SITEPIS Contraception is an Extension Officer in Providing Information on Family Planning in Indonesia

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Abstract

This study addresses the vital role of information as a reproductive health right and emphasizes the responsibility of family planning officers, including health workers, to disseminate accurate information for ensuring public reproductive health. The research focuses on evaluating the effectiveness of SITEPIS Contraception, an online information service designed to aid family planning officers in conveying contraceptive information. SITEPIS is a web application offering comprehensive information on contraception, medical eligibility criteria, and a live chat service. This study involves 28 family planning officers at sub-district and village levels in Bogor and West Lombok districts. Employing a descriptive research approach, the study includes socialization events introducing Sitepis Contraception, encouraging usage, and collecting officers' evaluations. Results indicate positive feedback from all officers, citing the website's appealing design, user-friendly accessibility, and essential features for effective information delivery. Despite challenges related to internet network support in certain areas, officers express willingness to use the SITEPIS website for their community information duties. Notably, while face-to-face interaction is preferred by most officers, SITEPIS contraception serves as a valuable tool for information dissemination. The study underscores the underutilization of online information as the primary method among family planning officers in Indonesia. Despite this, it recognizes the potential of online platforms, like SITEPIS, in reaching diverse societal levels. The findings emphasize the need for further examination of SITEPIS Contraception from the community's perspective, the primary target audience, to enhance its effectiveness. In conclusion, the study advocates for the integration of online information tools to empower family planning officers in fulfilling their crucial role as information providers.

Keywords: Family Planning, Online Information, SITEPIS Contraception.

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1. INTRODUCTION

Quality contraceptive information and services help the community to have freedom in determining the number and spacing of births and provide a range of potential benefits that include women's empowerment, economic development, education, and health improvement, including maternal and child health. In 2019, in low- and middle-income countries, there were around 218 million women of childbearing age who still had unmet contraceptive needs, whereas meeting these needs could reduce an estimated 111 million to 35 million unwanted pregnancies annually, 35 to 10 million abortions unsafe conditions, and 299,000 to 113,000 maternal deaths (Ali & Tran, 2022; Guttmacher Institute, 2020).

A comprehensive understanding of effective contraceptive methods is essential for women to protect their health and make informed decisions about sexuality and reproduction (Center for Reproductive Rights, 2011). Health workers are at the forefront of providing contraceptive services to clients, for example providing contraceptive counseling. Health workers are responsible for providing clients with comprehensive and accurate information to help clients make contraceptive decisions (Solo, & Festin, 2019; Soin, et al., 2022).

The quality of contraceptive counseling that women receive from healthcare workers can greatly influence their seeking behavior for further contraceptive services (Sserwanja, et al., 2023). Quality family planning counseling services have been associated with increased client satisfaction and a positive effect on clients' willingness to adopt and continue to use various family planning methods. Adequate counseling further empowers women to obtain information, which is a fundamental right. A comprehensive reproductive health approach demonstrates that quality family planning services must be client-oriented and empower women to make informed choices (Sserwanja, et al., 2023).

Since the start of the pandemic, health technology has been recommended for a variety of contraceptive services, including counseling, checking the appropriateness of contraceptive methods, selecting new methods of contraception, and continuing contraceptive use (Nanda, et al., 2020; Rao et al., 2022). Health technology has proven useful for the continuity of contraceptive services and for expanding access to contraception in remote areas (Sundstrom, et al., 2019; Thompson, Ahrens, & Coplon, 2020; Thompson, et. al., 2020). Online counseling services are an alternative for providing information to clients. Therefore the researchers developed a SITEPIS website to assist health workers in providing contraceptive information.

Various online information platforms have been extensively developed in Indonesia, both unidirectional and interactive in nature (Setiawati, Nurdiana & Yanti, 2020; Samosir, Kiting, & Aninditya, 2020; Wu et al., 2020). Online information channels have been extensively developed in Indonesia, both in unidirectional and interactive forms. However, among the numerous pieces of information or counseling services that have been developed, there is still a lack of online information services that guide the community in independently choosing contraception suitable for their needs. Additionally, there is a dearth of information services that delve into gathering community insights regarding their family planning behaviors. Even though, as we collectively know, the majority of Indonesian society, especially women, are engaged in work, which naturally poses limitations in accessing family planning information directly from officers. Therefore, SITEPIS Contraception serves as an alternative solution to address the information needs related to family planning. SITEPIS Contraception actively and independently provides an understanding of the contraception to be used, supported by a system that directs the community to the nearest health facilities for contraceptive services. SITEPIS Contraception also gathers information on the family planning behaviors, issues faced by clients, and client locations, facilitating easy outreach for officers to provide treatment for clients in need.
2. RESEARCH METHOD

