Gac Sanit. 2021;35(S2):S176–S179

Factors related to the incidence of unmet need in couples of reproductive age in the working area of Marawola Health Center☆

Rosmala Nur[a,*], A.B. Subardin[b], Pash Panggabean[a], Esron Sirait[b], I Kadek Wartana[b], Veni Momalita Kolupe[b], Rahma Dwi Larasati[a], Ridwan Amiruddin[c]

[a] Public Health Study Program, Faculty of Public Health, Universitas Tadulako, Indonesia
[b] Public Health Study Program, Sekolah Tinggi Indonesia Jaya, Indonesia
[c] Faculty of Public Health, Universitas Hasanuddin, Indonesia

ARTICLE INFO

Article history:
Received 28 June 2021
Accepted 30 July 2021

Keywords:
Unmet need for family planning
Age
Education
Family planning history
Husband's support

ABSTRACT

Objective: This study aimed at determining factors associated with the incidence of unmet need for family planning among couples of reproductive age in the working area of Marawola Health Center, Sigi Regency.
Method: This research was an analytic observational study with a cross-sectional study design. The variables in this study included age, education, family planning history, husband's support and unmet need. Data were in the form of primary and secondary data. Data were collected using a questionnaire. The data were analyzed using univariate and bivariate analysis utilizing the Chi-Square test. Population in this study were 4715 couples of reproductive age in the working area of Marawola Health Center. By using Lemeshow's calculation technique and simple random sampling, a sample of 90 people was obtained.
Result: The results demonstrated a relationship between age and the incidence of unmet need with p value = 0.004 (p-value ≤0.05); education and the incidence of unmet deed with p value = 0.005 (p-value ≤0.05); family planning history and the incidence of unmet need with p value = 0.002 (p-value ≤0.05); as well as husband's support and the incidence of unmet need with p value = 0.001 (p-value ≤0.05).
Conclusion: This study concludes that there is a relationship between age, education, family planning history, and husband's support and the incidence of unmet need for family planning in the working area of Marawola Health Center, Sigi Regency. Therefore, health workers, local governments, and traditional institutions are expected to provide education about family planning to couples of reproductive age (husband and wife) as an attempt to reduce the number of unmet needs in the working area of Marawola Health Center.

Introduction

Data released by the National Population and Family Planning Board (BKKBN) show that unmet need accounts for 75% of the causes of maternal mortality in Indonesia and affects population growth.[1] One of the issues that has become the focus of the government is the tendency of the high number of unmet need since it affects the family planning program. High number of unmet need is the cause of high Total Fertility Rate (TFR) and unwanted pregnancy.[2–4] Unmet need certainly has an impact on abortion because of unwanted pregnancy, short interpregnancy interval, too many pregnancies, as well as complications of disease during pregnancy, difficulty during labor, and puerperal complications.[5–7] Report on the results of unmet need is very important to get an overview of the achievement of the family planning program and to find out the state of the untapped targets.[8–10] By knowing the proportion of these groups, the size of the potential targets that still need to be invited for family planning will be found.[11,12]

The above findings support a notion that the high number of unmet needs causes a high fertility rate, which can lead to an increasingly large and uncontrolled number of births.[13] Indonesia is one of the developing countries with a large population.[14–16] Another impact caused by unmet need for family planning is Maternal Mortality Ratio (MMR) which continues to increase. Although it has decreased, from 359 per 100,000 live births in 2012 to 190 per 100,000 live births in 2013, MMR in Indonesia is still considered high. It is because the MMR has not been able to achieve MDGs target in 2015, which is 102 per 100,000 live births.[17]

Furthermore, in Central Sulawesi Province, the number of unmet needs reached 11.5%, which consisted of 117,954 people who wanted to space their pregnancies, but they did not use contraceptives. There were also 70,825 people who did not want children anymore, but they did not use contraceptives.[17–20]

Districts or cities with the highest number of unmet needs in Central Sulawesi in 2019 include Sigi Regency (21.1%), Toli-toli (18.5%) and Banggai Laut (18.2%). Referring to the national target (17.5%), Sigi Regency is still in the high category.[19] Data from the Sigi Regency Health Office, Central Sulawesi, shows that the number of couples of reproductive age who were not on family planning has increased every year (21% in 2018 and 22.1% in 2019).[19]

Based on data from the Population Control and Family Planning Office of Sigi Regency in 2019, Marawola sub-district has the highest number of couples of reproductive age who were not on family

☆ Peer-review under responsibility of the scientific committee of the 3rd International Nursing, Health Science Students & Health Care Professionals Conference. Full-text and the content of it is under responsibility of authors of the article.

