Unmet Need for Family Planning in Indonesia and Its Associated Factors

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Abstract

Background: The unmet need for family planning in Indonesia has been stagnant since the early 2000s in the 10%–12% range with substantial socioeconomic and geographic disparities. This study sought to better understand the factors underlying the nonuse of contraceptives among women with an apparent need for family planning so that evidence-based corrective actions can be taken.
Methods: Three sources of quantitative data were used in the study—the 2017 Indonesia Demographic Health Survey, the 2018 Village Potential Survey, and the National Population and Family Planning Board service statistics. Further insights were obtained from online focus group discussions and in-depth interviews with participants in 12 districts/cities in seven provinces.
Results: The analyses indicated that health concerns, service delivery-related factors, and opposition to family planning all contribute to the unmet need for family planning in Indonesia. Importantly, the salience of these factors varied significantly across different subgroups of women and geographic areas.
Conclusions: Successful efforts to reduce the unmet need for family planning are complex in that they must contend with the interplay between local sociocultural contexts, individual beliefs/aspirations/preferences, and the supply environment of family planning services. Differentiated interventions for different population subgroups and geographic areas will be needed.

Keywords: family planning, Indonesia, unmet need

INTRODUCTION

Since its introduction more than 50 years ago,[1] the unmet need for family planning has been among the more widely used metrics for monitoring the performance of family planning (FP) programs. The unmet need for family planning is defined as the percentage of women of reproductive age who do not want to become pregnant but are not using contraception.[2] The unmet need for family planning can be further divided into two components: (1) unmet need for limiting, defined as the proportion of women of reproductive age who do not want any more children but are not using a contraceptive method, and (2) unmet need for spacing, which consists of women of reproductive age who would like to postpone their next pregnancy by at least two years but are not using any method of family planning. Unmet need can also be defined in terms of the use of modern vs. all contraceptive methods, the latter of which includes traditional methods (i.e., the de facto unmet need for modern methods).

Although there has been some recent criticism of the unmet need metric because it does not capture consumer satisfaction with the methods they are using, which raises questions as to the extent to which need is being satisfied,[3,4] unmet need remains an important metric for national family planning for several reasons. One reason is that the failure of a national family planning program to facilitate the satisfaction of the reproductive aspirations of both women and couples is viewed as a failure to implement rights-based criteria for family planning.[5–8] Rights-based family planning is endorsed as an underlying principle by most countries of the world, including Indonesia.

Beyond issues related to reproductive rights, global evidence shows that family planning is among the most cost-effective public health (as well as overall development) interventions available to countries, with the potential to reduce both maternal and child mortality.[9] A study by Ahmed *et al.* quantified the magnitude of potential gains of reductions in the unmet need for family planning in a multicountry study. The

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authors estimated that if the proportion of satisfied demand for family planning were to reach 100%, unwanted pregnancies would be reduced by 70%, maternal deaths by 25%, and neonatal deaths by 18%.[10]

Reducing the unmet need for family planning is challenging due to the myriad and complex nature of factors that contribute to unmet needs. A study conducted in 52 countries[11] reported that the most common reasons for the unmet need for family planning among women of reproductive age fell into four categories: (1) concerns about side effects and health risks (26%), (2) no or infrequent sexual intercourse (24%), (3) opposition to contraceptive use (23%), and (4) postpartum amenorrhea/breastfeeding after having a baby (20%). A sizable number of individual–country studies have identified a wide variety of correlates of the unmet need for family planning, most of which were variations on the four basic categories of underlying reasons noted above, but also entailed life cycle and setting-specific contextual factors.[12–32]

Further reducing the unmet need for family planning in Indonesia is important for both human rights and maternal/neonatal health reasons. Regarding human rights, a recent study[33] documented significant gaps between the Indonesian government's rights-based principles and actual implementation of family planning programs, especially concerning informed choice and the wide socioeconomic and geographic disparities in demand and the unmet need for family planning. Regarding maternal health, Indonesia continues to struggle with high levels of maternal mortality, with a maternal mortality ratio of 305 per 100,000 live births in 2015,[34] far above the global Sustainable Development Goals (SDGs) 2030 target of 70 per 100,000 live births and the National Development Strategic Plan (*RPJMN*) 2020–2024 target of 183 per 100,000 live births.[35] As described above, in a multicountry study, there is potential to avert maternal mortality if unmet needs are reduced. The importance of family planning for maternal mortality reduction in Indonesia was demonstrated in a recent study that estimated that every percentage point increase in the contraceptive prevalence rate (CPR) was associated with maternal mortality ratios that were lower by 7.0 deaths per 100,000 live births.[36] This is achieved through the reduction of unwanted and high-risk pregnancies, which may lead to maternal deaths.

