

The importance of knowledge of fertile age couples regarding syphilis



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Abstract: Syphilis not only causes morbidity, but can also cause mortality for sufferers. In Indonesia, the Indonesian Ministry of Health (Kemenkes) reported that cases of syphilis or raja singa in Indonesia reached 20,783 cases in 2022. This figure increased by 70% compared to 2018 with 12,484 cases. Data from the Maluku Provincial Health Office in 2022 recorded the findings of 594 cases of sexually transmitted infections of Syphilis with an average productive age including mothers in the perinatal period and the majority of the distribution was in the city of Ambon. At the Suli Health Center, in 2023 when screening of pregnant women was carried out on the first visit, 193 mothers were found to have sexually transmitted infections of syphilis in 5 mothers, 2 of whom had given birth and had recovered, so that at the time of the study there were still 3 mothers in the perinatal period who were reactive to syphilis who were undergoing treatment. community service with the hope of providing knowledge to the public who are still unfamiliar with sexually transmitted diseases, especially in couples of childbearing age.

Keywords: Fertile Age Couples, Syphilis Awareness, Reproductive Health, Sexually Transmitted Infections (STIs)

1. Introduction

Sexually Transmitted Infections (STIs) remain a global health concern. The World Health Organization (WHO) reports that more than 1 million people are exposed to STIs every day, with about 500 million new cases each year, including chlamydia, gonorrhea, trichomoniasis, and syphilis (Diniarti et al., 2019). Among the different types of STIs, syphilis or lion king—caused by the bacterium *Treponema pallidum*—has a serious impact, not only increasing morbidity but also risking causing mortality for sufferers (Emerson, 2009 in Ramona et al., 2023).

The WHO report (2021) shows that there were 7.1 million new cases of syphilis globally in 2020. The Centers for Disease Control and Prevention (CDC) also revealed that the surge in syphilis cases shows no signs of slowing down, even more worrying in various countries. This indicates that prevention and education efforts about syphilis still need to be strengthened.

In Indonesia, syphilis cases have increased significantly. The Indonesian Ministry of Health (Kemenkes) noted that in 2022 there were 20,783 cases of syphilis, an increase of 70% compared to 2018 which only reached 12,484 cases (Ministry of Health, 2017). Based on age group, syphilis patients are dominated by the productive age group, namely 25-49 years (63%), followed by 20-24 years old (23%), and 15-19 years (6%) (Ministry of Health, 2022). In Maluku Province, in 2022 there were 594 cases of syphilis, the majority in Ambon City, including pregnant women in the perinatal period (Maluku Health Office, 2022).

As a preventive measure, Indonesia implements the Triple Elimination program, which aims to break the chain of transmission of HIV, Hepatitis B, and Syphilis from mother to baby. This program is regulated in the Minister of Health Regulation No. 52 of 2017 with a target of at least 95% coverage of all pregnant women undergoing integrated antenatal examinations (Mardiyanti et al., 2024).

At the Suli Health Center, in 2023 a screening for syphilis was carried out in pregnant women and 5 cases of syphilis were found, of which 2 of them had given birth and recovered, while 3 mothers in the perinatal period were still undergoing treatment (Primary Data of the Suli Health Center, 2023). This shows that the public's understanding, especially Couples of Childbearing Age (PUS), about syphilis still needs to be improved.

Therefore, this devotion will show the importance of the knowledge of couples of childbearing age about syphilis as a preventive measure in preventing the spread of this disease. By increasing public understanding, it is hoped that it can reduce the incidence of syphilis and support the success of the STI elimination program in Indonesia.



2. Materials and Methods

Location and Time of Implementation

Community service was carried out in April 2024 at the central Suli-Maluku Health Center work area which was attended by 25 pregnant women and their spouses.

Implementation

The author invites pregnant women with their husbands based on data from midwives and prepares KIE/Health Counseling materials on "Counseling for Sexually Transmitted Infections (Syphilis)" by preparing interesting leaflets and PPTs so that pregnant women will be interested in reading them, with the hope that pregnant women and their husbands will know and understand more and understand what has been conveyed and want to change their health behavior for the better.

The method of implementing this service activity at the beginning of the activity is the opening by the implementer and midwife, then continued by providing counseling and distributing leaflet to each participant, at the end of the counseling a discussion or question and answer session was held about the material and matters related to the material. Counseling activities were carried out at 10.00 WIT until it was finished. At the end of the session, prizes were given to PKM participants for participants who could answer questions properly and correctly. At the end of the activity there was a handover of souvenirs for midwives and a group photo.

