



Determinants of Traditional Contraceptive use among Women

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ABSTRACT

Background: Population growth in Indonesia remains high and it constitutes a population problem which requires the enactment of population policy, namely by reducing the growth rate as low as possible through the family planning programs. 3.8% of women of childbearing age (WCA) in Indonesia still choose to use the traditional family planning methods, including the use of natural ingredients or herbal medicine as the traditional contraception, the use of coitus interruptus method, and the use of calendar method which is lower in effectiveness than modern contraceptive methods.

Purpose: The purpose of this study is to review determinants of traditional contraceptive use among women.

Methods: Four databases were used to organize this scoping review, namely PubMed, JSTOR, Science Direct, and Google Scholar. These databases were considered to be relevant on condition that the scoping review research questions could be answered through the search of articles using keywords. To obtain the relevant articles, the inclusion and exclusion criteria were set, then the articles were selected through the PRISMA flow chart. After that, a critical appraisal was conducted to assess the quality of each article, the articles were further condensed using data charting, an evidence-based analysis was compiled, and the results were reported.

Results: This study resulted in the finding of 9 theme-related articles whose research characteristics consisted of grade A for 6 articles, grade B for 1 article, which all employed cross sectional research method, and grade Good for 2 qualitative design articles. These articles were obtained from developing countries. The limitation of this study was that not all factors contained in the collection of articles were discussed by the researchers due to the lack of comparison journals which matched the theme.

Conclusion: The results of scoping review from the title determinants of traditional contraceptive use among women revealed that there were several related factors including age, education level, economic status, parity, husband's support, culture and information systems. Based on the 9 articles in this scoping review, the research results on factors related to the use of traditional family planning methods were supported. However, not all factors such as sexual behavior, smoking, religious prohibitions, health problems and service quality could be studied in depth due to the limited comparison journals. Therefore, the researchers expect that further research can cover all factors related to the use of traditional family planning methods in order to develop knowledge concerning the traditional contraceptive use, and it is expected that the results of this study can serve the material for government policy making in future family planning programs.

Keywords:

determinants; traditional contraceptive methods; women

BACKGROUND

Over the past few decades around the world, the landscape of public health has changed dramatically. People living in different parts of the world encounter different experiences following the political, economic, social and cultural realities within their communities. Sexual activity inside or outside of marriage puts young people at risk for sexual and reproductive health problems, including early pregnancy (wanted or not), unsafe abortion, sexually transmitted infections such as HIV, and sexual coercion and violence (Laanpere et al., 2012b).

In countries with high birth rates, family planning programs will be highly beneficial in reducing maternal mortality and morbidity by around 32% and 10% for child mortality. The trick is to reduce high-risk labor, that is, childbirth less than 2 years (Rossier & Corker, 2017).

The family planning methods are classified into 2 types, namely modern and traditional contraceptive methods. The types of modern method include sterilization, oral pills, intrauterine device (IUD), subdermal contraceptive implants, the use of barrier contraceptives such as condoms or diaphragms, and emergency contraception. Besides, the traditional methods include periodic abstinence or calendar method, MAL, the use of natural ingredients or better known as herbal medicine, and coitus interruptus which is the most widely used (Center of Data and Information, 2014).

The use of traditional family planning methods in women of childbearing age comprises diligently drinking boiled water of turmeric and betel, and it is one of natural family planning methods. Despite number of modern family planning tools and methods, 3.8% of women of childbearing age (WCA) in Indonesia still choose to use the traditional family planning methods. According to the survey, this method is widely used by women aged 35-39 years. However, careful attitude is tremendously necessary since it can turn out to be dangerous if used in the wrong dose.

Family planning has apparently become a part of women's lives in Indonesia. The proof is that more than half (57.4%) of women of childbearing age use family planning. The most popular method is the injection method, but the IUD (Intrauterine Device) family planning method is also starting to be in demand. Interestingly, the province with the highest percentage of women using modern family planning in Indonesia is Yogyakarta. As one of Javanese cultural centers, in fact, one famous proverb exists there saying that 'many children, many fortune (Center of Data and Information, 2014; Japanese, 2021).

In the context of local leadership concerning people unity and expansion, positive talk about birth control has become a hot topic of conversation against community authority. Neither men nor women are of the same mind concerning the idea of birth control. It is common for a teenage girl supported by her teenage boyfriend to use herbs with the intention of preventing pregnancy when having sex (Rai & Unisa, 2013).

Postmenopausal adults often share their experiences as mothers or herbalists to attract the attention of their younger relatives. Generally, married women are very open and eager to use contraceptives. Skill/knowledge about traditional contraception, geographically, is evenly distributed (Creswell, 1998).

