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ORIGINAL ARTICLE

Exploring Indonesian men's role in family planning: factors and implications from a cross sectional study

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Objective: To assess factors associated with male contraception and develop a predictive model to inform related programs in Indonesia. Methods: The study used data from the 2017 Indonesia Demographic and Health Survey with a cross sectional study design. The outcome variable was contraception use, while the predictors include sociodemographic characteristics, media exposure, knowledge of women's ovulatory cycle, and attitudes toward contraception. Weighted analysis utilized chi-square tests and multivariable logistic regression. The model performance was evaluated using the Hosmer-Lemeshow test, ROC curve, and calibration belt test. Result: The prevalence of male contraceptive use was 8%, with withdrawal being the most commonly used method (41.8%). In the final model, significant factors included urban residence, exposure to family planning media, and knowledge of the ovulation cycle – both incorrect and correct. Although interaction terms were included in the model (e.g., urban × media × knowledge), none were statistically significant. The model demonstrated moderate predictive ability and good calibration. Conclusion: Residence, media exposure, and knowledge of women's ovulation are key factors in male contraception use. The effectiveness of withdrawal relies on accurate ovulatory knowledge. Future programs should integrate these insights and tailor communication strategies to target populations.

Keywords: Contraception. Family planning. Ovulatory cycle. Withdrawal.

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Introduction

Controlling population growth has long been perceived as a crucial strategy for achieving sustainable development. However, viewing population growth solely as a threat to resource allocation and development progress reflects a narrow demographic-centred narrative. Contemporary global public health discourses emphasize that the relevance of contraception extends far beyond the issue of fertility control. Unintended fertility – both mistimed and unwanted pregnancies – can negatively affect maternal and child health, disrupt family planning, and limit parents' ability to accumulate human capital such as education, income, and long-term well-being (Abebe Gelaw *et al.*, 2023; D'Souza *et al.*, 2022). Thus, the focus of contraceptive use must shift toward its role in improving individual and family welfare, promoting gender equity, and enabling sustainable development through strengthened reproductive autonomy (World Health Organization, 2023; United Nations Department of Economic and Social Affairs, 2022).

Despite global progress, unintended pregnancies remain a major public health concern. In 2021, approximately 1.1 billion of the 1.9 billion women of reproductive age (15-49 years) worldwide required family planning services, with 16% experiencing unmet need for contraception (World Health Organization, 2023). In low- and middle-income countries (LMICs), a substantial number of unintended pregnancies occur even among contraceptive users, suggesting issues of method failure, discontinuation, and lack of male involvement (Abebe Gelaw *et al.*, 2023).

Global efforts, as emphasized in Sustainable Development Goals (SDGs) Target 3.7 and Target 5.6, aim to ensure universal access to sexual and reproductive health services and the full exercise of reproductive rights. However, the burden of contraception continues to fall disproportionately on women. In 2020, female sterilization accounted for 22.9% of contraceptive methods globally, whereas male sterilization remained as low as 1.8% (United Nations Department of Economic and Social Affairs, 2022). Similarly, in Indonesia, short-term female methods such as injections and pills dominate contraceptive use, with limited uptake of male-centered methods such as condoms or vasectomy (Fajarningtiyas *et al.*, 2021).

Between 2007 and 2017, the overall contraceptive prevalence among ever-married women in Indonesia showed minimal improvement – from 61% to 64% – while male involvement remained modest, with condom use rising only from 2.1% to 4.0% (Aryanty *et al.*, 2021; Fajarningtiyas *et al.*, 2021). These data reflect an urgent need for strategies that promote shared contraceptive responsibility. Enhancing male involvement in contraception not only reduces the risk of unintended pregnancy but also contributes to lowering maternal and child mortality, improving spousal communication, and fostering reproductive equality (Grabert *et al.*, 2021; Jungari; Paswan, 2020).