Contraceptive prevalence in Indonesia has risen steadily over the years, with the CPR reaching 63.6% in 2017.[37] However, while there was a slight decrease in the unmet need for family planning between 2012 and 2017 from 11.4% to 10.5%, the unmet need for family planning has been stuck in the 10%–12% range since the turn of the century.[37]

In the present study, we combine detailed reanalyses of existing data with new qualitative data to better understand the underlying factors that have led to stagnant levels of unmet need for family planning in Indonesia. The focus of the analyses is toward identifying evidence-based corrective actions that might be taken to move the needle on unmet needs and maternal mortality in Indonesia.

METHODS

This study has ethics clearance from Atmajaya University. The number is 00291/III/LPPM-PM.10.05/09/2021. A mixed-methods approach was adopted for the study. The study used a concurrent triangulation design of mixed methods as both quantitative and qualitative data were collected and analyzed simultaneously. This is done to reach a better understanding and enrich the findings on the unmet need for family planning in Indonesia, although it also requires more resources and careful analysis to conduct. Quantitative and qualitative data and the methods used to analyze them are described in separate sections below.

Quantitative data
Three sources of quantitative data were analyzed in the study: the 2017 Indonesia Demographic Health Survey (IDHS), the 2018 Village Potential Survey (PODES), and National Population and Family Planning Board (BKKBN) service statistics. The IDHS sample consisted of 35,681 currently married women aged 15–49 years. The IDHS 2017 data were used to measure the unmet need for family planning and potential correlates thereof: sociodemographic and economic characteristics, husband–family factors related to family planning, and women's living environment characteristics. The PODES data were used to measure community-level characteristics related to health infrastructure for family planning services. The BKKBN service statistics were used to measure the volume of community-level family planning activities.

Data processing and analyses were undertaken using Microsoft Excel and Stata ver. 16 licensed to Knowledge Hub for Reproductive Health Indonesia. Logistic regression was used to undertake multivariate analysis.

A substantial portion of the quantitative analyses focused on 2017 IDHS data on reasons for nonuse of contraception among female IDHS respondents who wanted to limit or delay future pregnancies but were not using a contraceptive method at the time of the survey. The reasons stated were grouped into useful analytic categories, ranked in terms of importance, and compared between different population subgroups (e.g., women classified by age, education, and household wealth).

Variables used in the analysis were age, education (none, primary, secondary), working status, wealth index

(poorest, poorer, middle, richer, richest), residence (urban, rural) and region (Western, Central, Eastern Indonesia). Other variables used were parity, birth interval, husband's approval of contraceptive use, husband's ideal number of children, FP discussion with family/relation, source of FP information, distance to health facility, method knowledge, exposure to mass media (radio, tv, newspapers), physician density (number of physicians per 1,000 population), midwife density (number of midwives per 1,000 population), FP field officer density (number of FP field officers per 1,000 population), and the unmet need for FP.

Qualitative data

Qualitative data collection was undertaken via online focus group discussions (FGDs) and in-depth interviews (IDIs). Five (5) informant groups were : a) Group 1: Married women of reproductive age (WRA) with unmet needs (attended by 24 women); b) Group 2: Family planning (FP) program managers 1–Representatives of district and provincial health offices (attended by 20 persons); c)Group 3: FP program managers 2–Representatives of district FP officers, province FP officers, and BKKBN province (attended by 24 persons); d) Group 4: Health providers from hospitals and primary health centers (attended by 20 persons); e) Group 5: FP field officers and cadres (attended by 23 persons).

IDIs were conducted by phone with male partners of women with unmet needs who participated in the FGDs. The information obtained via the FGDs and IDIs with individual female and male respondents consisted of (1) Knowledge about FP and (2) Reasons for not using contraceptives. Information from program managers, health providers, and FP field officers/cadres consisted of (1) FP program planning and implementation, (2) Constraints/challenges of program implementation, and (3) Lessons learned concerning the unmet need for FP.

