to compensate for BKKBN's weakened position under a decentralized system, large numbers of poor people may find themselves unable to procure contraceptives.

Contrary to this common perception, however, not all poor women depend on the public sector to procure their contraceptives, and a sizeable proportion of women who are not poor, obtain their contraceptives from the public sector. As one would expect, extremely poor women use the public sector more that moderately poor women (39% vs. 35%, respectively) and the latter use the public sector more that better off women (35% vs. 26%, respectively) (Table 9). However, even among the poor there is a substantial proportion of women who procure their contraceptive methods from the private sector, especially private midwives: 37% of extremely poor and 46% of moderately poor women obtained their last method from a private midwives. As expected, fewer poor women poor women obtain their methods from private facilities (6% compared to 18%) while more poor women obtain their methods from other sources such as non-government health posts and family planning posts, shops, friends, etc. (18%, 13% and 8%, respectively for extremely poor, moderately poor and better off women).

Table 9
Percent distribution of women currently using a modern contraceptive by source of last contraceptive method. Indonesia, 2002/03

Source of last modern contraceptive method[1]	Extremely poor	Moderately Poor	Other	All
Public sector	39.2	35.0	26.0	27.8
Private midwives	36.5	45.5	47.6	46.6
Other private medical sector	6.0	6.1	18.2	16.1
Other sources	18.3	13.4	8.3	9.5
Total	100.0	100.0	100.0	100.0
Number of cases	2,002	1,668	11,657	15,327

Design-based $F = 26.7$, $p < 0.001$

[1] "Public sector" includes Public Hospitals, Health Centers, Government-run clinics, FP fieldworkers, FP mobile units, etc.; "Private midwives" include nurse/midwives and village midwives working independently; Other private include pharmacies, other private medical sources such as doctors or private clinics; Other sources include shops, friends and relatives, etc.

Source: IDHS 2002/03

The private sector is within reach for some poor women because private midwives and non-profit non-government organizations (NGOs) offer low-cost fees that either match or are only slightly higher than public sector fees. In the case of private midwives, their fees are generally reasonable and a very common practice among them is to charge less to those who cannot afford the full fee. A survey of private midwives attending the yearly Indonesia Midwife Association (*Ikatan Bidan Indonesia*, IBI) conference in September 2003 shows that 76% of private midwives have a flexible fee structure, with an average discount of 30%. Among midwives offering discounts, one third claims to offer discounts of 45% or more. There is also anecdotal evidence from field experience have also shown that many private midwives accept flexible payment schedules or deferred payments, so that poor women who find themselves short of cash can pay the fees installments or can pay at a later date.

In the case of NGO-run health facilities, flexible fee schedules are also common practice. A survey done in-house on a limited number health facilities associated with Muslimat and Muhammadyah also found that 98 out of the 100 surveyed facilities had policies that allowed low-income clients to pay a lower fee.[6] Muslimat and Muhammadiyah are faith-based organizations and helping the needy is an important guiding principle in Islam, so this may not be a common practice among secular NGOs. Nevertheless, these findings explain why even women in extreme poverty can have access to services in the private sector.

9. Cost of Contraceptive Methods

To assess what the costs of contraceptives are, we look at two variables: how many users can obtain them for free and how much those users who do not obtain them for free have pay for them. As it can be seen in Table 7, these factors vary noticeably depending on the type of method: short-term hormonals are low-priced but very few users obtain them for free, while long-term methods are relatively costly but a considerable proportion of users can obtain them free of charge.[7] Only 3% of poor users received a short-term method for free, but poor women who did not get them for free, paid on the average only 8,587 ($0.96).[8] To put this amount in perspective, the average monthly expenses for food in low-income households was

[6] Muhammadiyah is a Muslim NGO that operates more than 200 health facilities, ranging from hospitals to small maternity clinics. Muslimat is one of Indonesia's largest Islamic organizations and about 40 health facilities – most of them clinics run by midwives but also some hospitals – are associated with it.

