Impacts Caused By Vulvovaginal Candidiasis On The Health Of Women Of Reproductive Age: Integrative Review

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Abstract:

The present study aimed to identify the impacts caused by vulvovaginal candidiasis on the health of women of reproductive age. As a method, it is characterized as an integrative literature review study. The search was carried out during the month of September 2023, in the databases: (MEDLINE); (LILACS) and (BDENF). In the research, the Health Sciences Descriptors (DECS) and Medical Subject Headings (MeSH) were used: Women AND Candidiasis, Vulvovaginal AND Risk Factors. The search in the databases identified 136 publications after applying the exclusion criteria, 15 articles were eligible for qualitative analysis. As a result, two thematic categories were created: Profile of women with vulvovaginal candidiasis, where factors such as age at the beginning of sexual activity, number of children, pregnancy loss and the state of pregnancy itself did not demonstrate significant associations with the occurrence of vulvovaginal candidiasis in women of reproductive age, and the category impacts and factors associated with vulvovaginal candidiasis on women's health, inadequate diagnosis can lead to chronic vulvovaginal conditions. Depression, anxiety and stress have been identified as risk factors for vulvovaginal candidiasis. In conclusion, it is of great importance to emphasize the need for health education, improvement of clinical diagnostic techniques, screening during pregnancy, mental health assessment, awareness of other similar conditions and continued research.

Key Word: Vulvovaginal candidiasis; Risk factors; Impacts; Women; Women's health.

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I. Introduction

Vulvovaginitis can be understood as a disorder of the stratified epithelium of the vulva and/or vagina. The most common pathogens are fungi, mainly Candida *albicans*, and anaerobic bacteria, especially *Gardnerella. vaginalis* and *Trichomonas protozoa vaginalis*. At least a third of vaginitis cases are vulvovaginal candidiasis, with Candida *albicans* being responsible for 80 to 92% of cases. The increase in cases linked to non-*albicans Candida is noticeable*, mainly C. *glabrata*, which is responsible for the remaining percentage of infections, in addition to being correlated with the indiscriminate use of antibiotics and antifungals (Brasil, 2020; Millman *et al.*, 2020).

It is important to highlight that Candida spp. It naturally inhabits the genital tract, forming part of the normal microbiota, but when there is an imbalance in immunity or a change in vaginal pH, it triggers its multiplication, thus enabling the disease to occur. There are factors that are associated with a greater

predisposition to its development, such as: pregnancy, obesity, diabetes mellitus (when decompensated), use of corticosteroids, use of oral contraceptives, use of immunosuppressants or chemo/radiofrequency, use of clothing that increases the local humidity and HIV infection (Brazil, 2020; Pinheiro *et al.*, 2023).

Rodrigues *et al.* (2022), point out that the most frequently reported symptoms are burning, pain, itching and vulvar irritation, which may or may not be accompanied by dysuria, in addition to the presence or absence of discharge, which is classically white, thick, sticky and lumpy (similar to curdled milk), generally painless, however, in some cases it can also be observed as thin, watery, homogeneous and indistinguishable from other vaginitis.

Corroborating, Oliveira *et al.* (2022), highlight that the discomfort caused by the manifestations results in patients making a diagnosis empirically, without carrying out an adequate investigation and consequently taking medications without proper guidance. These attitudes can be the starting point for the development of resistance to antifungals, mainly to Fluconazole and Miconazole.

According to Bezerra, Belém and Gontijo (2022), candidiasis can be given two names, being considered uncomplicated when all of the following factors are present: mild/moderate symptoms, sporadic frequency, etiological agent C. albicans and absence of comorbidities, The complicated classification is designed for cases in which there is the presence of at least one of the following factors: intense symptoms, recurrent frequency, non-albicans etiological agent (glabrata, kruzei), pregnancy or presence of comorbidities.