Qualitative data collection was undertaken in 7 provinces and 12 districts/cities across the Western, Central, and Eastern regions of Indonesia which were selected based on high percentages of unmet needs and low CPR according to BKKBN service statistics. Before data collection, coordination with the Ministry of Health (MoH) and the BKKBN was performed to select informants based on the stated criteria and develop the questions and data-collection methods that aligned with the quantitative methods and research questions. All FGD and IDI activities were recorded, transcribed, and subjected to thematic content analyses.

RESULTS

Quantitative findings

Table 1 presents the distribution of married WRA included in the IDHS 2017 sample by background characteristics. Over half of the women were in the group of 35–49-year-olds and had a complete primary education. The majority of women were working. Respondents were more or less equally distributed by the level of household wealth. Slightly more respondents lived in rural than urban areas, and most (82.4%) lived in Western Indonesia, reflecting the wider population distribution of the country.

Table 2 presents the results of a multivariable logistic regression analysis of correlates of the unmet need for FP. As may be observed, only two of the six sociodemographic factors included in the analyses emerged as statistically significant—parity and birth interval length. Women of parity four or higher and those whose last completed birth interval was less than 24 months were significantly more likely to have an unmet need for FP. The fact that no significant differences emerge in terms of the socioeconomic variables is a credit to the national FP program regarding its ability to provide services to women and families at all socioeconomic levels.

Unmet needs were strongly influenced by the husband's views on contraception and family engagement in FP discussions. Married WRA whose husbands approved of contraception were 5.5 times less likely to have an unmet need than those with a husband who disapproved. Women who discussed FP with their families had 46% lower adjusted odds of having unmet needs. Husband–wife differences in the ideal number of children were unrelated to unmet needs.

Regarding program factors, the provision of FP information by health workers had the greatest influence. Compared to women who never received FP information, women who received the information from health workers had 32% lower odds of having unmet needs (AOR = 0.68, 0.60–0.78). Women who perceived that the distance to a health facility was a big problem were 20% (AOR = 1.20, 1.03–1.39) more likely to have unmet needs than women who did not perceive the physical distance to a health facility to be an issue. No significant association of unmet needs with exposure to mass media was observed.

Among local FP supply environment factors, only the number of midwives per 1,000 population had a significant association with unmet needs. However, a high population density of midwives is associated with somewhat lower odds of unmet needs, as might be expected (AOR = 1.20, 1.05–1.38).

Table 3 provides a summary of the reasons given by 2017 IDHS who indicated a desire to space out or limit future births for not using contraception at the time of the survey. The data displayed employed the categories used in the IDHS survey to collect the data, and the respective reasons are displayed separately for women

with demand for spacing out and limiting future births. Four reasons were given by 10% of respondents or more—lack of access (19.7%), fear of side effects (18.8%). infrequent sex (18.1), and postpartum amenorrhea (11.3%). As may be observed, the relative importance of several reasons varied depending on women's desire to space out births vs. limiting future births.

Table 4 shows the reason given by groups of women for not using contraceptives, based on socioeconomic factors. The group division consisted of Group 1, namely, a group of women who did not use contraceptives due to opposition to their use; Group 2's nonuse was due to health concerns; Group 3's nonuse was due to service delivery issues; Group 4's nonuse was due to postpartum amenorrhea; and Group 5's nonuse was due to infrequent sex.

Noncontraceptive use for women who had a demand or need for FP for reasons of "opposition to use" (Group 1) seems to be more common among women with lower education and in low-income households. Nonuse due to "health concerns" (Group 2) on the other hand, tends to be higher in urban areas, among women with higher education and residing in the wealthiest households. Similar to Group 1, nonuse due to "service delivery issues" (Group 3) was also seen to be higher among women with lower education and in low-income households, but only slightly so. Women with lower levels of education were less likely to cite having postpartum amenorrhea (Group 4) as the reason for nonuse of contraception, while no clear pattern of socioeconomic differences emerged from the data in Table 5 concerning nonuse of contraception due to infrequent sex (Group 5).