Nonetheless, engaging men in contraception use remains a challenge. Several studies have identified barriers such as low educational attainment (Osuafor *et al.*, 2023), rural

residence (Assefa *et al.*, 2021; Idris; Syafriyanti, 2021), traditional gender norms (Lantiere *et al.*, 2022), and the perception that contraception is a responsibility exclusive to women (Rahayu *et al.*, 2023). In Indonesia, men often hold the decision-making authority in households, including decisions related to family planning, which further emphasizes the importance of actively involving them in reproductive health programs (Nilofer Jabarulla Khan *et al.*, 2018).

Several reviews have further emphasized that effective male engagement in family planning requires more than just access to services. Aventin *et al.* (2023) highlighted that successful programs typically integrate peer-led education, couple communication, and gender-transformative strategies to address both structural and sociocultural barriers. In Indonesia, Mardiya *et al.* (2022) underlined persistent obstacles such as low male awareness, entrenched gender norms, and limited accessibility to services. Media exposure has also been shown to shape men's reproductive attitudes. Studies have found that limited media infrastructure in rural areas hinders access to reliable information (Amoak *et al.*, 2023; Osuafor *et al.*, 2023), while targeted campaigns can dispel myths and reduce religious resistance (Oyedele, 2021). Moreover, community-based actors such as grassroots health workers play an instrumental role in engaging men and reshaping reproductive norms, particularly in underserved contexts (Jungari; Paswan, 2020).

To address this gap, the Indonesian government has introduced initiatives such as financial incentives for vasectomy uptake. For example, since 2019, men willing to undergo vasectomy have been offered a cash incentive of approximately IDR 300,000 (BKKBN, 2021). While this approach has led to a slight increase in vasectomy uptake (Intan, 2024), the overall trend remains limited.

Given these challenges and opportunities, there is a critical need to identify the factors that influence male contraceptive use in Indonesia. Understanding these determinants can inform more targeted and effective program designs. Therefore, this study aimed to assess the potential associated factors of male involvement in contraception use and to build a prediction model that can support the planning of male-focused contraceptive programs in Indonesia.

Methods

This study is a secondary data analysis that uses a cross-sectional design based on the 2017 Indonesia Demographic and Health Survey (IDHS). The IDHS is a nationally representative household survey conducted every five years. Access to the dataset was obtained through official registration and approval via the USAID DHS Program website (USAID, 2018). The availability of IDHS 2007 is also acknowledged and may be considered in further analysis to examine trends in male contraceptive use over time.

The dependent variable is male contraceptive use, defined as current use of any contraceptive method – either traditional/folkloric or modern. Respondents were classified as "using" if they reported current use of any contraceptive method at the time of the survey, and "not using" otherwise.

The main independent variables include sociodemographic characteristics (age, education level, wealth index, duration of marriage, place of residence), exposure to family planning messages via mass media, knowledge of women's ovulation cycles, and attitudes toward contraception. Additionally, characteristics of the wife – such as age, educational attainment, and employment status – were considered as potentially important predictors to capture the household decision-making dynamics, and are explored in extended models. The selection of predictor variables was not solely based on statistical significance (p-value), but also on theoretical relevance and evidence from previous studies.

The analysis focused on 8,790 ever-married men aged 15–54 years, selected through a two-stage stratified cluster sampling design (USAID, 2012). All analyses applied sampling weights to ensure national representativeness and correct for sampling biases, non-response, and coverage errors (Yansaneh, 2003).

Descriptive and bivariate analyses were conducted to examine the respondents' characteristics. Initial associations between independent variables and contraceptive use were assessed using chi-square tests. To identify factors associated with male contraceptive use, multivariate logistic regression was performed. Variables with p-values < 0.25 in the bivariate analysis and/or those with strong theoretical justification were included in the initial model. The final model retained variables that were statistically significant ($p < 0.05$) and conceptually relevant for predictive accuracy.

To better understand the conditional nature of male contraceptive use, interaction terms were added to the final models to explore effect modification between key predictors, tested in the final models. These tests aimed to assess whether the effects of key variables differed across subpopulations.

Model performance was assessed using the Hosmer-Lemeshow goodness-of-fit test, the area under the receiver operating characteristic (ROC) curve, and the calibration belt method for internal calibration. Due to technical limitations of the calibration belt command with survey-weighted models, calibration analysis was conducted using an unweighted logistic regression model with identical predictors to the final weighted model. Furthermore, interaction terms were incorporated in extended models to examine potential effect modifications influencing male contraceptive use.