[7] In this particular table the extremely poor and the moderately poor are grouped into a single category described as "poor". We found no significant differences between the two categories and the calculation of the means requires an adequate number of cases to produce reliable results. For the same reason, modern contraceptives are grouped into two large categories: pills and injections are grouped as short-term hormonals and sterilization, IUD and implants are grouped as long-term methods. The number of women using barrier methods, namely condoms, diaphragms and other vaginal methods is insufficient to allow the calculation of means at any confidence level.

[8] The average rate of exchange during the time of the survey (October 2002 – April 2003) was 8,926 rupiah to the dollar.

Rp190,000 ($21.30), according to the 2002 Indonesian Social and Economic Survey (SUSENAS) (BPS, 2002), so what poor women would pay for short-term hormonals represents slightly less than 5% of their total monthly expenses for food items.

Even in the public sector, where commodities are offered at subsidized prices, only 7% of poor women obtain their methods for free. More significantly, poor who buy short-term hormonals in the public sector pay roughly as much as they would if they bought these methods elsewhere. These results suggest that BKKBN's ongoing efforts to encourage users to pay for the costs of contraception worked successfully.[9] On the other hand, the fact that short-term hormonals cost practically the same in public facilities as elsewhere is a sign the public sector is loosing its "competitive advantage" as a supplier, and it explains why family planning users have gradually shifted from the public sector to other sources.

In contrast to short-term hormonals, long term methods – IUDs, implants and sterilization – are considerably more expensive but users are much more likely to obtain them free of charge. The average of these methods cost is for poor women who pay for them is 39,164 rupiah ($4.40), but almost half of poor users (45%) obtain these methods free of charge. Though what users pay for long-term methods varies markedly depending on where they procure the method and on their ability to pay, even among those who obtain for these methods from private midwives, roughly one out of four (23%) received the method free of charge.

In brief, the public sector offers little comparative advantage for poor woman using short-term hormonals, but represents a major advantage for users of long-term methods. This advantage is takes place in terms of the likelihood of obtaining the method free of charge and in term of the methods' cost, if they need to pay for them.

[9] Efforts to transfer the costs of family planning from the government to the clients had started in 1987, under the *KB-Mandiri* (family planning self-sufficiency) program.

Table 10
Percentage of respondents who obtained the method free of charge and mean cost of contraceptive methods in Rupiah for those who paid the last time they obtained the method, by type of method and source of last contraceptive method, according to wealth index based poverty status. Indonesia, 2002/03

Source of last method	Short-term hormonals			Long-term methods			All modern methods[1]		
	Poor[1]	Others	All	Poor	Others	All	Poor	Others	All
Public sector									
% who obtained method free of charge	6.7%	4.9%	5.3%	49.0%	42.1%[c]	43.5%	25.5%	23.7%	24.1%
Mean cost[2]	9,015	8,613	8,709	35,667	98.904[c]	87,446	17,159	43,259[c]	36,584
Private midwives									
% who obtained method free of charge	0.8%	1.0%	1.0%	22.7%	23.8%	23.7%	3.4%	3.7%	3.6%
Mean cost	9,334	9,835	9,760	46,340	54,690	53,405	12,850	13,958	13,792
Private sector									
% who obtained method free of charge	1.4%	4.2%[b]	4.0%	*	19.1%	19.8%	7.9%	9.8%	9.7%
Mean cost	6,517	8,619[b]	8,430	*	163,238	161,459	12,855	57,955	55,049
Other sources									
% who obtained method free of charge	6.1%	5.1%	5.4%	*	75.5%	70.9%	14.2%	15.7%	15.3%
Mean cost	6,517	4,678	5,185	*	*	*	7,957	5,535	6,211
All sources									
% who obtained method free of charge	3.4%	2.6%	2.7%	44.7%	34.1%[c]	35.8%	13.5%	11.0%[c]	11.4%
Mean cost	8,587	8,984	8,915	39,164	106,314	97,147	13,473	27,947[c]	25,582
Number of cases	2,820	8,223	11,043	858	3,235	4,093	3,682	11,710	15,392

a = p=.05; *b* = p=.01; *c* = p=.001

[1] It includes women in the lowest wealth index quintile, i.e. women in the extremely poor and moderately poor categories.