Although differences by urban–rural residence are relatively muted (see Table 4), differentials by province are rather more pronounced (Table 5). Women who do not use contraception due to "opposition to use" (Group 1) tend to reside in selected provinces mostly in Eastern Indonesia, such as Papua (at 27.2%, the highest), Maluku (12.1%), and East Nusa Tenggara (11.8%). There might be cultural belief factors behind this high number. In Group 2, due to "health concerns," the number of nonuse women tends to be very high in Western Indonesia, such as 35.2% in Jakarta and 34.9% in Lampung, and very low in certain provinces in Eastern Indonesia, such as 13.7% in Papua. Noncontraceptive use due to "service delivery issues" (Group 3) tends to be higher in certain provinces, especially in Central Indonesia, such as North Kalimantan (36.6%), and in Eastern Indonesia such as Maluku (45.3%, the highest). Nonuse of contraception due to postpartum amenorrhea (Group 4) tends to be the highest on the island of Sumatra and lowest in Eastern Indonesia. Nonuse due to infrequent sex, on the other hand, tends to be less frequent in Sumatra and Eastern Indonesia and more frequent in Java and selected provinces in Central Indonesia.

TABLE 1. Respondent characteristics (N = 35,681)

Variable	Married women of reproductive age (%)
Age	
15–19	2.0
20–34	43.2
35–49	54.8
Education	
No education/incomplete primary	10.9
Complete primary/incomplete secondary	50.8
Complete secondary/higher	38.3
Working status	
Not working	38.4
Working	61.6
Wealth index	
Poorest	17.7
Poorer	19.9
Middle	20.7
Richer	21.2
Richest	20.5
Residence	
Urban	48.4
Rural	51.6
Region	
Western Indonesia	82.3
Central Indonesia	13.6
Eastern Indonesia	4.1

TABLE 2. Logistic regression analysis of correlates of unmet needs for family planning

	Unmet Need	
Variable	Adjusted Odds Ratio (AOR)	95% CI
Age		
15–19[Ref]	1.00	
20–34	1.46	0.08–27.6
35–49	2.14	0.11–40.4
Education		
No education/incomplete primary[Ref]	1.00	
Complete primary/incomplete secondary	0.98	0.84–1.14
Complete secondary/higher	0.98	0.82–1.16
Working status		
Not working[Ref]	1.00	
Working	0.92	0.84–1.01
Wealth index		
Poorest[Ref]	1.00	
Poorer	1.07	0.92–1.26
Middle	1.10	0.94–1.30
Richer	1.15	0.97–1.37
Richest	1.21	0.99–1.46

*$p < 0.05$

TABLE 2. Continued

Variable	Adjusted Odds Ratio (AOR)	95% CI
	Unmet Need	
Parity		
<4[Ref]	1.00	
4 or more	1.38*	1.23–1.55
Birth interval		
≥24 months[Ref]	1.00	
<24 months	1.29*	1.10–1.52
Residence		
Urban[Ref]	1.00	
Rural	0.90	0.81–1.00
Region		
West Indonesia[Ref]	1.00	
Central Indonesia	1.28*	1.06–1.53
East Indonesia	1.71*	1.40–2.29
Husband's approval of contraceptive use		
Approves[Ref]	1.00	
Disapproves	5.50*	4.55–6.57
Husband's ideal number of children		
Wants the same[Ref]	1.00	
Wants more	0.92	0.82–1.04
Wants fewer	1.02	0.82–1.26
FP discussion with family/relation		
Yes[Ref]	1.00	
No	1.54*	1.40–1.70
Source of FP information		
Never obtain FP info[Ref]	1.00	
From health workers	0.68*	0.60–0.78
From the FP field officers	1.14	0.84–1.53
From health workers and FP field officers	0.98	0.80–1.21
Distance to health facility		
Not a big problem[Ref]	1.00	
Big problem	1.20*	1.03–1.39
Methods knowledge		
Know ≥7 methods[Ref]	1.00	
Know <7 methods	1.09	0.98–1.21
Exposure to mass media (radio, tv, newspapers)		
Accesses 1–3[Ref]	1.00	
Accesses to none	1.09	0.82–1.45
Physician density		
≥1.3 per 1,000 pop[Ref]	1.00	
<1.3 per 1,000 pop	1.03	0.90–1.73
Midwife density		
≥2.5 per 1,000 pop[Ref]	1.00	
<2.5 per 1,000 pop	1.20*	1.05–1.38
FP field officer density		
≥1.2 per 1,000 pop[Ref]	1.00	
<1.2 per 1,000 pop	0.94	0.81–1.09