According to the World Health Organization (WHO), contraceptive use has increased in many parts of the world, especially in Asia and Latin America, and the lowest in Sub-Saharan Africa. Globally, users of modern contraceptives have increased insignificantly from 54% in 1990 to 57.4% in 2014. Regionally, the proportion of couples of childbearing 15-49 years who use the modern contraceptive methods was reported to increased in the last 6 years. It has increased in Africa from 23.6% to 27.6% and in Asia

from 60.9% to 61.6%, and it has slightly increased in Latin America and the Caribbean from 66.7% to 67.0%. An estimated 225 million women in developing countries want to delay or discontinue their fertility without using a contraceptive method due to the limited choice of contraceptive methods and the experience of side effects.

Data from WHS (World Health Statistics, 2013), around 2005 to 2012 showed that the number of women of childbearing age in Indonesia was the largest in Southeast Asia (61%), followed by Vietnam (78%) and the Philippines (49%). On the other hand, the lowest number of women of childbearing age in Southeast Asia was found in Timor Leste (22%).

Based on health research data in 2018, 59.3% of married women aged 15-49 years used modern family planning methods (implants, MOW, MOP, IUD, condoms, injections, pills), 0.4% used traditional family planning methods (breastfeeding/MAL, periodic/calendar abstinence, coitus interruptus, and so forth), 24.7% had ever done family planning, and 15.5% had never done family planning. According to education level, SDKI data in 2012 showed that education level did not have significant influence on the proportion of women aged 15-49 years who did family planning. Elementary school graduate respondents showed the largest proportion for the use of modern family planning methods, namely 56.4%, the use of traditional family planning methods was 1.8%, and not using any family planning methods was 41.8%. Meanwhile, respondents with education above high school showed that the largest proportion of married women of childbearing age who did not use family planning methods was 66.1%, those who used modern family planning methods were 28.3% and traditional family planning methods were 5.6%. This shows that education as one of mothers' characteristics makes a difference in the selection and use of contraceptive methods (Almalik et al., 2018).

The selection of contraceptive methods based on quintiles in Indonesia (2010) informed that, according to education level, 64.3% of respondents using the traditional contraceptive methods had a low level of education, but the number of users of traditional family planning methods will decrease along with the increasing level of education. This is inversely proportional to the selection of the non MKJP method in which the selection of the non MKJP method will increase by 14.3% if the level of education increases as well.

Research conducted by Magetin (2016) showed that wife's age, number of children and level of education have a significant relationship with the choice of the type of contraception used. Age has an effect on organ structure, organ function, biochemical composition and hormonal system, so that at a certain age period it can make differences in the contraceptives needed. The number of living children is also associated with the family planning of married couples and the level of family welfare. Couples with few children have the opportunity or tendency to use contraceptives with low level of effectiveness, while couples with a large number of children tend to use highly effective contraceptives. The level of education also has an influence in making choices, because someone with higher education in general has a wider insight and is more receptive to innovative ideas and things (Marquez et al., 2018b).

Another factor influencing the choice of contraceptive methods is health facilities. Health facilities are very important in the success of the family planning program where as providers of contraception tools/methods, they must also make efforts to increase the number of family planning acceptors and provide promotive and preventive services, so that couples of childbearing age can wisely use the contraception pursuant to their needs (Zainaro & Nurhidayat, 2020).

Some experts also argue that women using traditional contraceptive methods are mostly young unmarried women with a higher tendency to have an unexpected

pregnancy (Singh et al., 2018). On the other hand, societal pressure on married adolescents to conceive and give birth after marriage forces them not to consider the use of contraception important in order to realize people's expectations of having offspring (UNFPA, 2018).

The impact of inappropriate use of traditional family planning methods will actually be dangerous for the mother, for instance, the use of traditional contraception with natural ingredients (herbal medicine). Behind the efficacy of herbal medicine, it turns out that there are several bad effects, especially in the herbs containing chemicals in its manufacturing process, which may cause stomach infections, headaches, constipation, loss of appetite, acute kidney failure, dilation of facial blood vessels, stomach cramps, chest pain and nausea (Plastino & Sulak, 2008).

Reproductive health services such as the provision of contraception and treatment for sexually transmitted infections are sometimes unavailable, and there occur discomfort and shame when people want to get contraceptive services at health facilities. As a result, people are more likely to use resources outside of the formal health care delivery system, such as home remedies, traditional contraceptive methods, clandestine abortion, over-the-counter medicines or traditional health practitioners. To address this problem, a number of ideas have been developed and implemented to facilitate the general public to get the quality health services they need.

OBJECTIVE

The purpose of the scoping review of this study is to review the determinants of contraceptive use among women.

METHODS

Scoping review aims to map the literature, dig up information about research activities related to the topic under study and also investigate any problems, or gaps in the research area to be studied. Therefore, scoping review can provide basic information regarding research needs that may be carried out (Dr. Juliansyah Noor, 2019)

Scoping review method using Arksey and O' Melly's framework in 2005, there are five stages of a review that begins with identifying review questions, identification of relevant studies, selecting studies, mapping data (data charting), and compiling, summarizing and reporting result (Arksey & O'Malley, 2019).