* Corresponding author.
E-mail addresses: nurrosmala09@gmail.com, pmc@agri.unhas.ac.id (R. Nur).

https://doi.org/10.1016/j.gaceta.2021.10.019

Table 1
Characteristics of respondents in the working area of Marawola health center.

Variables	Frequency	Percentage (%)
Age		
Non-ideal age	50	55.6
Ideal age	40	44.4
Family planning history		
Ever	20	22.2
Never	70	77.8
Husband's support for family planning		
Support	20	22.2
Does not support	70	77.8
Education		
Low	50	55.6
High	40	44.4
Unmet need for family planning		
Unmet need	55	61.1
Met need	35	38.9

planning (995 people). Based on these data, the researchers were interested in examining "The factors associated with the incidence of unmet need for family planning in couples of reproductive age in the working area of Marawola Health Center, Sigi Regency, Central Sulawesi". Variables studied included age, education, history of contraceptive use, and husband's support.

Methods

This research is an analytic observational study with a cross-sectional study design which was conducted to see the relationship between independent variables (age, education, family planning history, and husband's support) and dependent variable (unmet need for family planning). This research was conducted on September 9–19, 2020 in the working area of Marawola Health Center, Sigi Regency, Central Sulawesi Province. Data were collected using a questionnaire which were analyzed using univariate and bivariate analysis utilizing Chi-Square test. Population in this study were 4715 couples of reproductive age in the working area of Marawola Health Center. By using Lemeshow's calculation technique and simple random sampling, a sample of 90 people was obtained. Samples were respondents who met the following inclusion criteria:

1. Respondents were couples of reproductive age.
2. Respondents were couples of reproductive age who were on family planning and who were not on family planning.
3. Respondents were willing to be interviewed and could speak Indonesian.

Results

The distribution of characteristics of respondents according to age, family planning history, husband's support, unwanted pregnancy, fertility, and unmet need can be seen in Table 1.

Table 1 shows that there are 50 respondents (55.6%) with a non-ideal reproductive age (>35 years) and 40 respondents (44.4%) with an ideal reproductive age (20–35 years). Moreover, there were 20 respondents (22.2%) who had had family planning, and 70 respondents (77.8%) who had never had family planning. Additionally, there were 20 respondents (22.2%) who received support from their husbands for using contraceptives, while the remaining 70 respondents (77.8%) did not receive support from their husbands to use contraceptives. There were 50 respondents (55.6%) with a low level of education and 40 respondents (44.4) with a high level of education. In addition, there were 55 respondents (61.1%) with unmet need and 35 respondents (38.9%) with met need.

Factors related to unmet need

To determine the relationship between age, education, family planning history, and husband's support with the incidence of unmet need for family planning in the working area of Marawola Health Center, data were analyzed using cross tabulation on the Chi Square test. The results of the analysis can be seen in the following Table 2.

Based on the data in Table 2, there are 37 out of 49 respondents (75.5%) with non-ideal age experiencing unmet need for family planning with p (0.004) $\leq \alpha$ (0.05). It indicates that there is a relationship between age and the incidence of unmet need for family planning. More importantly, Table 2 also shows that there are 48 of the 68 respondents (70.58%) who have never had family planning experiencing unmet need for family planning with p (0.002) $\leq \alpha$(0.05). It demonstrates that there is a relationship between family planning history and the incidence of unmet need for family planning.

Based on the table above, there are 50 of 71 respondents (70.42%) who do not get husband's support experiencing unmet need for family planning with p (0.003) $\leq \alpha$ (0.05). It shows that there is a relationship between husband's support and the incidence of unmet need for family planning. Last but not least, the table above demonstrates that 50 out of 62 respondents (80.64%) with low levels of education experiencing unmet need for family planning with p (0.002) $\leq \alpha$ (0.05). It shows that there is a relationship between level of education and the incidence of unmet need for family planning.