*p <0.05

Qualitative findings

Reasons for not using contraceptive methods

Based on the results of FGDs and IDIs, all groups of informants stated that the main reason for not using contraception was the fear of side effects, especially with the use of short-term contraceptive methods such as pills and injectables. Most admitted that they had headaches and felt weak while taking the pills, and the side effects of using injectables were weight gain and irregular menstruation. It also made the husbands disapprove of using contraception for the fear of side effects and disliking it if their wives gain weight. Some men also said they did not know much about other contraceptives, mostly long-term methods such as the Intrauterine Device (IUD) and implants, therefore, they were doubtful about their safety. In addition, as with the quantitative findings, many couples of reproductive age did not use contraception because one of them works outside town/island or far away which leads to infrequent sex.

"My reason is like this, when my fourth child was already 1 year old, I used pill then after 2 years I felt like unwell, felt a headache every day, lazy, then I tried to not use it for several months and actually I feel okay 4 years now, still well and safe. Due to the side effect that made me weak. I had used pill but always had complaints. So, I tried after my fourth child using pill but still like that. I have not tried implant." DA, female, 42 years old, Mahakam Ulu

"...My husband does not support using contraceptive because afraid I will gain weight." NJ, female, 22 years old, South Sorong

"I am afraid with chemical ingredients in pill. If it consumed every day, it may have side effect that affect kidneys or others, right. I do not use condom because, I have told by my friend too, but I am just afraid to use it. To use other contraceptives like injection, I am also afraid. If we use it, afraid it will have side effects..." N, male, 38 years old, Samarinda

Information was obtained from health workers, FP field workers, and cadres; in some cases, women were reluctant to use contraception because they already felt old (even though they were still of reproductive age) so they thought it was impossible or very unlikely that they would get pregnant again. Another reason is related to family beliefs such as patriarchy or traditional beliefs that prohibit contraceptive use. For example, in the South Nias District, there is a tradition that sons are the successors of the family so women are expected to keep having pregnancies until they gave birth to a son. Even though women want to limit having children, usually their husbands and family (such as in-laws) will oppose her use of contraception.

"About unmet need, usually they are not using contraceptive anymore because they already feel at old age, but if we look at our target data of couple in 15-49 years old, they actually are still at the age of 43 or 42" IB, Puskesmas health worker, South Sorong

Other reasons for noncontraceptive use that were stated by FP program managers were the lack of knowledge and difficulty in accessing health services. The access difficulty mostly happened in outer islands or mountain areas, which are far from health facilities and require large costs for transportation. This is consistent with quantitative findings, which also report that the lack of method knowledge and problems in accessing health facilities mean higher odds of unmet need.

TABLE 3. Reasons for not using contraception among women with an unmet need for spacing and limiting

Reason given	Demand for spacing (%)	Demand for limiting (%)	Total (N = 3,802) (%)
Fertility-related reason			
Not having sex	1.9	1.1	1.3
Infrequent sex	18.7	17.8	18.1
Postpartum amenorrhea	21.5	7.2	11.3
Breastfeeding	7.3	1.6	3.2
Fatalism	0.9	2.2	1.8
Opposition to use			
Respondents opposed	1.3	2.6	2.2
Husband/partner opposed	4.2	2.4	2.9
Others opposed	0.2	0.2	0.2
Religious prohibition	0.3	0.5	0.5
Lack of knowledge			
Knows no method	0.9	0.4	0.5
Knows no source	0.2	0.1	0.1
Method-related reason			
Lack of access/too far	21.3	19.1	19.7
Too costly	1.0	0.4	0.5
Preferred methods not available	1.2	2.6	2.2
No method was available	0.3	0.2	0.2
Fear of side effects	10.6	22.2	18.8
Inconvenient to use	0.0	0.1	0.1
Interferes with the body's processes	5.4	6.1	5.9
Weight gain/loss	3.6	2.5	2.8