Results

Men's involvement in family planning through contraceptve use was 8%, with the lowest proportion among those under 20 years of age (0.6%), and the top two methods were withdrawal (41.8%) and male condoms (37.4%). The significant difference in the proportion

of contraception use ($p < 0.05$) was identified according to residence, educational level, wealth, marital duration, media exposure, knowledge, and attitude toward contraception. Irrespective of contraceptive use or lack thereof, the majority had a secondary level of education. Contraceptive use was found to increase with higher wealth status. In contrast, contraceptive use decreased with longer marital duration and increasing wife's age.

TABLE 1
Sociodemographic characteristics of respondents based on current contraception status
Indonesia – 2017

Characteristics	Contraception status						p-value
	Using		Not using		Total		
	N	%	N	%	N	%	
Age (years)							
< 20	4	0.6	26	0.3	30	0.3	0.083
20-29	81	11.5	1,166	14.4	1,247	14.2	
30-39	259	36.7	3,004	37.2	3,263	37.1	
40-49	279	39.6	3,011	37.2	3,290	37.4	
> 50	82	11.6	878	10.9	960	11.0	
Wife's age (years)							
15-34	322	45.7	3,761	46.5	4,083	46.5	0.712
35-39	143	20.3	1,741	21.5	1,884	21.4	
40-44	137	19.4	1,467	18.2	1,604	18.2	
> 45	103	14.6	1,116	13.8	1,219	13.9	
Residence							
Rural	256	36.3	4,141	51.2	4,397	50.1	<0.001
Urban	449	63.7	3,944	48.8	4,393	49.9	
Education level							
No education	7	1.0	157	1.9	164	1.9	<0.001
Primary	114	16.2	2,561	31.7	2,675	30.4	
Secondary	395	56.0	4,319	53.4	4,714	53.6	
Higher	189	26.8	1,048	13.0	1,237	14.1	
Wealth status							
Poorest	127	18.0	1,837	22.7	1,964	22.3	<0.001
Poorer	116	16.5	1,754	21.7	1,870	21.3	
Middle	130	18.4	1,594	19.7	1,724	19.6	
Richer	147	20.9	1,518	18.8	1,665	19.0	
Richest	185	26.2	1,382	17.1	1,567	17.8	
Marital duration (years)							
0-4	122	17.3	1,281	15.8	1,403	16.0	0.006
5-9	132	18.7	1,484	18.4	1,616	18.3	
10-14	126	17.9	1,494	18.5	1,620	18.4	
15-19	143	20.3	1,507	18.6	1,650	18.8	
20-24	103	14.6	1,203	14.9	1,306	14.9	
25-29	72	10.2	770	9.5	842	9.6	
> 30	7	1.0	346	4.3	353	4.0	

(continue)

(continued)

Characteristics	Contraception status						p-value
	Using		Not using		Total		
	N	%	N	%	N	%	
Currently working							
No	12	1,7	153	1.9	165	1,9	0.483
Yes	693	98.3	7,932	98.1	8,625	98.1	
Media exposure to contraception							
Never	238	33.8	3,763	46.5	4,001	45.5	‹0.001
Ever	467	66.2	4,322	53.5	4,789	54.5	
Knowledge about women's ovulatory cycle							
Does not know	122	17.3	3,086	38.2	3,208	36.5	
Incorrect	360	51.1	3,529	43.6	3,889	44.2	‹0.001
Correct	223	31.6	1,470	18.2	1,693	19.3	
Contraception considered a woman's business men should not worry about							
Does not know	15	2.1	348	4.3	363	4.1	
Agree	183	25.9	2,821	34.9	3,004	34.2	‹0.001
Disagree	507	72.0	4,916	60.8	5,423	61.7	
Sterilized women seen as promiscuous							
Does not know	14	2.0	300	3.7	314	3.6	
Agree	33	4.7	128	1.6	161	1.8	0.002
Disagree	658	93.3	7,657	94.7	8,315	94.6	

Source: Indonesia Demographic and Health Survey 2017. Author's elaboration.