It is worth mentioning that most cases are classified as uncomplicated and respond to broad therapeutic schemes, since the first step to be followed to carry out the treatment is to determine the triggering factors, which must be combatted, in this way. avoiding reinfection (Santos; Almeida; Bezerra, 2023; Ortega *et al.*, 2022). One of the great facilitators for an adequate diagnosis is the performance of laboratory tests using a microscope of fresh vaginal contents, as well as bacterioscopy of vaginal smears stained using the Gram method (Pinheiro *et al.*, 2023; Dovo *et al.*, 2022).

Even with the creation of several public policies aimed at promoting women's health and preventing Sexually Transmitted Infections (STIs), a considerable increase in the number of infections is noticeable. It is believed that recurrent vulvovaginal candidiasis affects approximately 138 million women per year . year, worldwide, with a global prevalence of 3,871 per 100,000 women, of which 9% are in the age group of 25 to 34 years (Lima *et al.*, 2022; Brazil, 2022).

This context highlights the need to know the impacts caused to young women's health. This research is relevant since knowing the impacts of vulvovaginal candidiasis on the health of young women can contribute to better performance by the nursing team and other professionals involved in care and the adoption of preventive and effective measures that reduce the impacts caused on physical and women's psychological health, in addition to improving the quality of nursing care in primary care and promoting women's health through evidence-based practice.

Based on the outline, the present study aimed to identify the impacts caused by vulvovaginal candidiasis on the health of women of reproductive age.

II. Material And Methods

The present study is characterized as an integrative literature review study, which is a method that effects the synthesis of knowledge and makes possible the applicability of study results relevant to clinical practice (Ercole; Melo; Alcoforado, 2014). Notably, a comprehensive review is a way of synthesizing knowledge and incorporating the applicability of important research findings into practice, contributing to the discussion of methods and findings. The initial objective of this method is to gain an understanding of a given phenomenon based on previous research.

The integrative review is one of the research methods used in Evidence-Based Practice (EBP). Its purpose is the systematic and organized incorporation of evidence into clinical practice, with the aim of gathering and synthesizing the results of studies related to a specific topic. This approach contributes to a more in-depth understanding of the subject under investigation (Mendes; Silveira; Galvão, 2008).

To fulfill the necessary steps in the search for information regarding the impacts caused by vulvovaginal candidiasis on the health of women of reproductive age, the following steps proposed by Mendes, Silveira and Galvão (2008) were adopted: 1) Establishment of the hypothesis or research question; 2) Sampling or literature search; 3) Categorization of studies; 4) Evaluation of the studies included in the review; 5) Interpretation of studies; 6) Synthesis of knowledge or presentation of the review.

The study's research problem was constructed according to the strategy (PICo), being (acronym for P: population/disease; I: intervention; Co: context). Therefore, in this study, P-woman was assigned; I- Impact of vulvovaginal candidiasis on health Co: Reproductive age. In this sense, the following question was formulated: What are the impacts caused by vulvovaginal candidiasis on the health of women of reproductive age?

The search was carried out during the month of September 2023, in the databases: Medical Literature Analysis and Retrieval System Online (MEDLINE) via the National Library of Medicine National Institutes of

Health (PUBMED); Latin American and Caribbean Literature in Health Sciences (LILACS) and Nursing Databases (BDENF) via the Virtual Health Library (VHL). In the research, the Health Sciences Descriptors (DECS) and Medical Subject Headings (MeSH) were used, those described were synchronized by the Boolean operator AND: Women AND Candidiasis, Vulvovaginal AND Risk Factors.

The inclusion criteria were articles published in the last 5 years, from 2019 to 2023, complete articles, available free of charge, in Portuguese, English or Spanish. Letters to the editor, theses, dissertations and monographs that did not respond to the study problem were excluded.

The search in the databases made it possible to identify 136 publications, of which: 79 publications in MEDLINE, 56 in LILACS and 1 in BDENF. After reading the titles and abstracts, 45 studies were obtained and after evaluating the exclusion criteria, 15 articles were selected that meet the final sample of the respective review study, as shown in the flowchart below.

III. Result

In this integrative review, fifteen articles that met the established eligibility criteria were analyzed. Table 1 was created to facilitate the identification of the studies analyzed. The articles were coded from number 1 to 15, the numbering order was based on the year of publication, starting with the oldest.