Discussion

Results of the analysis using Chi-Square carried out on age and the incidence of unmet need for family planning obtained p value of (0.004) $\leq \alpha$ (0.05). Thus, H0 in this study was rejected which indicates that there was a relationship between age and the incidence of unmet need for family planning. It is in line with the research assumption that there is a relationship between age and unmet need. This is very likely due to the large number of respondents who had early marriage so they do not understand the importance of family planning.[21,22] They also do not have sufficient knowledge on the impact of not using contraceptives.

The results of this study are in line with research conducted by Nurjannah (2017) which obtained $p = 0.000$, less than $\alpha = 0.05$. It showed that there was a relationship between age and the incidence of unmet need.[23] Age is one of factors influencing the incidence of unmet need.[24–26] Besides, a research conducted by Osterlund et al. (2016) found that age is a factor in unmet need for family planning, because the higher the age, the higher the woman's need for contraception.[27,28]

Moreover, results of the analysis conducted using Chi-Square on education and the incidence of unmet need for family planning obtained p value of (0.005) $\leq \alpha$ (0.05). Thus, H0 in this study was rejected, which means that there was a relationship between education and the incidence of unmet need for family planning. According to the researchers' assumptions, this can happen because the education that a person is undergoing has an influence on increasing thinking skills. In other words, someone with a higher education will be able to make better decisions than someone with a lower level of education. A good education provides broad insights so that the understanding process can run well.

Couples of reproductive age with a high level of education can better receive knowledge about Unmet Need.[29,30] This is consistent with the modification between Anderson's (1974) and Lawrence Green's theoretical framework which claimed that education is included in a predisposing factor, one of the factors that can

Table 2
Analysis of respondents by age with the incidence of unmet need for family planning in the working area of marawola health center.

Variables	The incidence of unmet need for family planning				Total		*p*-Value
	Unmet need	%	Met need	%	*N*	%	
Age							
Non-Ideal Age	37	75.5	12	4.5	49	100	0.004
Ideal Age	18	43.9	23	6.1	41	100	
Family planning history							
Ever	7	31.81	15	68.18	22	100	0.002
Never	48	70.58	20	29.41	68	100	
Husband's support for family planning							
Support	5	26.31	14	73.68	19	100	0.003
Does Not Support	50	70.42	21	29.57	71	100	
Education							
Low	50	80.64	12	19.23	62	100	0.005
High	5	17.85	13	82.14	28	100	

strengthen human behavior.[2] In this case, the behavior referred to is the use of contraceptives in order to reduce the incidence of unmet need for family planning.[31–33]

More importantly, results of the analysis using Chi-Square carried out on family planning history and the incidence of unmet need for family planning obtained p (0.003) $\leq \alpha$ (0.05). Thus, H0 in this study was rejected, which means that there was a relationship between family planning history and the incidence of unmet need for family planning. Based on the researchers' assumptions, it can happen because of the side effects of past contraceptive use. In addition, those who decided not to use contraceptives were afraid of its effects as a result of not understanding its benefits.

The results of this study are in line with a research which obtained $p = 0.027$, less than $\alpha = 0.05$. It shows that there is a relationship between family planning history and the incidence of unmet need for family planning because of the fear of the acceptors. It is also supported by a research, it is known that p value $\leq \alpha$ ($0.001 \leq 0.05$), which means that there is a relationship between family planning history and the incidence of unmet need for family planning.[34,35]

Results of the analysis using Chi-Square carried out on husband's support and the incidence of unmet need for family planning obtained p value of (0.002) $\leq \alpha$ (0.05). Thus, Ho in this study was rejected, which means that there was a relationship between husband's support for family planning and the incidence of unmet need for family planning. Based on the researchers' assumptions, it occurs since the husband is dominant in making decisions. Gender disparities are very common in women's reproductive health issues.

Husband's support in this study is the extent to which the husband is involved in supporting the wife's decision to use contraceptives, such as reasons for choosing contraceptives, determining the number of children, monitoring the rules for using contraceptives, monitoring side effects, looking for other alternatives if the contraceptive method used is not satisfactory, and willing to use contraceptives in accordance with the wife's condition.[31,36–38]

Conclusion

Based on the results of the study and discussion, this study concludes that there is a significant relationship between age, education, family planning history and husband's support for family planning with the incidence of unmet need for family planning in couples of reproductive age in the working area of Marawola Health Center. Women of reproductive age who have husbands who do not support family planning tend to experience unmet need for family planning.

Conflict of interest

The authors declare no conflict of interest.