TABLE 4. Group of nonuse contraceptive women based on socioeconomic factors (N = 3,802)

	Group 1 (%)	Group 2 (%)	Group 3 (%)	Group 4 (%)	Group 5 (%)
Type of residence					
Urban	6.0	29.2	22.4	7.8	14.8
Rural	4.9	23.0	22.4	10.1	15.8
Education					
No education	15.5	18.1	27.4	2.9	6.7
Primary	5.2	26.8	21.1	4.5	16.2
JHS	4.1	27.3	21.8	9.0	18.1
SHS	5.0	23.9	24.1	13.9	14.8
Academy	11.1	21.3	20.7	18.9	10.2
University	5.3	31.2	23.2	14.8	11.1
Wealth index					
Poorest	7.4	21.4	25.2	9.5	13.1
Poorer	5.1	23.3	22.2	9.4	17.3
Middle	4.9	25.8	23.0	8.2	16.9
Richer	5.1	27.6	22.2	8.8	14.8
Richest	4.7	31.5	19.8	8.9	14.5

TABLE 5. Group of nonuse contraceptive women based on provincial differences

Province	Group 1 (%)	Group 2 (%)	Group 3 (%)	Group 4 (%)	Group 5 (%)
Aceh	4.8	27.8	21.0	13.4	5.0
North Sumatra	3.7	22.9	29.3	14.2	6.1
West Sumatra	4.5	21.9	35.9	16.1	10.2
Riau	5.9	24.8	30.9	12.2	12.0
Jambi	5.8	29.9	13.5	21.2	9.8
South Sumatra	1.1	23.5	15.5	9.8	11.9
Bengkulu	7.6	31.1	15.0	18.3	7.1
Lampung	6.7	34.9	27.3	7.6	11.3
Bangka Belitung	1.7	32.2	40.4	16.5	18.6
Riau Islands	10.0	23.4	23.3	5.4	15.2
Jakarta	6.9	35.2	28.7	5.8	12.1
West Java	4.7	32.7	17.9	6.3	14.4
Central Java	6.3	25.4	14.9	7.7	21.1
Yogyakarta	0.0	15.8	11.9	9.9	30.0
East Java	2.0	20.9	19.6	10.2	24.1
Banten	6.4	34.5	16.1	6.7	6.6
Bali	7.3	19.0	24.7	8.7	17.3
West Nusa Tenggara	2.8	22.0	31.3	13.0	15.9
East Nusa Tenggara	11.8	28.0	28.1	6.6	13.8
West Kalimantan	2.1	26.7	10.6	8.7	15.2
Central Kalimantan	0.0	22.1	26.5	13.9	18.3
South Kalimantan	4.0	16.3	25.9	9.9	25.9
East Kalimantan	6.1	26.3	33.3	13.8	17.9
North Kalimantan	5.2	37.5	36.6	14.7	14.0
North Sulawesi	0.0	25.1	26.1	5.9	25.7
Central Sulawesi	8.4	26.5	32.7	3.3	12.5
South Sulawesi	4.0	11.5	33.9	8.3	14.5
Southeast Sulawesi	4.8	13.7	28.5	15.0	16.2
Gorontalo	9.6	16.0	31.7	2.9	9.4
West Sulawesi	4.7	17.1	33.4	9.7	17.3
Maluku	12.1	19.3	45.3	5.7	9.2
North Maluku	4.6	21.0	19.6	7.3	8.9
West Papua	4.4	23.3	29.4	6.0	13.6
Papua	27.2	13.7	23.9	9.2	11.3

Another factor for not using contraceptives is the lack of support from the local government. One mentioned case was not supporting the National Family Planning Board (BKKBN) program "two children are enough" because there is suspicion that this program would gradually eliminate certain local ethnicities.

Obstacles or challenges of the FP program
Most of the informants mentioned the lack of service provider competency as a constraint to the FP program. Many service providers claimed they need to update their knowledge of FP services, but it had been a long time since the last training was received. Some also stated that they had not received any FP training or certification so they could not provide further services, such as the insertion or removal of the IUDs.