Table 1: Studies included in the literature review. (N=15) Brazil. 2023.							
Author/year	Title	Kind of study	Results				
Brown <i>et al.</i> (2019)	Vaginal microbiota and behavioral factors associated with the detection of genital Candida albicans in women of reproductive age	Cross-sectional study 394 women	Age at initiation of sexual activity, number of children, pregnancy loss, participants' pregnancy status, and previous genital infections were not significantly associated with any of the infections or syndromes investigated in this population.				
González et al. (2019)	Risk factors associated with vaginal infection in pregnant women	Longitudinal observational study 1,254 women	Having received some type of vaginal treatment before the study (OR 1.26) was a risk factor related to external procedures, although not significantly. The presence of urinary tract infection and diabetes mellitus were risk factors related to the appearance of vaginal infection in pregnant women.				
Gomes <i>et al.</i> (2019)	Identification of reproductive tract infections in women treated in Primary Health Care	Retrospective, documentary, cross-sectional study, carried out with 361 records of women	From the point of view of the benefits of women's health care, in primary care, professional action is encouraged to promote health education actions aimed at raising awareness among women of different age groups about the relevance of RTIs.				
Djohan <i>et al.</i> (2019)	vulvo-vaginal candidiasis in Abidjan (Ivory Coast): Etiology and associated factors.	Cross-sectional study 400 women	Some factors such as education, history of sexually transmitted infection, type of underwear used, frequency of personal hygiene and type of product used for this hygiene have been associated with the occurrence of vulvovaginal candidiasis.				
Yano et al. (2019)	Current patient perspectives on vulvovaginal candidiasis: incidence, symptoms, management and post- treatment outcomes	Cross-sectional study 284 women	Inadequate diagnosis without clinical examinations often leads to chronic vulvovaginal conditions. Current patient perspectives closely reflect historically documented estimates of the prevalence of vulvovaginal candidiasis				
Mushi <i>et al.</i> (2019)	Candidal vaginitis among symptomatic pregnant women attending antenatal clinics in Mwanza, Tanzania	Cross-sectional study 300 women	About two-thirds of pregnant women with clinical features of vaginitis who attended the antenatal clinic in Mwanza, Tanzania, were laboratory confirmed to have Candida vaginitis caused mainly by Candida albicans. Pregnant women of low socioeconomic status with a history of antibiotic use are more likely to experience Candida vaginitis.				
Moshfeghy et al. (2020)	Association between sexual function and psychological symptoms, including depression, anxiety and stress in women with vulvovaginal candidiasis	Case-control study 100 women	Depression, anxiety, and stress in the past four weeks are linked to an increased risk of vulvovaginal candidiasis.				
Melo et al. (2021)	Concordance Between Clinical and Laboratory Diagnosis of Abnormal Vaginal Discharge in Chilean Women	Cross-sectional study 125 women	Candidiasis vulvovaginitis and trichomoniasis appear to be overdiagnosed and bacterial vaginosis appears to be underdiagnosed by clinical diagnosis when compared to laboratory diagnosis.				