A. Identify review questions

Table 1. Framework Scoping Review

P (<i>population</i>)	E (<i>exposure</i>)	O (<i>outcome</i>) / t (<i>themes</i>)
Women using traditional contraception	traditional contraception	Factors related to the use of traditional contraceptives

B. Identify relevant articles

1. Eligibility Criteria

Based on the scoping review questions in the previous step, inclusion and exclusion criteria (articles) can be compiled using criteria PICO (*Population, Intervention, Comparison, Outcome*).

Table 2. Inclusion Criteria by Type

Criteria	Inclusion	Exclusion
<i>Population/ Problem</i>	<ul style="list-style-type: none"> - Women and men are productive users of traditional contraceptives - The article contains the characteristics of the respondents - Articles for the last 10 years 2011-2021 - Articles in English and Indonesian - Full Text Journal 	<ul style="list-style-type: none"> - Women and men are not productive - Articles from the last 10 years
<i>Intervention</i>	<ul style="list-style-type: none"> - Factors related to the use of traditional contraceptives 	-
<i>Comparison Outcomes</i>	<ul style="list-style-type: none"> - Traditional contraceptive methods - Factors related to the use of traditional contraceptives 	

2. Databases used

In preparing this scoping review, four databases were used, namely PubMed, JSTOR, Science Direct, and Google Scholar. Four databases are said to be relevant if they can answer the scoping review research questions.

3. Search and keyword strategy

Determining the keyword search for literature, based on a predetermined framework using PICO (Population, Intervention, Comparison, Outcome).

4. Article Selection

To assess the quality of an article here the author uses the MMAT checklist (Cross Sectional) and Hawker (qualitative research), to facilitate the assessment of articles, the author uses grades A, B and C in the scoring process, and distinguishes articles that are in the good category with a score of 15-20 (Grade A), quite good with a score of 8-14 (Grade B), and not good with a score of < 7 (Grade C). The data that has been extracted from this Scoping review article are organized into several themes, namely: age, economic status, education level, parity, culture, husband's support, and sources of information are determinants of the use of traditional contraception.

Table 3. Charting Data with PICO Approach

NO	Title/Author/ Year/Grade	Country	Aim	Type of research	Data Collection	Participant/ Sample Size	Result
1	<i>Ethnic differences in factors associated with the use of among 20-44 years old women in Estonia and St. Petersburg, Russia</i> . MadeLaan pere, et al/2011/Q1	Sierra Leone, United States	This study aims to explore factors associated with contraception among people aged 20-44 years from different ethnic groups in two Eastern European countries.	Cross-sectional	Data collection was carried out by conducting a random sampling survey to women (16-25, 26-35, and 36-44 years old) using a questionnaire instrument about sociodemography, reproductive history, use and satisfaction with health services, use of contraception, and future plans to have children.	1. 1524 Estonian women 2. 628 Russian women 3. 1056 St.Petersburg women	The number of traditional contraceptive users among Estonian women was high (27.3%, 39.9%, and 42.5% among women in Russia, Estonia, and St. Petersburg). Age, economic status, high-risk sexual behavior and smoking were not associated with traditional contraceptive use among Russian women in Estonia and St. Petersburg; This was in contrast to women in Estonia that previous delivery and abortion affected the use of traditional contraceptives (adjusted odds ratio, 0.50; confidence interval, 95% [CI], 0.31–0.81), but otherwise the risk increased among Russian women in St. Petersburg (1.99; 1.17–3.40). Abortion and previous delivery were not associated with the use of traditional contraception in Russian women (2.94; 1.25–6.95). Differences in methods and factors related to unmet contraceptive needs in the countries surveyed might be due to several cultural and social factors including different sources of information.
2	<i>Trends and determinants of contraceptive use among female adolescents in Ghana: Analysis of 2003–2014 Demographic and Health Surveys</i> ./ 2020/Q1	Ghana	To look retrospectively at trends and determinants of (modern and traditional) contraceptive use among adolescent girls in Ghana.	Cross-sectional	This study used the data from GDHS 2003, 2008, and 2014. All analyzes were performed with STATA version 13. At the descriptive level, we calculated the proportion	The sample for this study consisted of sexually active adolescents aged 15-19 years for each round of the survey resulting in a sample of 426 in 2003, 389 in 2008 and 726 in 2014.	Contraceptive use was high in WCA who had heard of family planning on TV in recent months. Marital status was associated with contraceptive use. Those who were married were less likely [OR 0.09, 95% CI 0.03-0.96] to use traditional contraceptive methods than those who were not married. Those at parity of three were more than five times likely to use traditional contraception than their counterparts at parity of zero [OR 5.98, 95% CI 2.88-7.29]. Newspaper reading frequency was associated with the use of modern contraception. In particular, adolescents who read the newspaper at

of adolescents using (both traditional and modern) contraception for each of the three surveys as illustrated.