More than half of men currently using contraception were working (98.5%) and had been exposed to contraceptive information through the media (66.9%) but had insufficient knowledge on women's ovulatory cycle (51.1%). Regarding attitudes, contraceptive use was high among men who disagreed with statements that contraception is solely a woman's issue men should not worry about (72.0%), and that sterilized women are promiscuous (93.3%).

TABLE 2
Association between sociodemographic characteristics and contraception use
Indonesia – 2017

Variables	OR (95%CI)	p-value
Age (years)		
‹ 20	1	
20 – 29	0.34 (0.07 – 1.58)	0.172
30 – 39	0.49 (0.11 – 2.21)	0.357
40 – 49	0.54 (0.12 – 2.43)	0.424
› 50	0.45 (0.09 – 2.10)	0.316

(continue)

(continued)

Variables	OR (95%CI)	p-value
Wife's age (years)		
15 – 34	1	
35 – 39	0.97 (0.75 – 1.26)	0.874
40 – 44	1.03 (0.80 – 1.34)	0.778
› 45	1.15 (0.87 – 1.54)	0.312
Residence		
Rural	1	
Urban	1.92 (1.52 – 2.43)	‹0.001
Education level		
No education	1	
Primary	0.77 (0.31 – 1.91)	0.581
Secondary	1.85 (0.76 – 4.48)	0.172
Higher	3.57 (1.46 – 8.68)	0.005
Wealth status		
Poorest	1	
Poorer	0.95 (0.69 – 1.31)	0.762
Middle	1.16 (0.83 – 1.61)	0.382
Richer	1.32 (0.94 – 1.84)	0.106
Richest	1.97 (1.41 – 2.77)	‹0.001
Marital duration (years)		
0 – 4	1	
5 – 9	1.09 (0.81 – 1.48)	0.535
10 – 14	1.09 (0.81 – 1.49)	0.552
15 – 19	1.13 (0.84 – 1.53)	0.399
20 – 24	1.01 (0.72 – 1.41)	0.939
25 – 29	0.97 (0.68 – 1.38)	0.886
› 30	0.18 (0.72 – 0.46)	‹0.001
Currently working		
No	1	
Yes	1.32 (0.59 – 2.93)	0.485
Media exposure to contraception		
Never	1	
Ever	1.68 (1.36 – 2.07)	‹0.001
Knowledge about women's ovulatory cycle		
Does not know	1	
Incorrect	2.90 (2.23 – 3.76)	‹0.001
Correct	4.56 (3.39 – 6.15)	‹0.001
Contraception considered a woman's business men should not worry about		
Does not know	1	
Agree	1.45 (0.74 – 2.81)	0.274
Disagree	2.51 (1.32 – 4.77)	0.005
Sterilized women seen as promiscuous		
Does not know	1	
Agree	4.11 (1.81 – 9.30)	‹0.001
Disagree	2.13 (1.08 – 4.21)	0.028

Source: Indonesia Demographic and Health Survey 2017. Author's elaboration.

The bivariate analysis showed 4 of 10 explanatory variables were statistically significantly associated with contraceptive use ($p < 0.05$). Men in urban areas had 1.92 times higher odds of using contraception than men in rural areas. Men exposed to contraceptive information through the media also had up to 1.68 times higher odds of using contraception compared to those who were not. In this study, wife's age, educational level, and wealth status shared the same scheme for contraceptive use. Older age of wife, higher educational level, and greater wealth were associated with higher odds of men using contraception. Conversely, longer marital duration was associated with lower odds of men using contraception (Table 2).