Mulinganya et al. 2021	Prevalence, risk factors, and adverse pregnancy outcomes of bacterial vaginosis in the second trimester among women	Cross-sectional study with a total of 533	The prevalence of bacterial vaginosis in Bukavu is high, but is in line with the global average. BV was associated with adverse pregnancy outcomes in the study population.
Drewes; Kalder; Kostev, (2021)	Factors associated with the diagnosis of depression in women seen in gynecological offices in Germany	Retrospective study 5,893 women	A wide range of illnesses documented in gynecological practice have been associated with the diagnosis of depression. Understanding all of these associations can help gynecologists promptly refer women to psychologists or psychiatrists who can help manage depression in this population.
Zhao et al. (2022)	Bacterial vaginosis, vulvovaginal candidiasis and trichomonal vaginitis in women of reproductive age in Yunnan, China	Descriptive study 770 women	Risk factors for vaginitis include age, miscarriage, and education level. Health education interventions are recommended to increase women's awareness of vaginitis and its prevention.
Benedict <i>et al</i> . (2022)	Survey of incidence, lifetime prevalence, and treatment of self-reported vulvovaginal candidiasis, United States	Cross-sectional study 1,869 women	Overall, the results of this nationally representative survey of adult women help contribute to a greater understanding of the estimated incidence and lifetime prevalence of VVC in the United States.
Jansåker <i>et al.</i> (2022)	New risk factors associated with common vaginal infections: a national primary care cohort study: New risk factors for vaginal infections.	An open cohort study consisting of 2,357,711 women	sociodemographic factors were significantly associated with both outcomes. Compared to women born in Sweden, women from the Middle East/North Africa had the highest risk of VVC
Pinto <i>et al.</i> (2023)	Factors associated with Trichomonas infection vaginalis in women of reproductive age undergoing cervical examination in southeastern Brazil	Cross-sectional study 1,477 women	Several factors have been independently associated with T. vaginalis infection, such as self-declaration as black or mixed race for ethnicity. Screening programs to correctly detect T. vaginalis infection may be useful in guiding prevention strategies for the community. Our study supports an association between abnormal vaginal microbiota and T. vaginalis infection.
García <i>et al.</i> (2023)	Epidemiological profile of patients with vulvovaginal candidiasis from a sexually transmitted infections clinic in southern Spain	Retrospective study 438 women	Vulvovaginal candidiasis infection is common and its epidemiological profile is contradictory, so our results do not suggest a relevant role for risky sexual behaviors in the diagnosis.

Source: Author's own work (2023)

When analyzing the number of article publications over the last five years, a variable distribution can be observed. In 2019, there were six publications, which represents the highest percentage of the period, with 40% of the total. In the following year, 2020, there was only one publication, equivalent to 7% of the total, marking a significant drop compared to the previous year. In 2021, the number of publications increased again, with three articles published, representing 20% of the total. This same number of publications was maintained in 2022, with an additional 20% of the total, indicating stability during this period. In 2023, two publications were observed, corresponding to 13% of the total. Although this percentage is lower compared to previous years, it is still a significant portion of publications.

Related to the study design, the majority of articles were cross-sectional studies, this finding highlights the importance and popularity of this research method in various academic disciplines. Cross-sectional surveys have been a frequent choice among researchers because of their ability to capture a "snapshot" of a phenomenon at a particular moment in time. This approach allows for data collection from a wide range of participants in a short period of time, making it time and resource efficient. Furthermore, cross-sectional research is valuable for establishing correlations between variables in a single step, contributing to an initial understanding of the relationships between factors. Table 2 presents the characteristics of the studies included in the review.

Table 2: Characteristics of the studies included in the integrative review. (N=15) Teresina (PI) 2023.

Author/year	Country	Language	Data base		
Brown et al. (2019)	U.S	English	Medline		
González et al. (2019)	Cuba	Spanish	Lilacs		
Gomes et al. (2019)	Brazil	Portuguese	Lilacs		
Djohan et al. (2019)	Costa do Marfim	English	Medline		
Yano et al. (2019)	U.S	English	Medline		
Mushi et al. (2019)	Tanzania	English	Medline		
Moshfeghy et al. (2020)	Will	English	Medline		
Melo et al . (2021)	Chile	English	Medline		

Mulinganya et al. 2021	Democratic Republic of Congo	English	Medline
Drewes; Kalder; Kostev, (2021)	Germany	English	Medline
Zhao et al. (2022)	China	English	Medline
Benedict et al. (2022)	U.S	English	Medline
Jansåker et al. (2022)	Sweden	English	Medline
Pinto et al. (2023)	Brazil	English	Medline
García et al. (2023)	Spain	English	Medline

Source: Author's own work (2023)

Data analysis revealed an interesting geographic distribution of publications, with the United States and Brazil emerging as the main contributors to the research. This reflects the significant influence of these two countries on the global academic stage and suggests that they are playing prominent roles in investigating relevant topics. The dominance of the English language in almost all identified articles (80%) indicates the predominance of this language as a vehicle for international scientific communication.