least once a week were more likely to use modern contraception [OR ¼ 1.84, 95% CI ¼ 1.05–4.78] compared to those who did not read the newspaper at all. Correspondingly, those who watched television at least once a week were more likely to use modern contraception than those who did not watch television at all [OR ¼ 2.25, 95% CI ¼ 1.06–4.78]. **It was evident that Mole-Dagbani adolescents had a lower chance of using modern contraception compared to adolescents in the West** [OR ¼ 0.11, 95% CI ¼ 0.03-0.50]. In conclusion, residents in the Upper East were more than eight times likely to use modern contraception than those in the West [OR ¼ 8.10, 95% CI ¼ 1.44-12.76].

<p>3 <i>Dynamics of contraceptive use in India: Apprehension versus future intention among non-users and traditional method users/2013/Q1</i></p>	<p>India</p>	<p>This study examines the reasons for not using any contraceptive method as well as reasons for not using modern contraceptive methods, and factors associated with future intention to use contraception in India and its selected states, i.e. Uttar Pradesh, Assam and Bengal.</p>	<p><i>Cross-sectional</i></p>	<p>The third batch of the District Level Household and Facility Survey data were used, 2007–08. Bivariate and logistic regression analyzes were performed to fulfill the research objectives.</p>	<p>Forty-seven questions were asked of respondents who were qualified to understand the behaviors associated with contraceptive use under the subheading ‘Contraception’ in ‘Contraception and Fertility Preferences: Section 4’. In DLHS-3, (during 2007–08). The sample included a total of 643944 ever-married women aged 15–49 years from 720,320 households spanning 34 states in India. A multi-stage stratified systematic sampling design was adopted for DLHS-3.</p>	<p>In the case of traditional contraceptive users, 8% of women across all levels of India reported that they rarely had sex/no sex and about 2% of the women reported breastfeeding and 'submitted to God's will on reasons related to fertility, refusal to use and lack of knowledge. At the national level, about 16% of non-users reported that they themselves opposed the use of contraception. In the case of Assam, about 33% of women were against the use of contraception, and in Uttar Pradesh, the percentage of women who reported refusal to use was almost half of those in Assam. In the case of traditional method users, the resistance to using modern methods from respondents, especially from women, was about 10% each in India, Uttar Pradesh and Assam. The same percentage also reported husband’s refusal / other opposition / religious prohibition for the use of modern contraceptive methods. Only a small percentage of users and non-users of traditional methods reported lack of knowledge about contraceptive methods. To document the reasons related to the method, the predictors considered in this study were health problems, fear of side effects, limited access or being too far away, very expensive cost, difficult or uncomfortable method, uncomfortable use, health problems in body condition, normal process, disapproval of the existing methods,</p>
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							fear of sterilization and inability to work after sterilization.
4	The Use of Traditional Contraception in Women of Childbearing Age (WCA): Women's Perspective in Sewon District, Bantul, Yogyakarta/ 2019/Q1	Indonesia	This study aims to determine the use of traditional contraception in women of childbearing age (WCA): Women's Perspective in Sewon District, Bantul, Yogyakarta.	<i>Phenomenology</i>	Based on the results of SDKI from 2003-2012, 8.6% of married women's needs were unmet.	Purposive sampling was conducted as the sampling method. The WCA using traditional contraception were 517 people from Sewon District.	Participants' agedid not affect the use of contraception; knowledge of the use of hormonal family planning and calendar family planning indicated that they already knew about the contraception; it was found in terms of the service quality that the place of service was accessible and the information provided was very useful; and it was found in terms of husband's support that the husband supported the use of traditional contraception.
5	<i>Use of Family Planning Methods and Influencing Factors Among Women in Erzurum/ 2018/Q1</i>	Erzurum	Our study aims to determine the prevalence of family planning methods, socio-demographic characteristics, and the relationship between pregnancy history and use of family planning methods among women aged 15-49 years living in the center of Erzurum province.	<i>Cross-sectional</i>	The data for the variables were taken from the 2013 Turkey Demographic and Health Survey (TDHS).	From a total of 106,669 women aged 15-49 years living in the center of Erzurum province, 627 samples were selected.	Statistically significant differences in the use of any family planning method were determined by women age group (chi square = 6.609; $P = 0.037$) with a linear trend (chi square = 5.708; $P = 0.017$); In terms of the use of modern versus traditional methods by age group, modern methods were most commonly used in the 15-24 year age group and traditional methods were most commonly used in the 35 years age group or older , although the difference was not statistically significant. The use of modern versus traditional techniques was ($P < 0.05$). The use of modern methods was higher among women with university-level education (75%; $n = 111$), whereas the use of traditional methods was higher among women with high school-level education (48.7%; $n = 74$). The highest use of modern methods was among women with incomes of 3001 TL and above (83.1%; $n = 54$), while the highest use of traditional methods was among the 1001-3000 TL income group (41.6%; $n = 104$). The variables used in the regression analysis were 1) age (numeric); 2) education level (elementary school and below; junior high school; senior high school; university), 3) work