"… There are some obstacles that had been informed also about certification. That is one of the obstacles for the midwife, many midwives have competency (to do the services), but do not have certification. So that they cannot do services" GE, OPDKB Kupang

Another obstacle to the FP program is the availability of contraceptives, stock scarcity, or expiry experienced in some areas. It affected the delivery of contraceptive services and could lead to the low achievement of FP program targets. Many informants from the Central and Eastern regions of Indonesia mentioned these problems. Distribution delays or stock shortages have occurred from a few weeks to six months. Some claimed that it could be made worse due to the COVID-19 pandemic. In addition, the FP program constraints occur due to the

lack of access, which makes it difficult to reach out to the community and hinders the distribution of logistics.

"Stock of contraceptive was run out in the past 6 months, or maybe because our condition in Wakatobi is quite difficult or maybe because of the pandemic..." AH, Wakatobi health officer

Several program managers also mentioned the unsynchronized recording and reporting of FP data between the MoH and the BKKBN as a program obstacle. They pointed out the negative effects of the lack of synchronization on program planning and monitoring.

DISCUSSION

The factors underlying the unmet need for FP in Indonesia are both several and complex. In a broad perspective like those observed in other countries, the key underlying factors vary across different population subgroups and geographic areas, ruling out simple one-size-fits-all solutions.

One theme concerning factors underlying unmet needs identified in the analyses concerns opposition to their use by husbands and family members. The results of this and a parallel study of male involvement in FP in Indonesia[38] show that support from husbands/partners and discussions about contraceptive use with family members have a positive impact on female contraceptive use. Comparable findings have been reported in studies in other countries.[19,24,29,30] Overall, male opposition to FP in Indonesia is low (4.3% as per the 2017 IDHS) but is more common in Eastern Indonesia, especially in Papua. The engagement of political and religious leaders and other public opinion influencers will, thus, be essential in addressing this issue. Promotional campaigns targeted at males, and more specifically to males of low socioeconomic status, to increase support for FP will be needed. Program efforts should be directed to increasing not only male approval of FP, but also active male involvement as FP clients, partners, or agents of change, each of which can make contributions to reducing the unmet need for FP.[39]

A second major theme emerging from the analyses was health concerns, most notably the fear of side effects. Commonly cited effects included headache and irregular menstruation when using short-term methods. Health concerns were more commonly cited in Western Indonesia and by women of higher socioeconomic status, who may have greater knowledge of the risks and side effects of using contraceptives. The role of health concerns in elevating the unmet need for FP in Indonesia is likely related to inadequate counseling of women concerning side effects and how they can be managed. This interpretation is supported by Indonesia's low global ranking on the FP2020 Method Information Index, an indicator of the quality of FP counseling.[40] Indonesia's total Method Information Index (MII) score in 2017 was 28.7, less than half of that of the ASEAN peer countries Philippines (59.8) and Cambodia (67.4). Among the three components of the MII score, performance on the components pertaining to informing clients about the side effects of alternative contraceptive methods and what can be done about the side effects has been the weakest by far. Concern over side effects is likely also at least partially responsible for the sizable increase in the use of traditional methods among more highly educated, urban women observed between 2012 and 2017.[41] These results indicate the need for improved communication/education and counseling concerning health issues related to different contraceptive methods delivered in ways that are the most suitable for different subgroups of women and local geographic contexts.

A third theme concerned service delivery issues, which were cited more frequently in Eastern Indonesia. Among the issues cited were contraceptive stock shortages in difficult-to-reach areas and a lack of service provider training and certification related to long-acting methods (implants, IUDs, and sterilization). As health service delivery (including FP) in Indonesia is decentralized, local governments have the primary responsibility for addressing service delivery barriers and bottlenecks. However, the central-level government plays a key role in commodity procurement and training. Regarding stock shortages, a real-time logistics information system (LMIS) would go a long way toward minimizing service disruptions due to inadequate supplies of contraceptives. Ensuring that provinces and districts include commodity distribution costs in their annual budgets would also help minimize the "last-mile" distribution disruptions that are often the cause of stock shortages. In areas where physical access to FP services is challenging, mobile and/or online services might be expanded. Regarding training, more up-to-date information on staff training needs is needed if the MoH and the BKKBN are going to be able to provide effective support to cities and districts. In this regard, the MoH is in the process of developing a learning management system for the transformed primary healthcare system and national public laboratory network. A comparable LMIS will also be needed at the BKKBN.