References

1. Prihastuti D. Advanced analysis of SDKI 2002–2003, the tendency of fertility preference, unwanted pregnancy in Indonesia. Jakarta: National Population and Family Planning Agency (BKKBN); 2004.
2. Mahmoud H, Gewaifel GI, GalalEl-Sharkawy O, et al. Unmet need for postpartum family planning in Alexandria, Egypt. Alexandria J Med. 2018;54:143–7.
3. Vreman RA, Heikkinen I, Schuurman A, et al. Unmet medical need: an introduction to definitions and stakeholder perceptions. Value Heal. 2019;22:1275–82.
4. Chan ES, Dinakar C, Gonzales-Reyes E, et al. Unmet needs of children with peanut allergy: aligning the risks and the evidence. Ann Allergy Asthma Immunol. 2020;124.
5. Rodrigues NCP, Monteiro DLM, Almeida ASD, et al. Temporal and spatial evolution of maternal and neonatal mortality rates in Brazil, 1997–2012. J Pediatr (Rio J). 2016;92:567–73.
6. Ke X-T, Wang C-L, Salmon JW, et al. Unmet needs as indicator of improving chronic care delivery system in China. Chronic Dis Transl Med. 2020.
7. Dong N, Chen W-T, Lu H, et al. Unmet needs of symptom management and associated factors among the HIV-positive population in Shanghai, China: a cross-sectional study. Appl Nurs Res. 2020;54:1512.
8. Nur R. Impacts of violence during pregnancy–post childbirth to reproductive health of women at rural and urban areas. Int J Sci Basic Appl Res. 2015;4531:16–26.
9. Anggraeni AT, Susilaningrum D. Modeling and mapping of kb unmet need factors in East Java as planning to prevent population explosion with binary logistic regression (Pemodelan dan pemetaan faktor unmet need kb di Jawa Timur sebagai perencanaan mencegah ledakan penduduk dengan regresi). In: Seminar Nasional Matematika dan Aplikasinya. Surabaya: Departemen Matematika Fakultas Sains dan Teknologi Universitas Airlangga; 2017.
10. Andriani D, Ariesta R. The effectiveness of health education of pregnancy to knowledge level of primigravida about labor. J Ners dan Kebidanan. 2017;4:108–10.
11. Satriyandari Y, Yunita A. Picture of husband's support for couples of childbearing age with unmetneed incidents in Panembahan Village, Yogyakarta in 2016 (Gambaran dukungan suami pada pasangan usia subur dengan kejadian unmetneed di Kelurahan Panembahan Yogyakarta tahun 2016). J Ilm Bidan. 2018; 3.
12. Jidar M. Determinants of Kb unmet need among Fertile Age Couples (PUS) in South Sulawesi (Comparison between urban & rural areas)Hasanuddin University. Hasanuddin University; 2018.
13. Sholiha H, Sumarmi S. Analysis of the risk of incidence of low birth weight in primigravidas (Analisis risiko kejadian Berat Bayi Lahir Rendah (BBLR) pada primigravida). Media Gizi Indones. 2015;10:57–63.
14. Ishii H, Shuichi S, Williams P, et al. Cross-sectional survey in patients with type 1 and type 2 diabetes to understand mealtime insulin unmet needs in Japan: the MINUTES-J study. Diabetes Res Clin Pract. 2020;162:1–11.
15. Sarnak D, Tsui A, Makumbi F, et al. The predictive utility of unmet need on time to contraceptive adoption: a panel study of non-contracepting Ugandan women. Contracept X. 2020;2:100022.
16. Opitasari C, Andayasari L. Parity, education level and risk for (pre-) eclampsia in selected hospitals in Jakarta. Heal Sci J Indones. 2014;5:35–9.
17. Central Bureau of Statistics of Indonesia. Indonesian Demographic and Health Survey (IDHS). Jakarta; 2012.
18. Anasel MG, Mlinga UJ. Determinants of contraceptive use among married women in Tanzania: policy implication. African Popul Stud. 2014;28:976–88.
19. Fira LW. Determinants of unmet need kb and its impact on reproductive health in Fertile Age Couples in Mantikulore District, Palu City, Central Sulawesi (Determinan kejadian unmet need kb dan dampaknya pada kesehatan reproduksi pada Pasangan Usia Subur (PUS) di Ke). Universitas Tadulako; 2019.