TABLE 3
Initial and final predictive models of contraception use
Indonesia – 2017

Variable		Coefficient	SE	t	p-value	95%CI
Initial model						
Residence	Urban	0.48	0.12	4.00	‹0.001	0.25 – 7.22
Media exposure	Ever	0.23	0.11	2.13	0.033	0.02 – 0.45
Attitude	Agree	0.77	0.43	1.79	0.074	-0.07 – 1.62
	Disagree	0.17	0.35	0.48	0.629	-0.52 – 0.86
Knowledge	Incorrect	0.94	0.13	6.91	‹0.001	0.67 – 1.20
	Correct	1.37	1.15	8.89	‹0.001	1.07 – 1.67
Constanta		- 3.89	0.36	-10.72	‹0.001	-4.61 – -3.18
Final						
Residence	Urban	0.74	0.32	2.26	0.024	0.09 – 1.38
Media exposure	Ever	0.64	0.27	2.33	0.020	0.10 – 1.19
Knowledge	Incorrect	0.95	0.30	3.17	0.002	0.36 – 1.55
	Correct	1.49	0.33	4.50	‹0.001	0.84 – 2.14
Residence x media exposure	Urban x ever	-0.69	0.42	-1.63	0.103	-1.53 – 0.14
Residence x knowledge	Urban x incorrect	0.09	0.41	0.23	0.817	-0.71 – 0.90
	Urban x correct	-0.40	0.47	-0.84	0.401	-1.34 – 0.54
Media exposure x knowledge	Ever x incorrect	-0.21	0.38	-0.54	0.587	-0.96 – 0.54
	Ever x correct	-0.39	0.45	-0.89	0.376	-1.28 – 0.48
Residence x media exposure x Knowledge	Urban x ever x incorrect	0.21	0.52	0.39	0.696	-0.83 – 1.23
	Urban x ever x correct	0.94	0.62	1.50	0.133	-0.29 – 2.16
Constanta		- 3.87	0.22	-17.65	‹0.001	-4.30 – -3.44

Source: Indonesia Demographic and Health Survey 2017. Author's elaboration.

Reference categories are rural (residence), never (media exposure), does not know (knowledge)

The initial model indicated significant associations of urban residence, media exposure, and knowledge with male contraceptive use. Men living in urban areas (*coef.* = 0.48; $p < 0.001$) and those exposed to family planning messages in the media (*coef.* = 0.23; $p = 0.033$) had higher odds of using contraception. Knowledge emerged as the strongest predictor:

even incorrect knowledge was associated with higher use (*coef.* = 0.94; p ‹ 0.001), while correct knowledge had an even stronger effect (*coef.* = 1.37; p ‹ 0.001). Attitudinal variables were not statistically significant.

In the final model, which included interaction terms, the main effects remained significant. Urban residence (*coef.* = 0.74; p = 0.024), media exposure (*coef.* = 0.64; p = 0.020), and both incorrect (*coef.* = 0.95; p = 0.002) and correct knowledge (*coef.* = 1.49; p ‹ 0.001) continued to show strong associations. Although interaction terms did not reach statistical significance, several patterns emerged. The interaction between urban residence and media exposure (*coef.* = –0.69; p = 0.103) suggested a potentially stronger effect of media exposure in rural areas. The three-way interaction of urban residence, media exposure, and correct knowledge (*coef.* = 0.94; p = 0.133) indicated a possible synergistic effect, though it did not achieve significance. Overall, the findings highlight the central role of media exposure and knowledge in shaping male contraceptive behavior, with context-dependent effects warranting further investigation.

TABLE 4
Summary of logistic regression model evaluation tests

Evaluation test	Result	p-value
Hosmer-Lemeshow	$\chi^2(7) = 0.00$	1.000
Link test – _hat	Coefficient = 1.000	0.089
Link test – _hatsq	Coefficient = -0.00000026	1.000
Area under ROC curve	AUC = 0.6550 ; 95%CI = 0.64 – 0.67	
Calibration belt test	Test statistic = -0.00	1.000

Source: Author's elaboration.