6	<i>Are users of modern and traditional contraceptive methods in Jordan different?/ 2018/Q1</i>	Jordan	The main objective of this study was to assess trends in the use of modern and traditional contraceptives in Jordan with a focus on examining differences between users of each method.	<i>Cross-sectional</i>	Secondary data analysis from the 2012 Jordan Population and Family Health Survey data was conducted. The survey used a multistage cluster random sampling.	10,801 married women aged 15-49 years were surveyed.	status (working; not working); and 4) monthly income category (up to 1000 TL; 1001–3000 TL; more than 3000 TL). Age was the only significant independent variable that influenced the use of effective contraceptive methods ($P = 0.023$; Exp (B) = 1.034; 95% CI: 1.005–1.064). The results of the survey on married women aged 15-49 years showed that 38.8% did not use a contraceptive method and 61.2% used a method at the time of interview for the Jordan Population and Family Health Survey, 18.9% used traditional methods and 42.3% relied on modern methods. Among women who did not use any method, 65.0% were uneducated, 72.5% were in the 15-19 year age group, and 52.0% lived in rural areas. Among women who used the contraception, IUD was the most widely used method (21.0%) among modern methods, followed by the male pill and condom, 8% each. Coitus interruptus and rhythm methods were the most commonly used among traditional methods (14.3% and 3.5% each).
7	<i>Traditional and Modern Contraceptive Method Use in the Philippines: Trends and Determinants 2003–2013/2018/Q1</i>	Sub-Saharan Africa	To investigate if it is better for women to use traditional methods in Sub-Saharan Africa and to explore why it happened	<i>Cross-sectional</i>	The data were from countries in West, East, and Central Africa that have conducted surveys since 2008 (Table 1). Then, the United Nations term was used to categorize countries in these three sub-regions. However, countries in South Africa were excluded because there were too few recent DHS surveys in the region to account for sub-regional patterns.	The sample of this research covered 29 countries and 409,399 women of reproductive age (15-49)	According to our data, only 4 percent of women in Sub-Saharan Africa used either periodic abstinence or coitus interruptus , compared to 17 percent who used modern methods. The prevalence of these two traditional methods exceeded 5 percent in only five countries, all but one of which (Madagascar) was located in Central Africa (Cameroon, Gabon, Congo, and Republic of the Congo). Overall, one in five contraceptive users in the regions used periodic abstinence or coitus interruptus, and one in two users in Central Africa . Looking at the use of individual methods by country, either periodic abstinence or coitus interruptus, was among the top three methods most used in seven countries (five where the traditional method used a peak of 5 percent, as well as Benin and Côte d'Ivoire). In the joint sample of all countries and all women, the use of traditional methods was lower among younger and older women, and among

Muslim women compared to women of other religious affiliation. **The use of traditional methods was higher among women who wanted to limit/end childcare and among those better educated, urban and wealthier, but slightly higher for ever-married women compared to never-married women. The use of traditional methods was quite widespread only in Central Africa and remained relatively low in East and West Africa. There did not seem to be a clear relationship between the level of use of modern and traditional methods** at the country level for the complete sample, and this was shown by the correlation coefficient results (-0.016) which did not show a visible correlation between contraceptive prevalence rates for methods at the country level.

8	<i>Traditional and Modern Contraceptive Method Use in the Philippines: Trends and Determinants 2003-2013/2018/Q1</i>	The Philippines	<i>To assess the current level, pattern and determinants of the use of traditional contraceptive methods</i>	<i>Cross-sectional</i>	<i>Based on data collected from the 2003, 2008, and 2013 Philippines National Demographic and Health Survey.</i>	11,815 women were involved in the study, which were distributed as follows: 3,613 women in 2003, 3,663 women in 2008, and 4,539 women in 2013. Before the data sets were combined, all variables used in the analysis were aligned over the three years of the survey.	The most preferred method was coitus interruptus; the prevalence increased from 17 percent in 2003 to 22 percent in 2013 — an increase of 5 percentage points over a ten-year period, with a larger share of the increase occurring between 2008 and 2013. In contrast, the use of periodic abstinence decreased in prevalence, from 13 percent in 2003 to 12 percent in five years later and a further 9 percent in 2013. Younger women tended to use this traditional method instead of modern contraceptive methods compared to women aged 45-49 years whose the end of their reproductive year was close. Differences in partner age where women were older than their husbands/spouses had a 28 percent higher risk of using coitus interruptus relative to using modern contraceptive methods compared to women of the same age or younger than their husbands/spouses (RRR = 1.28). Education exerted a contrasting influence on the use of traditional contraceptive methods. More educated women were more likely to use periodic abstinence but
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were less likely to use coitus interruptus instead of modern contraceptive methods. The same pattern applied to husband/spouse education. Otherwise, women with secondary school education had a 25 percent higher relative risk of using coitus interruptus than using modern contraceptive methods compared to women with college education.