[2] The mean is calculated excluding women who obtained the method for free

* Mean or percentage based in fewer than 100 cases

10. Discussion and Programmatic Implications

This report presents a new view on the issue of contraceptive use among the Indonesian poor. A significant gap exists in modern contraceptive prevalence between the extremely poor, the moderately poor and the better off (43%, 53% and 59%, respectively), access and cost do not seem to be the major reason for this gap. Contrary to widespread assumptions, our results suggest that attitudinal barriers such as desire for more children, opposition to family planning or concerns about health effects of contraceptive methods are equal or more powerful deterrents to contraceptive adoption. According to the women's own assertions, the cost and access are secondary reasons for not using a modern contraceptive. One possible explanation is that the majority of women are accustomed to paying for contraceptive methods. IDHS data not shown in this article reveal that even among women living in extreme poverty, 95% paid for their short-term hormonals and 60% paid for their long-term methods. Furthermore, with respect to short-term hormonals, poor women pay as much as better-off women do.

Thus, attitudes emerge as the primary barrier to contraceptive adoption among the poor. Diffusion of innovation theory would predict, and our findings confirm, that poor families – less educated and less exposed to media than the rest – are more likely to lag behind in adopting family planning and small family "ethos." Poor women want larger families, are less approving of family planning and tend to use basic health services less frequently than women in the higher strata. Putting the current situation in a time perspective, modern CPR among the extremely poor today is what it was for the general Indonesian population 15 years ago; for the moderately poor the time gap in modern CPR among is about 8 years. The poor lag behind other indicators, such as mean ideal family size and approval of family planning as well. These results suggest that an intervention aiming to increase the CPR among the poor by focusing only on offering contraceptives at subsidized prices or free of charge would be only partially successful. A successful intervention, on the other hand, should have lowering cultural and attitudinal barriers and increasing demand as one of its principal objectives.

We believe that increasing CPR among poor women would benefit the Indonesian population program as a whole. If poor women adopted modern contraceptives at a rate equal to that of women in the higher strata, the usage of modern methods for the population as a whole would increase about two percentage points to 59%. This change is roughly equivalent to a five-year growth in CPR. And the TFR would decline to 2.5, getting Indonesia somewhat closer to its goal of achieving replacement fertility.

Even though the public sector lost a major portion of its clients to the private sector, especially to private midwives, during the last decade, it continues to play an important role as supplier of long-term methods and as the support system private midwives rely on. A considerable proportion of poor women obtain long-term methods from the public sector either at subsidized prices or completely free.

As for the increasingly important role of private midwives, one must keep in mind that the phenomenon of the rapid expansion of private midwives as family planning providers has been to a great extent supported and subsidized by the public sector. Indeed, private midwives are the

point at which the public and private sectors intersect. The vast majority of them spends part of their time as private midwives and work part time as government employees in government-run health facilities. It is there that the midwives get their know-how, their client-base and, in many cases, their supplies. Because of these considerations, we foresee that the public sector will continue to be a major supplier of contraceptive services, either directly as a supplier of long-term methods, or indirectly as the support system that private midwives rely upon.

On the subject of the spatial distribution, poverty is not distributed evenly across the country but it is widespread in certain provinces while rare in others. The province with the largest proportion of poor people is East Nusa Tenggara, where eight people out of ten are tallied as poor and six people out of ten are tallied as extremely poor. South East Sulawesi and West Kalimantan are also poor provinces in the sense that more than half the population is poor. This suggests that interventions aiming at reaching the poor should focus primarily in these provinces.

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