The research design uses a cross-sectional approach. The researcher socialized the contraception SITEPIS website to family planning officers. SITEPIS contraception is a website that contains contraceptive information and medical eligibility criteria modified from the medical eligibility criteria from WHO and the Ministry of Health and is used by officers to screen or screen contraceptive methods according to client needs. The contraception SITEPIS website is also equipped with features to dig up information on client conditions, contraceptive use behavior, respondent's area of residence, and live chat. The following is the appearance of the contraceptive site website:

![Contraceptive SITEPIS Website](image1.png)

**Figure 1.** Contraceptive SITEPIS Website.

![Display of data collection and respondent's residential area on the SITEPIS Contraceptives website.](image2.png)

**Figure 2.** Display of data collection and respondent's residential area on the SITEPIS Contraceptives website.

To assess the functionality and usefulness of the website, the respondents at this stage were family planning officers consisting of midwives, PLKB, and family planning cadres who provide information services to the community at the sub-district and village levels in Bogor Regency and West Lombok Regency, totaling 28 respondents. The selection of respondents was carried out by purposive sampling. The research was conducted in June-July 2023. The data analysis used was descriptive analysis.
In addressing the research objectives, this study employs a descriptive approach by gathering information about SITEPIS Contraception from family planning officers who play a crucial role in providing family planning information. As a research protocol, the researcher obtained permission from the authorized administrators of the research site, in this case, by submitting a request for approval to the Health Department, DP2PKB, Regional Harmony and Political Affairs Office of Bogor Regency, and the Regional Development Planning Agency (Bappeda) of West Lombok Regency. The subsequent legal step involves conducting an ethical fitness test, and it was declared to have passed with the approval number LB.01.03/6/143/2023 issued by the Research Ethics Commission of Health Polytechnic Mataram.

The steps in data collection for this study involve conducting structured and systematic socialization of SITEPIS Contraception to family planning officers. The socialization activities are conducted for one day in each respective region. The socialization event begins with the opening of the research activities by the head of DP3P2KB, in conjunction with the Health Department in the Bogor Regency area, and the head of the community health center in the West Lombok Regency area. Subsequently, the researcher presents a comprehensive overview of SITEPIS Contraception and demonstrates how to utilize this contraceptive method. All respondents directly open and practice the utilization of SITEPIS Contraception. Subsequently, a discussion forum is opened, and at the end of the socialization, respondents are asked to provide assessments of SITEPIS Contraception. The assessment of SITEPIS by respondents is conducted using a questionnaire formulated by the instrument used to evaluate the effectiveness of online information media development. The aspects evaluated include appearance, ease of access, ease of understanding, functionality, and the usefulness of available features, as well as the support of the internet network in the research area.

The research respondents consist of family planning officers, including midwives, family planning counselors (PLKB), and health cadres, totaling 28 respondents. These officers were selected from districts with relatively low family planning achievement rates in the Bogor and West Lombok regencies. Additionally, selected respondents include family planning officers serving both the public and private sectors in their work areas, such as a selected midwife who serves as a coordinator at a community health center while also providing services in Independent Midwife Practice. Furthermore, some midwives also hold positions in professional organizations. Therefore, the information conveyed by these respondents will represent the roles of family planning information providers across various fields. In terms of sampling limitations, the researcher did not proportionally represent each type of family planning officer. However, this is not expected to introduce bias to the information, as midwives are the predominant source of contraceptive services in Indonesia.

3. RESULTS AND DISCUSSION

Table 1. Characteristics of Family Planning Officers in Bogor and West Lombok District in 2023.