Regarding databases, most publications were found on Medline, which is consistent with the focus on the health area. Medline is widely recognized as a high-quality source for biomedical and healthcare research.

IV. Discussion

From the publications included in this literature review, it was possible to construct two categories of discussion: Profile of women with vulvovaginal candidiasis; and impacts and factors associated with vulvovaginal candidiasis on women's health.

Profile of women with vulvovaginal candidiasis

Bacterial vaginosis is a common gynecological condition that affects many women around the world. It is characterized by an imbalance in the vaginal flora, in which good bacteria are outnumbered by bad bacteria. This imbalance can lead to uncomfortable symptoms such as abnormal vaginal discharge, unpleasant odor and itching. To better understand the profile of women with bacterial vaginosis, it is important to consider several factors (G onzález *et al.*, 2019).

In the study by Brown et al. (2019), the profile of women was non- pregnant, sexually active, aged between 18 and 45 years old, representing four ethnic/racial groups (white, black, Hispanic and Asian). In the study by Yano *et al.* (2019), participants were predominantly Caucasian women (77.7%), with representation of African Americans (14.2%) and Asians (8.1%). There was also a small proportion of Hispanic or Latina women (8.2%). Regarding age group, around half of the participants were of reproductive age (18-40 years old). Similar characteristic presented in the study by Moshfeghy et al. (2020) and Melo *et al.* (2021), where the age ranged from 18 to 50 years.

In the study by Drewes; Kalder; Kostev (2021), carried out in a gynecological office, it was noted that the highest proportion of women were in the 51-60 age group, at 18.1%. On the other hand, the 18-30 age group has the lowest proportion of women, representing 24.6%. The 31-40 age groups have intermediate proportions of women, 26.6%. In the study by Zhao et al. (2022), single-variable analysis revealed that age 20 to 29 years and lack of education were significantly associated with vaginal candidiasis.

In the study by Benedict *et al.* (2022), the largest proportion, approximately 34%, of women who had vulvovaginal candidiasis were in the age group of 30 to 44 years. Furthermore, it was observed that the majority of women who reported vulvovaginal candidiasis were of white origin, representing around 74% of the total.

Likewise, in the study by Pinto *et al.* (2023), involving 1,477 women, provided valuable data on the demographic profile of participants and the prevalence of bacterial vaginosis. This data is fundamental to understanding the health and risk factors associated with this condition. The average age of the participants was 33 years old, with an age range ranging from 18 to 50 years old. This age diversity demonstrates the representativeness of the study, covering women at different stages of life.

According to Gomes *et al.* (2019), the condition can occur in women of all ages, but is more common in women of reproductive age. Djohan *et al.* (2019) also points out that sexual activity, especially unprotected sexual activity, has been associated with a greater risk of developing bacterial vaginosis, but the condition can also occur in women who are not sexually active. Additionally, Mushi *et al.* (2019) points out that the prevalence of bacterial vaginosis may vary between ethnic groups, with studies indicating a higher incidence in women of African or African descent.

The range of ages also suggests that bacterial vaginosis is not restricted to a specific age group, affecting women in different age groups (Mulinganya *et al.*, 2021). Still in the study by Pinto *et al.* (2023), the self-declared ethnicity of the participants showed that the majority of them, around 62%, identified themselves as white. Regarding marital status, the majority of women were married or living in a stable union, representing 65.2% of the total. With regard to education, 59.2% of participants had completed high school.

These studies highlight that bacterial vaginosis and vaginal candidiasis can occur in various age groups, but there is a higher prevalence in women of reproductive age. This suggests the importance of providing gynecological health guidance and education to all women, regardless of age. Variation in the prevalence of these conditions among ethnic groups is also a relevant factor, highlighting the need to consider health disparities when developing prevention and treatment strategies. Therefore, promoting sexual and reproductive health education, as well as including partners in discussions about prevention, can be useful strategies to address these health issues.