By wealth quintile, the direction of effect was similar for periodic abstinence and coitus interruptus, although not all categories showed statistically significant estimates. **The risk of using periodic abstinence** relative to modern methods was 61 percent higher among women in the lowest quintile than among women in the highest quintile. Similarly, working women had a lower risk of using coitus interruptus relative to the use of modern contraceptive methods.

Women's religious affiliation did not affect the use of periodic abstinence versus modern contraceptive methods, but Catholics had a 22 percent higher relative risk of using coitus interruptus than modern contraceptive methods compared to non-Catholics.

Women without children and those who wanted more children were significantly more likely to use periodic abstinence or coitus interruptus instead of modern contraceptive methods compared to their counterparts. Relative to women without children, those with 1-2 children, those with 3-4 children, and those with at least 5 children had an approximately 85 percent lower relative risk of using periodic abstinence compared to modern contraceptive methods. For the coitus interruptus, women with children (regardless of the number) had about an 80 percent lower relative risk of using coitus interruptus than modern contraceptives compared to those without children. As expected, knowledge of the fertile period was associated with the use of periodic

abstinence but not with the use of coitus interruptus. Compared to women who had inaccurate knowledge of the fertility cycle, women with accurate knowledge had a 58 percent higher relative risk of using periodic abstinence than modern contraceptive methods. Exposure to family planning information through various types of media did not appear to be significantly associated with the type of contraceptive method used, with the exception of **hearing about family planning on the radio, which was associated with a 12 percent lower probability of using coitus interruptus** than without such exposure. **The type of marital union** was not a significant predictor of the use of traditional methods relative to the use of modern contraceptive methods.

9	<p><i>Agenderanal ysisoftraditio nalcontraceptiveuseinSikk adistrict/2018/Q1</i></p>	<p>Indonesi a</p>	<p>To describe traditional contraceptive methods and analyze gender barriers and husband's support in the use of traditional contraceptives</p>	<p><i>Qualitative research with in-depth interview techniques</i></p>	<p>In-depth interview data with informants</p> <p>There were 10 respondents with 2 types of informants. The first type of informant was the hattra (traditional health care provider) of the KroweMuhang ethnic group as key informants and providers of traditional contraceptive services, and the second type of informant was traditional contraceptive users, both women and men (hereinafter referred to as participants).</p>	<p>A total of 10 informants consisting of 3 hattra as key informants and 7 users of traditional contraception were included in this study. The key informants were over 40 years old and had done practicing traditional medicine, in this regard including traditional contraception, for more than 15 years. The knowledge and skills in traditional medicine were acquired from generation to generation, which were inherited by the ancestors of the KroweMuhang ethnic group. Most of the medicinal plants used in the manufacture of traditional contraceptives were obtained from the forest as they were wild plants.</p> <p>To strengthen mutual trust between partners, husbands themselves already had awareness regarding health welfare in their reproductive activities, namely being consciously involved and participating in the use of traditional contraception. Thus, it can be concluded that the balance of the position of husband and wife in their reproductive health activities had been created in order to achieve the welfare of life in the family. The results of this study indicated that there was no gap in accessing traditional contraceptive services. Husbands and wives had equal</p>
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access to traditional contraceptive services.

Female participants were more aware of the possibilities for **economic difficulties** if they had many children, so they were more proactive in seeking traditional contraceptive services.

RESULTS

In the 405 identified articles, after going through the screening process there were 3 duplicate journals so that the remaining articles (n=402), 402 articles obtained through a search on the PubMed journal as many as 31 titles, Science Direct 285 articles, JSTOR 92 articles and gray literature using Google scholar as much as 2 articles.

The next step, the researcher sorts the articles based on the title obtained (n = 402) after that discarding 372 articles that do not match the research title and 1 type of article that has been reviewed, then filtering based on the abstract obtained (n = 22), discarding 13 articles that are not according to the research question. Furthermore, by screening further articles to find appropriate references regarding factors related to the use of traditional contraception, it was found (n = 9) articles that matched the inclusion criteria for critical appraisal for review.