<table>
<thead>
<tr>
<th>Respondent Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bogor District</td>
<td>11</td>
<td>39.3</td>
</tr>
<tr>
<td>West Lombok District</td>
<td>17</td>
<td>60.7</td>
</tr>
<tr>
<td>Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwife</td>
<td>24</td>
<td>85.7</td>
</tr>
<tr>
<td>PLKB</td>
<td>3</td>
<td>10.7</td>
</tr>
<tr>
<td>Family planning cadres</td>
<td>1</td>
<td>3.6</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>1</td>
<td>3.6</td>
</tr>
<tr>
<td>D3 Midwifery</td>
<td>15</td>
<td>53.6</td>
</tr>
</tbody>
</table>

Most of the family planning officers in this study came from the West Lombok district and worked as midwives. Based on education level, more than half are D3 Midwifery. Midwives are health workers who mostly provide counseling services. Health care practitioners (midwives) provide information to women and offer them all options of contraceptive methods, as soon as possible within 7 days after delivery (NICE, 2016; Jawad, Jawad, & Alwan, 2019).

Health workers who can provide contraceptive counseling include doctors with various specialties (for example family medicine, pediatrics, obstetrics and gynecology, nurse practitioners, physician assistants, midwives, community health workers, and cadres (Coulter, Jacobson, & Parker, 2000). Personal biases can hinder the ability of health workers to assess clients’ needs as a whole and create barriers to choosing contraception. These health workers come from various educational backgrounds, so they have different competence and ability levels in the provision of contraception. Contraceptive counseling practices can also be influenced by their perceptions of the risks of pregnancy, understanding of the adequacy of contraception for certain populations (including eligibility for medical), and training that has been followed (Akers, et al., 2010).

The research results indicate that the majority of respondent characteristics are distributed across several categories. For instance, the most common type of family planning officer in this study is a midwife, and the educational level is predominantly D3 in midwifery. This suggests that the characteristics of the respondents are homogeneous, posing limitations in further analysis. Consequently, the presentation is focused on providing an overview of the respondents’ assessments of SITEPIS Contraception without linking these assessments to specific respondent characteristics. Another limitation of this study is the failure to explore information about cultural factors that could potentially influence the research outcomes. Geography is one of the factors influencing internet connectivity. This challenge can be addressed by improving internet access in remote locations through collaboration with the Ministry of Communication and Information.

**Table 2.** Age and Length of Service Characteristics of Family Planning Officers in Bogor and West Lombok District in 2023.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Average</th>
<th>SD</th>
<th>Minimum - Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>28</td>
<td>41,6</td>
<td>9</td>
<td>26 - 53</td>
</tr>
<tr>
<td>Length of Service</td>
<td>28</td>
<td>17,7</td>
<td>11</td>
<td>0,8 - 33</td>
</tr>
</tbody>
</table>

The age of family planning officers ranged from 26 to 53 years, with an average of 41.6 years. Based on the length of work, it ranges from less than 1 year to 33 years, with an average of 17.7 years.

**Table 3.** Assessment of Contraceptive Cyprus Websites by Family Planning Officers in Bogor and West Lombok District in 2023.

<table>
<thead>
<tr>
<th>Website</th>
<th>SITEPIS Contraception</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td>23</td>
<td>82,1</td>
</tr>
<tr>
<td>Very good</td>
<td></td>
<td>5</td>
<td>17,9</td>
</tr>
<tr>
<td>Ease of access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td>24</td>
<td>85,7</td>
</tr>
<tr>
<td>Very good</td>
<td></td>
<td>4</td>
<td>14,3</td>
</tr>
</tbody>
</table>
The family planning officer's assessment of the contraceptive SITEPIS website in terms of appearance, ease of access, easy-to-understand information, and features received good and very good marks. Meanwhile, in the aspect of internet network support, 10.7% of family planning officers gave a bad rating.

Digital health, or the use of digital technologies for health, has become a dominant area of practice in the routine and innovative application of information and communication technologies (Okunlola, 2023; Ugaz, Correa, and E. DeGraw, 2021). Digital technologies provide new opportunities to address health system challenges and offer the potential to improve the scope and quality of healthcare practice. Digital health interventions can be used to facilitate communication with individuals through reminders and health promotion messages to expand access to health information. Digital health interventions can also be targeted at healthcare workers to provide them with quicker access through clinical protocols, decision support mechanisms, or telemedicine consultations with other healthcare workers (Beyond the Phill at UCSF Bixby Center for Global Reproductive Health, 2017; World Health Organization, 2019; Zapata et al., 2015).