For a substantial number of women with an apparent need for FP, the reason given for the nonuse of contraception was postpartum amenorrhea. Such an explanation was given more frequently by women with higher levels of education, likely reflecting their better understanding of the protective effects of postpartum amenorrhea and exclusive breastfeeding. The danger here is that postpartum women wait too long to begin/resume contraceptive use after having a child. Indeed, an earlier study found that while the unmet need for FP among postpartum women in Indonesia was

relatively low compared with other low- and middle-income countries, Indonesian women tended to initiate contraceptive use relatively late, considering the limited duration of exclusive breastfeeding practiced by most Indonesian women.[42]

In considering strategies to reduce the unmet need for FP, it should be borne in mind that Indonesian women have, historically, shown a preference for nongovernment service providers, with such providers having a 60%–70% market share since the early 2000s. Greater collaboration with nongovernment providers will, thus, be needed to reduce the unmet need for FP significantly. The BKKBN would be prudent to adopt a total market approach as it targets efforts to reduce unmet needs geographically. Such collaboration might, for example, take the form of the BKKBN focusing on government resources more heavily in areas that are currently underserved by nongovernment providers. At the same time, nongovernment providers such as religious organizations and civil society organizations can help fill gaps where ensuring the provision of government FP services has proved challenging. On the all-important matter of client information/counseling and informed choice, given the market share of nongovernment providers, Indonesia will find it challenging indeed to significantly improve performance on informed choice unless it can productively engage nongovernment providers to improve the quality of information and counseling services.

As was noted earlier, recent global literature has focused on the limitations of the conventional definition of unmet need for FP in that it does not consider women's satisfaction with the methods they are currently using.[3,4] The argument is that women who are not satisfied with the method they are using are more likely to discontinue use and thus should not be viewed as having met their needs. A recent study in Kenya estimated that the level of unmet need (11.5%) would be increased by 25%–70% depending upon the definition of consumer dissatisfaction applied in the definition of unmet need.[3] This matter merits deliberation in Indonesia. One way to pursue this would be by including relevant questions in the next IDHS to support the empirical analysis of the implications of the use of more rigorous definitions of the unmet need for FP in the future.

Finally, although the focus of the present study was on the unmet need for FP, the fact that the demand for FP is quite low in some parts of Indonesia should not be overlooked. For example, according to the 2017 IDHS, demand for FP was only 64% in West Papua and 54% in Papua against a national figure of 75%. In such areas, unmet need tells only part of the story. Efforts to generate demand in Eastern Indonesian needs to continue and be made more effective in parallel with reducing the unmet need for FP. To do this, effective

communication strategies and local stakeholder involvement are crucial.

A coordinated MoH–BKKBN initiative is recommended to systematically address the factors underlying stubbornly high levels of unmet needs for FP. As business-as-usual practices and intervention strategies have not moved the needle on unmet needs significantly for the past 20 years, new approaches are needed. This will entail (1) developing communication strategies and messaging (including FP counseling) that address effectively such factors as concerns over side effects, opposition to FP, limited male participation in FP, and limited demand for FP (in some areas), in ways that resonate with important population subgroups and community leaders as well as in different geographical areas, and (2) adopting on a wider scale service delivery approaches that overcome barriers to physical access to services. Each locality must be viewed as a separate market and interventions should be developed and implemented that best address local factors underlying the unmet need. More meaningful engagement by nongovernment service providers would also be prudent and is recommended. Given their sizable market share, such providers can be of considerable assistance to the national FP program in strengthening FP counseling and informed choice as well as providing service delivery options in many locations and filling the gaps in the geographic coverage of public sector services.

CONCLUSIONS

Successful efforts to reduce the unmet need for FP are complex in that they must simultaneously contend with the interplay between local sociocultural contexts, individual beliefs, aspirations, and preferences, and the supply environment for FP at both the national and local levels. The fact that the relevance of these factors varies across different population subgroups and geographic areas means that there is no simple, one-size-fits-all solution to reducing the unmet need for FP in Indonesia. Differentiated interventions for different population subgroups and geographic areas will be needed if progress is to be made.

CONFLICT OF INTEREST

None declared.

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