Impacts and factors associated with vulvovaginal candidiasis on women's health

Vulvovaginal candidiasis is one of the most common yeast infections affecting women worldwide. This condition is mainly caused by the fungus Candida albicans, although other Candida species may also be involved. The infection occurs in the vulva and vagina and can have several impacts on a woman's health, in addition to being associated with a series of risk factors (Moshfeghy *et al.*, 2020).

The impacts on women's health include a range of uncomfortable symptoms. Most women who develop vulvovaginal candidiasis experience intense itching, burning, pain, and redness in the genital area. Additionally, vaginal discharge becomes thick and white, which can be quite uncomfortable. These symptoms can harm women's quality of life, causing discomfort and affecting their daily activities (Y ano *et al.*, 2019).

According to Mushi *et al.* (2019), although candidiasis is generally considered a mild infection, in rare cases it can lead to more serious complications. This is more common in women with compromised immune systems, such as those with HIV/AIDS or women undergoing cancer treatment. The infection can spread to other parts of the body, resulting in a systemic infection.

Treatment of vulvovaginal candidiasis usually involves topical or oral antifungals along with prevention measures to prevent recurrences. This may include adopting a balanced diet, eliminating irritants such as scented toiletries, and maintaining good personal hygiene (Zhao *et al.*, 2022).

In the study by Brown *et al.* (2019), researchers analyzed secondary data and samples from a previous study called the Vaginal Microbiota 400 Woman Study. They examined the association between C. albicans detection and several factors, including the composition of the vaginal microbiota, personal behaviors, and medication use. They found that C. albicans colonization was associated with the presence of Lactobacillus crispatus in the vaginal microbiota, the use of over-the-counter antifungals, and receptive oral sex. Receptive oral sex has also been identified as a risk factor for detecting C. albicans in the vagina. Additionally, the use of over-the-counter antifungals appears to be related to C. albicans colonization.

Mulinganya 's study *et al.* (2021), identified several factors associated with bacterial vaginosis in pregnant women, as well as their relationship with adverse pregnancy outcomes. Among the associated factors, the presence of simultaneous sexual partners, the use of inadequate vaginal hygiene practices, vaginal colonization by Candida, unemployment, a history of multiple sexual partners throughout life and the unexpected and interesting factor of protection. Furthermore, bacterial vaginosis has been shown to be associated with pregnancy complications such as low birth weight and premature birth. This indicates that bacterial vaginosis can be considered a risk factor for such complications, highlighting the importance of its diagnosis and treatment during pregnancy.

Furthermore, for Melo *et al.* (2021), vulvovaginal candidiasis can be recurrent for some women, meaning they experience several episodes of infection in a short space of time. This not only increases physical discomfort, but can also have a significant impact on emotional health, leading to stress and anxiety.

According to a study by Benedict *et al.* (2022), several factors are associated with Vulvovaginal Candidiasis, including lower educational levels, presence of children under 18 years of age, diabetes and marital status. Women with less education may have an increased risk of Vulvovaginal Candidiasis, possibly due to a lack of knowledge about prevention and limited access to healthcare. The presence of children under 18 may be related to hormonal changes during pregnancy and childbirth. Diabetes is a known risk factor due to an imbalance in blood sugar levels, favoring the growth of Candida.

Similar result was found by Jansåker *et al.* (2022), where several sociodemographic factors were associated with these Vulvovaginal Candidiasis infections. Incidence rates were particularly high in younger women, with low education and low income, as well as in those living in large cities.

It is believed that the lack of adequate guidance for microbiological confirmation in patients with suspected Vulvovaginal Candidiasis is the main cause associated with inaccurate diagnoses. Furthermore, non-adherence to routine preventive exams in health services can promote the indiscriminate use of antifungals, leading to the development of antifungal resistance. In this context, the studies conducted by Mushi *et al.* (2019) and Melo *et al.* (2021), identified low education and low income as risk factors associated with Vulvovaginal Candidiasis. Correlated to the study by García *et al.* (2023), these vulnerability factors are linked to poor hygiene conditions, making women more susceptible to infections caused by Candidiasis.