The researcher conducted an assessment by looking at the determinants of the use of traditional contraception using a quantitative research design (Cross-sectional) and also using a qualitative research design. The study quality assessment uses MMAT, while for qualitative design research using Hawker. MMAT Mixed Methods Appraisal Tools are used to critique the quality of selected articles with the most common type of study methodology or design (Hong et al., 2018).

1. Study Characteristic

a. Research Design

Based on the 9 journals studied, they have different designs. 7 (78%) articles with cross sectional design and 2 (22%) journal articles with qualitative research designs.

b. Country

Based on the place where the research was conducted, it was in the Eastern European countries, Ghana, India, Philippines, Jordan, Erzurum, Sub-Saharan Africa and 2 articles with research studies in Indonesia.

c. Grade

Based on the critical appraisal tool, namely MMAT (Cross Sectional) and Hawker (Qualitative) adjusted by the research method, each value is at grade "A" there are 6 (67%) articles and 1 (11%) journal articles at grade "B". while in critical appraisal the qualitative method uses Hawker 2 (22%) journal articles at the "GOOD" grade.

2. Themes

Based on articles related to the Research Theme, the articles carried out by scoping reviews can be grouped according to table 4 below:

Table 4. Research Themes

No	Theme	Code
1	Factors related to the use of traditional contraception	
	Age	(1) (2) (4) (5) (6) (7) (8)
	Education level	(1) (5) (7) (8)
	Economic status	(1) (7) (8) (9)
	Parity	(2) (7) (8)
	Partner support	(3) (4) (9)
	Culture	(1) (9)
	Resource	(1) (2) (4) (8)

DISCUSSION

1. Relationship between Age and Traditional Contraceptive Use

Women who use traditional contraceptive methods are mostly young unmarried women, who are at greater risk of having an unexpected pregnancy. In line with that of (Appiah et al., 2020), contraceptive use among sexually active adolescent girls is in the age range of 15-19 years.

Pursuant to the research of (Çalikoğlu et al., 2018), on the contrary, the use of modern versus traditional methods according to age group showed that the traditional methods were most commonly used in the age group of 35 years or older, although the difference was not statistically significant as illustrated in the study of (Almalik et al., 2018) that 18.9% of married women aged 15-49 years involved in the survey used traditional methods. It was further supported by the results of research by (Marquez et al., 2018a) that most of these women were in their peak childbearing age (25–34 years), while some were teenagers who used traditional contraception.

The researchers assume that the increasing trend of using traditional contraception in the age range above 35 years is due to the decrease in sexual activity which is less frequent than those under 35 years old. Thus, women above the age of 35 years are a risk group in terms of not using effective family planning. This is supported by studies from Indonesia and Iran which have shown that the use of traditional method/coitus interruptus increases with age.

The explanation above is inversely proportional to the results of research by (Machmud et al., 2019) and (Laanpere et al., 2012a) which stated that the age of the participants did not affect the use of traditional contraception among Russian women in Estonia and St. Petersburg.

2. Relationship between Economic Status and Traditional Contraceptive Use

The direct and indirect costs (including financial, social and opportunity costs) that create barriers to the use of modern contraception are the reasons why many couples of childbearing age with low economic status use traditional contraception.

Well-educated and wealthy women find it easier to overcome barriers related to costs. Generally they are users of modern methods and tend to use them in a higher proportion than less educated and poor women.

The above is not in line with the results of the study of (Rossier & Corker, 2017) that more educated and wealthier women were more likely to use traditional methods. All other things were constant (results not shown) and the same results were shown by the research of.

The level of welfare of participants is measured by the fulfillment of basic needs such as food, income, housing, and health. Married couples have middle to lower economic levels. If they intend to delay pregnancy due to economic difficulties to finance a large number of children, they will choose to use more effective contraceptive method, that is, modern contraception (Riwu et al., 2018).

3. Relationship between Education Level and Traditional Contraceptive Use

Education as one of mothers characteristics makes a difference in the selection and use of contraceptive methods. The selection of contraceptive methods in Indonesia based on quintiles in Indonesia (2010) informed that based on the level of education associated with the use of traditional contraceptive methods, it showed that 64.3% of respondents had a low level of education, but the number of users of traditional family planning methods will decrease along with the increasing level of education. This is inversely proportional to the selection of the non MKJP method in which the selection of the non MKJP method will increase by 14.3% if the level of education increases as well. In line with the research results of Appiah, et al that the use of contraception was 24.7% among adolescents with secondary education level. It was also in line with the results of the study of where the use of modern methods was higher in women with university level education (75%; n = 111), while the use of traditional methods was higher in women with high school education (48.7%; n = 74).

The results of the above study are assumed and associated with the acceptance of negative attitudes towards contraception (e.g. fear of side effects), and resistance by others is one of the most important barriers to contraceptive use in developing countries today (Behere et al., 2017). Well-educated women will more easily overcome the obstacles since generally they are users of modern methods and tend to use them in a higher proportion than less educated and poor women (Baumann et al., 2019).