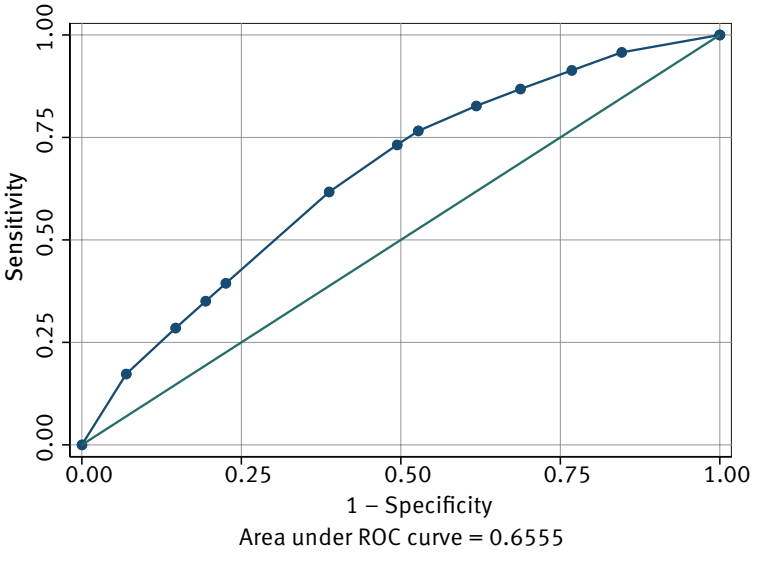
The performanc of the final logistic regression model was evaluated using several diagnostic tests. The model's goodness of fit was supported by the Hosmer-Lemeshow test, which showed no significant difference between observed and predicted values ($\chi^2(7) = 0.00$; p = 1.000), indicating excellent model fit.

Specification analysis using the link test showed that the predicted values (_hat) were statistically significant (p = 0.049), while the squared predicted values (_hatsq) were not (p = 1.000), confirming the model was correctly specified.

Discriminatory ability was assessed using the area under the ROC curve (AUC), which yielded a value of 0.6555 (95% CI: 0.6357–0.6754), suggesting modest but acceptable discrimination in predicting male contraceptive use.

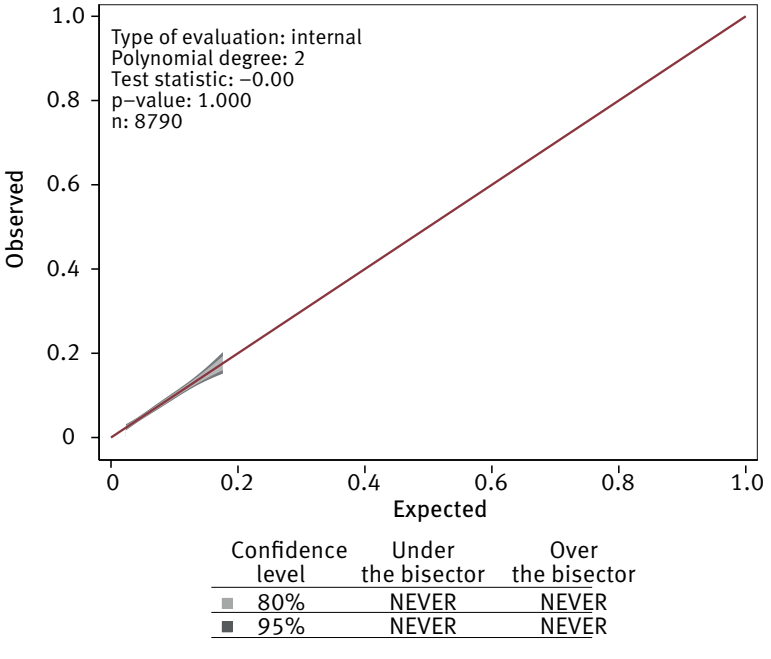
Model calibration was evaluated using the calibration belt method. The internal calibration belt plot (n = 8,790; polynomial degree = 2) showed no significant deviation from the ideal line (Test statistic = -0.00; p = 1.000), with both the 80% and 95% confidence belts encompassing the identity line across all predicted risk levels. These findings indicate that the model provides reliable and well-calibrated predictions within the study population.

FIGURE 1
ROC curve of the final model



Source: Author's elaboration.

FIGURE 2
Internal calibration belt plot on the final model



Source: Author's elaboration.