V. Conclusion

This study aimed to identify the impacts caused by vulvovaginal candidiasis on the health of women of reproductive age. The literature review revealed that this condition has a significant impact on the quality of life of young women, affecting not only their physical health, but also their psychological health. The lack of adequate diagnosis and the indiscriminate use of medications can worsen the problem, leading to resistance to antifungals.

Therefore, it is essential that healthcare professionals, including nurses, are aware of the challenges associated with vulvovaginal candidiasis and strive to promote women's health by providing guidance, accurate diagnosis and appropriate treatment. Health education, prevention and promotion of evidence-based practices are key to effectively dealing with this health problem.

In this context, this study contributes to the understanding of the impacts of vulvovaginal candidiasis on the health of young women and highlights the importance of approaching this issue in a holistic way, taking into account not only the physical aspects, but also the psychological and social aspects. The research provides support for improving the quality of nursing care in primary care and for promoting women's health.

References

- [1]. Benedict, Kaitlin Et Al. Survey Of Incidence, Lifetime Prevalence, And Treatment Of Self-Reported Vulvovaginal Candidiasis, United States, 2020. Bmc Women's Health, V. 22, N. 1, P. 147, 2022.
- [2]. Bezerra, Dallila Estefâne Rodrigues; Belém, Gizelle Guida; Gontijo, Erica Eugênio Lourenço. Candidíase Vulvovaginal Em Gestantes: Uma Revisão Integrativa Da Literatura. E-Acadêmica, V. 3, N. 2, P. E2232153-E2232153, 2022.
- [3]. Brasil. Ministério Da Saúde. Biblioteca Virtual Em Saúde- Atenção Primaria A Saúde. Quais Os Tratamentos Disponíveis Para Candidíase Vulvovaginal Recorrente? 2022.
- [4]. Brasil. Protocolo Clínico E Diretrizes Terapêuticas Para Atenção Integral As Pessoas Com Infecções Sexualmente Transmissíveis (Ist). 2020.
- [5]. Brown, Sarah E. Et Al. The Vaginal Microbiota And Behavioral Factors Associated With Genital Candida Albicans Detection In Reproductive-Age Women. Sexually Transmitted Diseases, V. 46, N. 11, P. 753-758, 2019.
- [6]. Djohan, V. Et Al. Recurrent Vulvo-Vaginal Candidiasis In Abidjan (Côte D'ivoire): Aetiology And Associated Factors. Journal De Mycologie Médicale, V. 29, N. 2, P. 127-131, 2019.
- [7]. Dovo, Essi Etonam Et Al. First Detection Of Mutated Erg11 Gene In Vulvovaginal Candida Albicans Isolates At Ouagadougou/Burkina Faso. Bmc Infectious Diseases, V. 22, N. 1, P. 678, 2022.
- [8]. Drewes, Maja; Kalder, Matthias; Kostev, Karel. Factors Associated With The Diagnosis Of Depression In Women Followed In Gynecological Practices In Germany. Journal Of Psychiatric Research, V. 141, P. 358-363, 2021.
- [9]. Ercole, Flávia Falci; Melo, Laís Samara De; Alcoforado, Carla Lúcia Goulart Constant. Revisão Integrativa Versus Revisão Sistemática. Reme: Revista Mineira De Enfermagem, V. 18, N. 1, P. 09-11, 2014.
- [10]. García, Encarnación Et Al. Epidemiological Profile Of Patients With Vulvovaginal Candidiasis From A Sexually Transmitted Infection Clinic In Southern Spain. Pathogens, V. 12, N. 6, P. 756, 2023.
