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The Relationship of Personal Hygiene Knowledge in the Incidence of Vaginal Discharge A Systematic Review of Cross-Sectional Studies

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ABSTRACT

Genital hygiene is an important part of a woman's health and important for protecting reproductive health. Women engage in many genital hygiene practices that have direct and indirect effects on the genitals and the potential for sexually transmitted infections. Every year, around 100 million women worldwide are affected by genital infections which can cause vaginitis, cervicitis, and urethritis, and trichomoniasis (Shah et al., 2019). Young women alone already have an estimated incidence of vaginitis of 10-25% (Tavani et al., 2015). This systematic literature review aims to present a systematic review of the relationship between personal hygiene in maintaining vulvar hygiene and leucorrhoea. The population is women of various age ranges. To present a systematic review of cross-sectinal approaches with 8 journals from 2016 to 2022. The results of the study (Prasanthi et al., 2017) for knowledge about vaginal discharge, 98.5% obtained <50% and only 8 (1.5%) which has a score between 50% -75%. The conclusion of various cross-sectional studies has provided evidence that there is a lack of knowledge about personal hygiene for vaginal discharge among women of childbearing age. The findings of this study provide an insight that knowledge of personal hygiene on vaginal discharge in the productive age group must be increased and as health workers provide more information or education to women about vaginal discharge to improve their quality of life.

Keywords: *Hygiene, Vaginal discharge, Vaginosis bacterial*

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INTRODUCTION

Bacterial vaginosis (BV) is the most common cause of abnormal vaginal discharge, affecting women of reproductive age (Guan dkk., 2020). This infestation is

characterized by a loss of the predominant Lacto bacillus (hydrogen peroxide producing) vaginal microflora (Villar dkk., 2020), and a concomitant overgrowth of anaerobic bacteria It is known that BV has an influence in the acquisition of certain genital infections.

Every year, approximately 100 million women worldwide are affected by genital infections that can cause vaginitis, cervicitis, and urethritis, and trichomoniasis (G. Chen dkk., 2020). Adolescent girls alone have an estimated incidence of vaginitis of 10-25%.

If it continues without follow-up, it can cause infection to the uterus and ovaries. Vaginal infections are usually not clear white in color but yellow, gray, even green to foul and fishy smellin (Wang dkk., 2020). Recurrent vaginal infections can have a negative impact on social, personal relationships affecting their quality of life.

Based on research, if you do not maintain personal hygiene, especially reproductive health protection (J. Chen dkk., 2020). Bacterial infections can occur when there is reduced acidity in the female area, using tight and non-absorbent fabrics, not maintaining the moisture of the female area.

The lack of information related to reproductive health experienced by adolescents results in the emergence of various problems related to the reproductive system. Lack of knowledge and attitudes in caring for external genital organs (Garg dkk., 2020). Inadequate health services, absence of social security, low social status, extreme fertility and related gynecological problems (Powles dkk., 2020), wrong beliefs, and wrong application of genital health are the main causes of reproductive health problems in women (Rinott dkk., 2020). There is a relationship between vaginal discharge symptoms and various socio-cultural based beliefs as adolescent girls in low- and middle-income countries are often not exposed to unhygienic practices.

The improvement of the knowledge system in adolescents is certainly influenced by the awareness of the lack of information and the condition of bacterial infection in female reproductive organs (Ashina dkk., 2021). Therefore, this systematic review will provide information based on scientific evidence that explains the relationship between knowledge of personal hygiene and the incidence of bacterial infections in adolescents (De Santiago-Martín dkk., 2020). The results of this review can provide us with information so that adolescents understand the importance of knowledge of caring for vulvar hygiene to increase the reduction of bacterial infections.

RESEARCH METHODOLOGY

Search Strategy

This study is a systematic review that examines articles published from 2016-2021. The search was obtained by pubmed database with the keywords (Barbagallo & Sacerdote, 2018): Hygiene knowledge and Vaginosis bacterial or vaginal discharge.

Inclusion criteria

Published articles published using English or Indonesian free full text articles that can be downloaded for free (open access), cross sectional design, the population is

women of various ages (Black dkk., 2019). With the risk factor is vaginal hygiene habits and the outcome or outcome measured is bacterial vaginosis.

bacterial vaginosis (Jain dkk., 2019). Knowledge assessment must be carried out using internationally recognized questionnaires or measuring instruments, namely WHOQOL-BREFDASS, IAQ, Amsel criteria, socio-demographics.