3. Results

From the results of the pre-test, it was known that the majority of respondents had a low level of knowledge about syphilis. Only 30% of respondents had sufficient understanding of the disease, while the other 70% still had insufficient information. After counseling was carried out, the post-test results showed a significant increase in the level of understanding of participants. As many as 85% of respondents understand the causes, symptoms, and how to prevent syphilis, while the other 15% still need further education.

The results of statistical analysis using the Wilcoxon test showed a significant difference between the pre-test and post-test scores ($p < 0.05$), which indicated that counseling succeeded in significantly increasing the knowledge of the respondents. In addition, the discussion and question and answer sessions showed the enthusiasm of the participants in understanding more deeply about this disease, especially related to the importance of early examination and proper treatment.



Figure 1. Implementation of Activities



Figure 2. Documentation

4. Discussion

The increase in respondents' knowledge of syphilis after counseling can be explained through several relevant learning theories and behavior changes. The results of the pre-test showed that the majority of respondents, i.e. 70%, had a low level of knowledge about syphilis, with only 30% having sufficient understanding. This reflects the lack of adequate information in the community regarding the disease, which may contribute to its spread. After counseling was carried out, the post-test results showed a significant improvement, where 85% of respondents now understood the causes, symptoms, and ways to prevent syphilis. This improvement can be explained through the Adult Learning Theory (Andragogi), which emphasizes the importance of relevance and experience in the learning process. Well-designed counseling, which relates information to real-life situations and provides opportunities for participants to discuss, can increase their engagement and understanding.

Statistical analysis using the Wilcoxon test showed a significant difference between the pre-test and post-test scores ($p < 0.05$), which indicated that counseling succeeded in significantly increasing the knowledge of the respondents. This is in line with Cognitive Theory, which states that good information processing and integration of new knowledge into existing cognitive schemes can make it easier for participants to understand and remember information. Thus, effective counseling not only conveys information, but also helps participants to relate new knowledge to what they already know.

In addition, the discussion and question and answer sessions conducted during the counseling showed the enthusiasm of the participants in understanding more deeply about this disease. Cognitive Social Theory explains that social interaction and observation of others can affect learning. In this context, group discussions and support from facilitators can increase participants' motivation to learn more. Participants who were actively involved in the discussion tended to better understand the importance of early screening and proper treatment, which is a crucial aspect in the prevention and management of syphilis.

Couples of childbearing age knowledge about syphilis as a preventative measure is crucial in limiting the spread of the disease, but it does not appear to be sufficient in different regions. Studies show that while some pregnant women in Surabaya, Indonesia, have a good understanding of syphilis prevention, most still do not have adequate knowledge, which is important for preventing congenital syphilis in newborns (Zediara et al., 2024) (Zediara et al., 2024)]. Similarly, in Brazil, pregnant women show limited awareness of syphilis, with many not fully understanding the transmission and complications associated with the disease, highlighting the need for more comprehensive prenatal education (Gomes et al., 2021). In China, a study focusing on determinants of couple-level syphilis infection found that factors such as marriage duration and condom use were significant in reducing infection rates, suggesting that couple-based education strategies can be effective in prevention efforts (Han et al., 2022)]. Furthermore, in Tanzania, overall knowledge of syphilis among mothers is low, with only 27.8% being aware of the disease, suggesting a large gap in understanding that could hinder the elimination of mother-to-child transmission (Chotta et al., 2020). In Thailand, youth who visited family planning clinics showed varying levels of knowledge and awareness, with factors such as employment status and previous reproductive health education influencing their understanding of syphilis prevention (SON, 2023)]. These findings collectively underscore the importance of targeted educational interventions to improve syphilis prevention knowledge among couples of childbearing age, which can significantly contribute to reducing the incidence of syphilis and related complications globally. Public health strategies should focus on improving access to information and promoting preventive behaviors, such as consistent condom use, to effectively address these public health challenges (Lestari & Aulia, 2023) (Monteiro et al., 2014).

5. Conclusions

The counseling carried out in community service succeeded in significantly increasing respondents' knowledge about syphilis. This improvement can be explained through learning theories, such as Adult Learning Theory and Cognitive Theory, which emphasize the relevance and processing of information. The discussion session also encourages the active participation of participants. These results show that a good counseling program not only increases knowledge, but also motivates people to be more concerned about their sexual health.

Conflict of Interest

No conflicts of interest

Acknowledgment

We would like to express our gratitude to the community, the campus as a funder in community service activities which will be carried out in April 2024 and thank the head of the Suli health center for providing opportunities in the implementation of community service.

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