The results of the evaluation of the SITEPIS contraceptive website, which is used to assist family planning officers in conveying contraceptive information to the public, is considered to have an attractive appearance, ease of access, easy-to-understand information, and good features. However, currently, the method of providing information that is most preferred or frequently used by health workers is face-to-face counseling.

Healthcare providers trained with supporting processes such as software applications can improve healthcare delivery, strengthen health systems, and support clients. There is increasing evidence that technology can produce time and resource efficiencies and improve the quality of services resulting in better patient outcomes. The World Health Organization (WHO) has issued recommendations for digital interventions to strengthen health systems (World Health Organization, 2019).

Table 4. Methods of Providing Information and Readiness to Use SITEPIS Contraception by Family Planning Officers in Bogor and West Lombok Regencies in 2023.

<table>
<thead>
<tr>
<th>Methods of Providing Information and Willingness to Use SITEPIS Contraception</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The method of providing information most preferred or frequently used by officers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face to face</td>
<td>27</td>
<td>96,4</td>
</tr>
<tr>
<td>On line</td>
<td>1</td>
<td>3,6</td>
</tr>
<tr>
<td>Willing to use the SITEPIS contraception website</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>28</td>
<td>100,0</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100,0</td>
</tr>
</tbody>
</table>
The results of a study regarding methods of providing information showed that almost all family planning officers stated that they preferred the face-to-face method compared to online. However, all family planning officers are willing to use the contraceptive site website in carrying out their duties of providing information to the public. This is a very important aspect of family planning services. Quality counseling between clients and providers (medical personnel) is one of the indicators that determine the success of the family planning program (Nirwana, et al., 2023). Assisting also includes the counselor’s willingness to listen to the client’s life journey, both his past, hopes, unfulfilled desires, failures experienced, trauma, and conflicts that the client is currently facing. Counseling is a face-to-face meeting between two parties, where one party helps the other party to make the right decision for himself and then act according to his decision (Anggraini, Ariestantia, & Yusuf, 2023; Fatima, et al., 2018).

Studies have shown that provider recommendations have a significant and positive impact on patient initiation and choice of contraceptive methods. However, the provision of information highlights the importance of individualized contraceptive counseling through a process of shared decision-making, which is defined as an interactive process in which providers and patients communicate and arrive at mutually agreed decisions. Clients have reported many advantages to the web-based platform, including interactive and the ability to compare contraceptive methods using filters and sorting options. In addition, patients appreciate using decision-making tools before clinical visits to help them narrow their contraceptive options and prepare questions for their providers (Rezel-Potts, et al., 2020; Wu et al., 2020; Wu et al., 2018).

Healthcare providers highlight the benefits of telehealth, including continued access to contraceptive services and accommodating patients who face the challenge of having in-person contraceptive visits. However, many healthcare providers have noted a lack of patient awareness regarding the availability of telehealth services and disparities in access to technology. Service providers feel there is a lack of personal connection in contraceptive counseling if done virtually, are aware of the challenges in maintaining confidentiality, and express concern about the inability to provide all contraceptive methods via telehealth (Akers, et al., 2010; Fataar, Zweigenthal, & Harries, 2022; Lee, et al., 2011; Rao et al., 2022).

4. CONCLUSION

The SITEPIS Contraception website serves as a valuable informational tool for family planning officers, even though the predominant preference remains face-to-face interactions. While the utilization of online platforms presents an effective strategy to disseminate information across all societal levels, family planning officers in Indonesia have not fully embraced online methods as their primary approach. Nevertheless, the continued provision of online information holds the potential to significantly support family planning officers in their pivotal role as information providers. The challenge lies in the shift away from traditional counseling methods, yet this transition offers a promising opportunity to extend services to individuals facing barriers such as work commitments, geographical remoteness, and economic constraints. Government support and policies are integral to encouraging family planning officers to embrace online information services, thereby enhancing public understanding of contraceptive options tailored to individual needs. Additionally, the SITEPIS Contraception website enables the independent reporting of contraceptive conditions by individuals, allowing for the monitoring of community family planning behaviors. Although the current assessment primarily reflects the perspective of family planning officers, future research should expand to incorporate the viewpoint of the community, who are the ultimate beneficiaries of this online information service.
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