Discussion

This study revealed male contraceptive use in Indonesia has shown some improvement compared to earlier national research (Idris; Syafriyanti, 2021; Yulianti *et al.*, 2023), yet it remains considerably lower than in other low and middle income countries (LMIC), such as Northen Ethiopia (12.5%), South-West Nigeria (32.4%), Myanmar (40.7%), and Northern Uganda (46.6%) (Myint *et al.*, 2021; Obiyan; Lasii, 2019; Tumwesigye *et al.*, 2023; Wondim *et al.*, 2020). Although Indonesia's National Population and Family Planning Board (BKKBN) emphasizes the roles of men as clients and agents of change in its 2020-2024 strategy, male participation in practice remains largely passive (Rahayu *et al.*, 2023). This represents a critical gap, as active male engagement is associated with a significant reduction in unmet contraceptive needs among women.

A wide range of factors limits male participation in family planning, including sociocultural norms, limited access to information and services, and gendered perceptions of reproductive responsibility (Mardiya *et al.*, 2022). Our findings support these concerns, showing that men in urban areas are significantly more likely to use contraception than their rural counterparts. Limited healthcare access, poor availability of male contraceptive methods, and entrenched gender norms in rural areas are likely contributors (Ali *et al.*, 2022; Assefa *et al.*, 2021; Saifullah; Budiarti, 2023; Wondim *et al.*, 2020; Yulianti *et al.*, 2023).

These dynamics are consistent with evidence from Indonesia. A study in Gunung Mulia highlighted that male involvement in contraception was significantly associated with family support, approval from religious leaders, and positive attitudes toward contraceptive use. Their findings emphasize that efforts to increase male involvement should consider socio-religious influences and household-level support structures. Such contextual barriers may help explain the amplified impact of media exposure on contraceptive uptake in rural areas observed in this study. Mass media likely serve as a compensatory source of information where formal health education is lacking (Murti *et al.*, 2023).

Furthermore, a systematic review (Aventin *et al.*, 2023) found that successful programs commonly integrated community mobilization, peer-led education, couple communication, and health system strengthening. Programs adopting gender-transformative approaches – actively challenging harmful gender norms – demonstrated greater effectiveness in promoting supportive attitudes, improving couple communication, and enhancing men's contraceptive knowledge and shared decision-making roles.

Our findings indicate media exposure increased the odds of male contraceptive use by 27%. This is consistent with findings from other LMICs, including Senegal (Speizer *et al.*, 2018), Malawi (Osuafor *et al.*, 2023), Northern Uganda (Tumwesigye *et al.*, 2023), Southern Ethiopia (Ermias Geltore; Yohannes Lakew, 2022), and across Sub-Saharan Africa (Mutumba, 2022). In rural areas, limited media infrastructure can act as a barrier (Amoak *et*

al., 2023). However, where available, mass media may reduce social and religious barriers, dispel myths, and improve reproductive knowledge (Oyedele, 2021).

Reproductive knowledge also plays a crucial role. This study found that men who had adequate knowledge of the female ovulation cycle were nearly four times more likely to use contraception, with even partial knowledge associated with increased use. This suggests enhancing biological literacy could significantly improve male engagement. Since ovulation is included in the senior high school curriculum in Indonesia, disparities in educational attainment between rural and urban areas may also partly explain differences in contraceptive knowledge and behavior.

Patriarchal cultural norms remain a major barrier to male involvement in family planning. Many men in Indonesia still perceive contraception as solely a woman's responsibility, reinforcing unequal gender roles that discourage shared reproductive responsibility (Kiranantika *et al.*, 2020; Rahayu *et al.*, 2023). Our study supports this, showing that men who disagreed with such views were significantly more likely to use contraception.

Furthermore, rejecting stigmatizing beliefs – such as the notion that sterilized women are promiscuous – was associated with greater contraceptive use. These findings highlight how deeply embedded gender ideologies influence male attitudes and behaviors regarding contraception. Cultural expectations of masculinity and male authority, particularly in communities with strong patriarchal traditions such as Javanese society in Indonesia and many communities in the Philippines, often limit women's autonomy and reinforce male dominance in reproductive decision-making (Lantiere *et al.*, 2022; Stevenson *et al.*, 2023). Even among rural populations, the belief that contraception is solely a woman's issue has been rising, increasing from 31.8% to 44.6% (Anggraeni; Nurrachmawati, 2015). Addressing these gender norms is essential for promoting male engagement, and calls for gender-transformative strategies that actively challenge patriarchal attitudes in family planning programs.