20. Prasetyo BE, Prawirohartono EP, Rahyaningsih R. The relationship between birth spacing and the number of children with the nutritional status of kindergarten children (Hubungan jarak kelahiran dan jumlah anak dengan status gizi anak taman kanak-kanak). J Gizi Klin Indones. 2008;4:133–9.
21. Nur R, Mallongi A, Demak IK, et al. Early-age marriage and the impact of health reproduction women. J Eng Appl Sci. 2019;4:981–6.
22. Puspasari J, Rachmawati IN, Budiati T. Family support and maternal self-efficacy of adolescent mothers. Enferm Clin. 2018;28:227–31.
23. Nurjanah N, Septiani TD. The relationship between birth spacing and the number of children under five with nutritional status in RW 07 in the working area of the Cijerah Community Health Center, Bandung City (Hubungan jarak kelahiran dan jumlah balita dengan status gizi di RW 07). J Keperawatan Anak. 2013;1:120–6.
24. Rios-Zertuche D, Blanco LC, Zúñiga-Brenes P, et al. Contraceptive knowledge and use among women living in the poorest areas of five Mesoamerican countries. Contraception. 2017;95.
25. Chou Y-H, Hsieh VC-R, et al. Unmet supportive care needs of survival patients with breast cancer in different cancer stages and treatment phases. Taiwan J Obstet Gynecol. 2020;59:231–6.
26. Giarratano G, Harville EW, De Mendoza VB, et al. Healthy start: description of a safety net for perinatal support during disaster recovery. Matern Child Health J. 2015;19:819–27.
27. Osterlund P, Sorbye H, Pfeiffer P, et al. Drug costs and benefits of medical treatments in high-unmet need solid tumours in the Nordic countries. J Cancer Policy. 2016;7:12–22.
28. Prata N, Bell S, Fraser A, et al. Partner support for family planning and modern contraceptive use in Luanda, Angola. Afr J Reprod Health. 2019;23:35–48.
29. Zrein M, Chatelain E. The unmet medical need for Trypanosoma cruzi-infected patients: monitoring the disease status. Biochim Biophys Acta (BBA)-Molecular Basis Dis. 2020;1866:165628.
30. Nur R, Patui NS, Demak IPK, et al. The smart book effect of pregnancy–postpartum care towards the husband's knowledge and reduction of reproductive health problems. Fam Med Prim Care Rev. 2020;22:133–9.
31. Khalil SN, Alzahrani MM, Siddiqui AF. Unmet need and demand for family planning among married women of Abha, Aseer Region in Saudi Arabia. Middle east Fertil Soc J. 2018;23:31–6.
32. Garg A, Neuren E, Cha D, et al. Evaluating patients' unmet needs in hidradenitis suppurativa: results from the Global Survey of Impact and Healthcare Needs (VOICE) project. J Am Acad Dermatol. 2020;82:366–76.
33. Joseph FI, Earland J. A qualitative exploration of the sociocultural determinants of exclusive breastfeeding practices among rural mothers, North West Nigeria. Int Breastfeed J. 2019;14:1–11.
34. Cahill N, Sonneveldt E, Stover J, et al. Modern contraceptive use, unmet need, and demand satisfied among women of reproductive age who are married or in a union in the focus countries of the Family Planning 2020 initiative: a systematic analysis using the Family Planning Estimation Tool. Lancet. 2018;391:870–82.
35. Dahiya N, Sharma V, Kumar B, et al. Awareness and adherence to primary and primordial preventive measures among family members of patients with myocardial infarction- the unmet need for a "preventive clinic". Indian Heart J. 2020;72.
36. Keogh SC, Urassa M, Kumogola Y, et al. Postpartum contraception in Northern Tanzania: patterns of use, relationship to antenatal intentions, and Impact of antenatal counseling. Stud Fam Plann. 2015;46:405–22.
37. Simanjutak H, Anwar AD, Lestari BW, et al. Differences in knowledge and attitudes about modern contraception among women of childbearing age after structured counseling (Perbedaan pengetahuan dan sikap tentang kontrasepsi modern pada wanita Usia subur setelah dilakukan konseling terstruktur). J Pendidik dan Pelayanan Kebidanan Indones. 2015;2:56–62.
38. Carter M. Husbands and maternal health matters in rural Guatemala: wives' reports on their spouses' involvement in pregnancy and birth. Soc Sci Med. 2002;55:437–50.