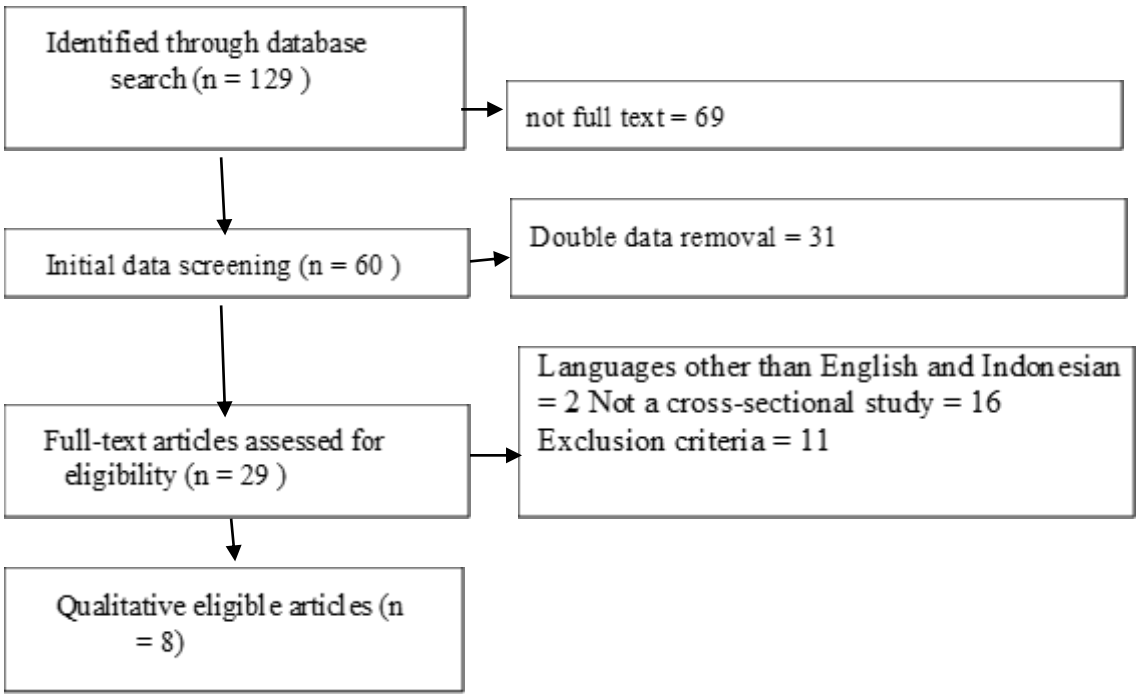
Exclusion criteria

Articles published in Chinese, Arabic, Spanish, Japanese and French (Bilal dkk., 2019). Articles with randomized controlled trial, clinical trial (Murthy dkk., 2020), review, and observational (Manson dkk., 2019). Adolescents who have chronic diseases such as cancer, and have infections other than vaginal infections and use long-term antibiotics.

Strategy and quality assessment and data synthesis

All identified studies were independently assessed by all authors for relevance based on title and abstract. Subsequently, full-text versions of all potentially relevant, disagreements between authors were resolved through a discussion forum (Wisnu dkk., 2021). The abstracted data were presented in a flow chart according to PRISMA (preferred items of systematic review and meta-analysis) (Karavani dkk., 2019). The current study aims to determine self-care on quality of life, knowledge, and quality of life, knowledge with the incidence of vaginal discharge.

RESULT AND DISCUSSION



PRISMA flow diagram for article selection in a systematic review

Criteria	(Shah *et al.*, 2019)	(Abdelnaem, 2019)	(Prasanthi *et al.*, 2017)	(YAŞAR, TERZİOĞLU and KOÇ, 2017)	(Fathy Mohammed *et al.*, 2018)	(Tatirah	(Antony and Philip, 2021)	(Choudhary, 2016)