Conversely concluded that education has a contrasting effect on the use of traditional contraceptive methods. The important note was that more educated women were more likely to use periodic abstinence (traditional contraception) instead of modern contraceptive methods. The reason was that side effects were lower in the use of periodic abstinence method than modern contraceptive methods. The same pattern also applied to husband/spouse education.

4. Relationship between Parity and Traditional Contraceptive Use

Parity is the number of deliveries that have been experienced or the number of live births a woman has. Parity is a term that indicates the number of pregnancies ending in the birth of a fetus that is able to live outside the womb. Excessively high parity and excessively close distance between pregnancies will affect the condition of the mother and fetus.

Currently in the midst of society there are still those who adhere to the traditional concept, which tends to choose to have a large number of children. From an economic point of view, the large number of children can be a resource to increase their parents' income. Supporting research stated that those at parity of three were more than five times likely to use traditional contraception than their counterparts at parity of zero [OR ¼ 5,98, 95% CI ¼ 2,88-7,29]. Women without children and those wanting more children were significantly more likely to use periodic abstinence or coitus interruptus (traditional contraceptive methods) instead of modern contraceptive methods compared to other respondents.

The person who having one child, there is a tendency to have minimal experience with family planning so that the show the behavior to be enthusiastic about seeking family planning information (Effendi & Widiastuti, 2014).

5. Relationship between Culture and Traditional Contraceptive Use

There are many factors influencing a person not to get contraceptive services. One of the factors that exist in remote areas is the difficulty of accessing health facilities due to the long distances or cultural factors existing in each area.

The patriarchal culture that is very thick in almost various regions in Indonesia often makes women the victims of the gender gap. Sikka Regency in East Nusa Tenggara is an area known for its rich herbal medicine used for traditional medicine. The indigenous people inhabiting Sikka Regency in East and Central Flores are the Sikka tribe, which is referred to as part of the Mukang ethnic group, consisting of several small tribes or ethnicities, namely Sikka, Krowe, Mukang and Muhang.

The local community in Talibura District, which is dominated by the KroweMuhang ethnic group, is still maintaining their ancestral heritage in terms of traditional medicine and health care methods using traditional ingredients. So many plants are used as ingredients, including in terms of spacing pregnancies (traditional family planning). Local people tend to prefer using contraception made from herbal medicine rather than medical contraception that can be obtained at health facilities. The knowledge and skills in traditional medicine have been passed down from generation to generation by the ancestors of the KroweMuhang ethnic group. Most of the herbal medicine used in the manufacture of traditional contraceptives are obtained from the forest as they are wild plants (Craig et al., 2020).

The above review is one of many stories of traditional contraception in the world, which of course is still a lot of traditional contraceptive culture existing in the community.

6. Relationship between Husband's Support and Traditional Contraceptive Use

The importance of men's involvement in the use of traditional contraception reflects gender equality. Women and men equally participate in the use of traditional contraception. The participation of men in the use of traditional contraception can be said to be successful. Unlike the use of modern contraception, the involvement of men in the use of traditional contraception can be considered positively as a form of their awareness that traditional contraception is not only for women, but men also have the same obligation to be actively involved in it.

In her research, it was concluded that the results indicated husband's support for the use of traditional family planning in women of childbearing age in Sewon district, Bantul. It was found that the husband supported the use of traditional contraception. Along with this, explained that there was an awareness of wives and husbands to use contraception due to economic difficulties in supporting many children, so both of them decided to postpone the pregnancy. Husbands/patners are important figures in the sexual and reproductive live of women and contribute to the culture in which women live (Hidayati et al., 2018).

7. Relationship between Information Sources and Traditional Contraceptive Use

Fear of the side effects of modern contraceptives was the most widely reported reason not to use them. Participants had received information about modern contraception by health workers in the regions but refused to use it. This can be a strong factor to refute that respondents have been exposed to information related to modern contraceptive methods by health workers, but in reality there are still people who use traditional contraception.

Information sources as one of the factors related to the use of traditional contraception are found in one of the results of a study conducted in Ghana, where someone who often reads newspapers and watches television is more likely to use modern contraception. In conclusion, interaction with information sources affects behavior in the use of contraception with modern methods more than traditional methods.

CONCLUSION

The results of the scoping review from the title of determinants of the use of traditional contraception are that there are several related factors including age, education level, economic status, parity, husband's support, culture and sources of information. There is a tendency for women of childbearing age to use traditional contraception "interrupted intercourse" compared to other types of traditional contraception. The limitation of this study is that not all the factors contained in the collection of articles are discussed by the researchers due to the lack of comparison journals that match the theme, therefore it is necessary to conduct a new study to map new articles on the determinants of the use of traditional contraception.

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