- [11]. Gomes, Liliane Soares. Et Al. Identificação De Infecções Do Trato Reprodutivo Em Mulheres Atendidas Na Atenção Primária À Saúde. Revista De Aps, V. 22, N. 4, 2019.
- [12]. González, Nelvys Et Al. Factores De Riesgo Asociados A Infección Vaginal En Mujeres Embarazadas. Multimed V. 23, N. 3, P. 430-446, 2019.
- [13]. Jansåker, Filip Et Al. Novel Risk Factors Associated With Common Vaginal Infections: A Nationwide Primary Health Care Cohort Study. International Journal Of Infectious Diseases, V. 116, P. 380-386, 2022.
- [14]. Lima, Hianna Gabriella Morais Et Al. Candidíase Vulvovaginal Na Atenção Primária À Saúde: Rastreamento De Mulheres Diagnosticadas Em Municípios Na Região Central Do Estado Do Tocantins, Brasil. Research, Society And Development, V. 11, N. 9, P. E51111929505-E51111929505, 2022.
- [15]. Lopes Júnior, Luís Carlos Et Al. Dificuldades E Desafios Em Revisar Aspectos Éticos Das Pesquisas No Brasil. Revista Gaúcha De Enfermagem, V. 37, P. E54476, 2016.
- [16]. Melo, Angélica Et Al. Concordance Between Clinical And Laboratory Diagnosis Of Abnormal Vaginal Discharge In Chilean Women. Revista Brasileira De Ginecologia E Obstetricia/Rbgo-Gynecology And Obstetrics, V. 43, N. 08, P. 600-607, 2021.
- [17]. Mendes, Karina Dal Sasso; Silveira, Renata Cristina De Campos Pereira; Galvão, Cristina Maria. Revisão Integrativa: Método De Pesquisa Para A Incorporação De Evidências Na Saúde E Na Enfermagem. Texto & Contexto-Enfermagem, V. 17, P. 758-764, 2008
- [18]. Millman, Roanne Et Al. Interesse Dos Pacientes No Lowdown On Down There: Participação Em Um Workshop De Saúde Vulvovaginal E Sexual Pós-Tratamento De Câncer. Cuidados De Suporte No Câncer, V. 28, P. 3889-3896, 2020.
- [19]. Moshfeghy, Zeinab Et Al. Association Of Sexual Function And Psychological Symptoms Including Depression, Anxiety And Stress In Women With Recurrent Vulvovaginal Candidiasis. Journal Of The Turkish German Gynecological Association, V. 21, N. 2, P. 90, 2020.
- [20]. Mulinganya, Guy Et Al. Prevalence, Risk Factors And Adverse Pregnancy Outcomes Of Second Trimester Bacterial Vaginosis Among Pregnant Women In Bukavu, Democratic Republic Of The Congo. Plos One, V. 16, N. 10, P. E0257939, 2021.
- [21]. Mushi, Martha F.; Mmole, Amani; Mshana, Stephen E. Candida Vaginitis Among Symptomatic Pregnant Women Attending Antenatal Clinics In Mwanza, Tanzania. Bmc Research Notes, V. 12, N. 1, P. 1-5, 2019.
- [22]. Oliveira, Jeisiane Souza Et Al. Fatores Associados À Patógenos Vaginais Em Pacientes Do Serviço Básico De Saúde Na Região Amazônica. Research, Society And Development, V. 11, N. 6, P. E26811628669-E26811628669, 2022.
- [23]. Ortega, Nadine Micaela Et Al. Infección Vaginal Por Candida En Mujeres Que Acudieron Al Control Para Prevención Del Cáncer De Cuello Uterino, En Concepción, Paraguay, 2019.: Vaginal Infection By Candida In Women Who Attended Control For Cervical Cancer Prevention, In Concepción, Paraguay, 2019. Medicinae Signum, V. 1, N. 1, P. 37-43, 2022.
- [24]. Pinheiro, Diana Maria Alexandrino Et Al. Prevalência De Doenças Em Mulheres Do Campo Em Município Baiano. Peer Review, V. 5, N. 12, P. 119-133, 2023.
- [25]. Pinto, Gabriel Vitor Et Al. Factors Associated With Trichomonas Vaginalis Infection In Reproductive-Aged Women Attending Cervical Screening In Southeast Of Brazil. The Brazilian Journal Of Infectious Diseases, V. 27, N. 4, P. 102794, 2023.