Does the cohort study clearly address the clinical problem?	YA	YA	YA	YA	YA	YA	YA	YA
Were the subjects selected in the correct way?	YA	YA	YA	YA	YA	YA	YA	YA
Are the outcomes measured correctly?	YA	YA	YA	YA	YA	YA	YA	YA
Did the researchers identify all important confounding factors?	YA	YA	YA	YA	YA	TIDAK	TIDAK	YA
Do the main results of the study report effect sizes or complete statistical analysis?	YA	YA	YA	YA	YA	YA	YA	YA
Are the results reliable?	YA	YA	YA	YA	YA	YA	YA	YA
Can the results be applied to the local population?	YA	YA	YA	YA	YA	YA	YA	YA

Table 1. Study quality assessment

Studi	**Subyek**	**Lokasi**	**Hasil**
(Shah *et al.*, 2019)	400 respondent	Nepal	37 respondents had good knowledge and 363 respondents had poor knowledge.
(Abdelnaem, 2019)	214 respondent	Mesir	54 respondents had unfavorable knowledge and 160 respondents had unfavorable knowledge.
(Prasanthi *et al.*, 2017)	555 respondent	Sri langka	8 respondents have good knowledge, and 547 respondents have poor knowledge.
(YAŞAR, TERZİOĞLU and KOÇ, 2017)	84 respondent	Turki	had poor knowledge.
(Fathy Mohammed *et al.*, 2018)	300 respondent	Mesir	40 respondents have good knowledge, 44 respondents have poor knowledge.

(Tatirah and Chodijah, 2020)	82 respondent	Indonesia	81 respondents have good knowledge, 219 respondents have poor knowledge.
(Antony and Philip, 2021)	100 respondent	India	13 respondents have good knowledge, 69 respondents have poor knowledge.
(Choudhary, 2016)	250 respondent	India	39 respondents have good knowledge, 61 respondents have poor knowledge.

Personal hygiene is an action to maintain cleanliness and health for well-being. Abnormal vaginal discharge is mostly triggered by lack of knowledge in maintaining personal hygiene, especially the genitals. Based on the literature review obtained, 8 articles state that there is a significant relationship between knowledge of personal hygiene or genital hygiene and the incidence of vaginal discharge.

A cross sectional research analysis conducted by (Choudhary, 2016) states that the prevalence of reproductive tract infections is one of the main burdens of disease in developing countries even though many symptoms indicate this disease (Shibeshi dkk., 2021). The most commonly reported among women is abnormal vaginal discharge. Various community-based studies in developing countries have revealed that there is a lack of information about reproductive health (Gnocchi dkk., 2022). Meanwhile, after an educational program (Yustikasari dkk., 2021), there was a significant improvement in their knowledge, practices, and quality of life.

This cross-sectional descriptive study involved collecting information on women's knowledge about vaginal discharge using a multiple-choice questionnaire. Two hundred and fifty women living in Model Town, Ludhiana (Klok dkk., 2020). It showed that only 20% of the subjects had a good level of knowledge and 80% of the subjects had a poor level of knowledge about vaginal discharge, the mean score of knowledge about vaginal discharge in the subjects was 19 with a standard deviation of 3.94 (Critchley dkk., 2020). Although all respondents had some level of educational background, but the majority did not have adequate knowledge about self-care towards quality of life (Shah dkk., 2019), knowledge with vaginal infections.

A research analysis conducted is that vaginal discharge is a common complaint among women in the reproductive age group and it is one of the most common symptoms in gynecological disorders (Middeldorp dkk., 2020). About 54% of women aged 18-49 in the plantation community were found to have symptomatic vaginal discharge. Concluding that among women suffering from vaginal discharge (Rodriguez-Wallberg dkk., 2023), the majority (70%) did not seek information from health workers or treatment, making the level of knowledge inadequate. making the level of knowledge inadequate.

This study used a community-based cross-sectional study of 550 women using an interviewer-administered questionnaire. For knowledge about vaginal discharge, 98.5% scored <50% and only 8 (1.5%) scored between 50%-75% (Dobson & Giovannoni, 2019). Among the majority (98.5%) of the study participants indicated the need for

increased awareness on health education which should be directed at younger women to empower them and recognize abnormal vaginal discharge as early as possible.

CONCLUSION

The above cross sectional studies have provided evidence that lack of knowledge about personal hygiene on vaginal discharge among women of childbearing age (Rubin dkk., 2020). The findings of this study provide an insight that knowledge of personal hygiene on the incidence of vaginal discharge in the productive age group should be improved and as health workers provide more information or education to women about vaginal discharge to improve their quality of life.

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