To close these gaps, family planning programs must move beyond information delivery to adopt integrated, gender-transformative strategies. These include engaging men in counseling and outreach initiatives, tailoring media messages for male audiences, and involving community and religious leaders. Community health workers and grassroots educators also play a pivotal role in reshaping norms and improving male acceptance, particularly in tribal and rural communities (Jungari; Paswan, 2020). Future programs and research should emphasize these approaches to foster sustainable male engagement in reproductive health.

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Resumo

Explorando o papel dos homens indonésios no planejamento familiar: fatores e implicações de um estudo transversal

Objetivo: Avaliar os fatores associados ao uso de contracepção masculina e desenvolver um modelo preditivo para orientar programas relacionados na Indonésia. Métodos: O estudo utilizou dados da Pesquisa Demográfica e de Saúde da Indonésia de 2017, com delineamento transversal. A variável de desfecho foi o uso de contraceptivos, enquanto os preditores incluíram características sociodemográficas, exposição à mídia, conhecimento sobre o ciclo ovulatório feminino e atitudes em relação à contracepção. A análise ponderada utilizou testes do qui-quadrado e regressão logística multivariada. O desempenho do modelo foi avaliado por meio do teste de Hosmer-Lemeshow, curva ROC e teste da faixa de calibração. Resultados: A prevalência do uso de contracepção masculina foi de 8%, sendo o coito interrompido o método mais utilizado (41,8%). No modelo final, os fatores significativamente associados foram residir em área urbana, exposição à mídia sobre planejamento familiar e conhecimento sobre o ciclo ovulatório – tanto incorreto quanto correto. Embora termos de interação tenham sido incluídos no modelo (por exemplo, urbano × mídia × conhecimento), nenhum foi estatisticamente significativo. O modelo apresentou capacidade preditiva moderada e boa calibração. Conclusão: A residência, a exposição à mídia e o conhecimento sobre a ovulação feminina são fatores-chave para o uso de contracepção masculina. A eficácia do coito interrompido depende do conhecimento preciso do período ovulatório. Programas futuros devem integrar esses achados e adaptar suas estratégias de comunicação aos públicos-alvo.

Palavras-chave: Contracepção. Planejamento familiar. Ciclo ovulatório. Coito interrompido

Resumen

Explorando el papel de los hombres indonesios en la planificación familiar: factores e implicaciones de un estudio transversal

Objetivo: Evaluar los factores asociados al uso de anticoncepción masculina y desarrollar un modelo predictivo para informar programas relacionados en Indonesia. Métodos: El estudio utilizó datos de la Encuesta Demográfica y de Salud de Indonesia de 2017, con un diseño de estudio transversal. La variable de resultado fue el uso de anticonceptivos, mientras que los predictores incluyeron características sociodemográficas, exposición a medios de comunicación, conocimiento sobre el ciclo ovulatorio femenino y actitudes hacia la anticoncepción. El análisis ponderado empleó pruebas de chi-cuadrado y regresión logística multivariable. El desempeño del modelo se evaluó mediante la prueba de Hosmer-Lemeshow, la curva ROC y la prueba de la banda de calibración. Resultados: La prevalencia del uso de anticonceptivos masculinos fue del 8%, siendo el método de retiro el más utilizado (41,8%). En el modelo final, los factores significativos incluyeron residir en zonas urbanas, la exposición a medios sobre planificación familiar y el conocimiento del ciclo de ovulación – tanto incorrecto como correcto. Aunque se incluyeron términos de interacción en el modelo (por ejemplo, urbano × medios × conocimiento), ninguno resultó estadísticamente significativo. El modelo demostró una capacidad predictiva moderada y una buena calibración. Conclusión: La residencia, la exposición a los medios y el conocimiento del ciclo ovulatorio femenino son factores clave en el uso de anticoncepción masculina. La eficacia del método de retiro depende del conocimiento preciso de la ovulación. Los programas futuros deben integrar estos hallazgos y adaptar sus estrategias de comunicación a las poblaciones objetivo.

Palabras clave: Anticoncepción. Planificación familiar. Ciclo ovulatorio. Método de retiro.

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