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# How Vaginal Infections Impact Women's Everyday Life

# —Women's Lived Experiences of Bacterial Vaginosis and Recurrent Vulvovaginal Candidiasis

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#### **Abstract**

Reoccurring symptoms and persistent problems that continue post treatment can be characteristic of the vaginal infections Bacterial Vaginosis (BV) and recurrent vulvovaginal candidiasis (RVVC). The purpose of this study was to describe women's life experiences in managing the symptoms of bacterial vaginosis and Candida. Sixteen women were recruited and participated in an interview study when they contacted a Swedish gynecology clinic with vaginal complaints that ranged from and included abnormal discharge, irritation itching along with serious malodor. An interpretive phenomenological approach was used with an individual interview to get a more intimate understanding of the women experiencing these problems. The finding of this study shows that managing the recurrent symptoms of the infections remains to be a challenge for women as it has a clearly negative impact on the quality of their lives. Four themes developed: frustration and mood disorders, intimacy changes in the relationship, exposure, hope and relief. The women had high hopes of eliminating the symptoms within the six-month study period. The treatment program, with its well-developed guidelines and continuity of care within the context of the study greatly improved the quality of life of these women. Women had feelings of frustration and anxiety when nothing could cure their problem while they had also a great hope to get rid of the symptoms with a long striking treatment. Well-developed guidelines and continuity of care can help these women to have an improved quality of life.

# **Keywords**

Bacterial Vaginosis, Vulvovaginal Candida Infection, Women's Experience, Recurrent Symptoms, Qualitative Study, Interview

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## 1. Introduction

Because of the intimate nature of vaginal infections, they tend to remain a taboo subject. Vaginal infections have historically been a relatively underexplored subject and have perhaps been regarded as a relatively minor problem despite the fact that the symptoms have a negative impact on the quality of life for the women who experience these symptoms. Women who seek treatment for symptoms of Bacterial Vaginosis or Candida must seek treatment within the healthcare symptom in the face of the taboo nature or the subject. The cause of Bacterial Vaginosis is still uncertain and the recurring symptoms are a source of frustration for the women. Previous research in the field is generally from a medical perspective and there is limited qualitative research focusing on the psychological aspect of the effect it has on women who suffer from these infections. The purpose of this study was to gain a deeper understanding of what it is like to live with the symptoms of these vaginal infections.

#### 1.1. Previous Research

The frequency of bacterial vaginosis has been calculated globally as between 10 and 40 percent [1]. Bacterial vaginosis is the most common cause of vaginitis in women of reproductive age. It is a condition that occurs when the microbiological flora in the vagina is disrupted by a reduction of the lactic acid bacteria that normally dominate the environment of the vagina. Simultaneously an overabundance of anaerobe bacteria develops [2]. The underlying reason for this change of vaginal flora is not yet fully understood [3]. The most obvious main symptom of bacterial vaginosis is an extremely malodorous vaginal discharge. The odor of the discharge can be described as that of "rotten fish" [4]. A yeast infection produces symptoms in the form of genital irritation including itching, redness in the mucous membranes, changes in vaginal discharge and sometimes pain during intercourse. Fungal infection is usually caused by an overgrowth of yeast that is normally found in the vaginal flora [5].

The diagnosis of bacterial vaginosis is usually through the application of Amsel's criteria when measuring the vaginal pH levels, the assessment of the appearance of the discharge, microscopic evaluation along with a smell test made. Three of the four criteria must be met for the diagnosis of bacterial vaginosis to be confirmed [6]. Amsel's criteria [6] are not the only criteria with which to diagnose bacterial vaginosis. Nugent's criteria are based solely on the microscopic evaluation [7]. Research shows that 30 to 40 percent of women may have recurrent symptoms within 12 months of their medical treatment [4]. The underlying causes of recurring bacterial vaginosis infections are not clear and this contributes to the difficulty in preventing a reoccurrence of the infection [7].

Bradshaw [4] finds that a previous history of bacterial vaginosis, non-use of hormonal contraception, lesbian sexual relationships and women living in a permanent monogamous sexual relationship (that have NOT been treated with partner treatment for BV) have an increased frequency of recurrent bacterial vaginosis infections. According to Chen, Tian and Beigi [8], there are many theories about the cause of recurring bacterial vaginosis infections that have not been scientifically confirmed. Possible causes of reoccurring infections may include the choice of antibiotic, a sex partner who carries a

pathogen of bacterial vaginosis or if the level of the woman's lactic acid bacteria that normally dominate in the vagina is not restored completely after the infection. It is possible that a combination of these factors contribute to recurring bacterial vaginosis infections. Previous studies have demonstrated a correlation between obstetric complications such as premature rupture and preterm birth in pregnant women with bacterial vaginosis [9]. Studies also show an increased risk of infection in connection with surgical procedures in the vagina if the woman has an ongoing bacterial vaginosis infection. This is due to a significant increase in the level of bacteria in the vagina.

Normally bacterial vaginosis is treated with the active substances Metronidazole and Clindamycin [10]. Chen [8] studied the relationship between repeated bacterial vaginosis infections and subsequent fungal infections after various medical treatment options for bacterial vaginosis. In effort to find the very best treatment extended antibiotic treatment with clindamycin in combination with probiotic lactobacilli and vaginal metronidazole the cure rate could increase to 70% if the women did not change sexual partner [11]. Extended antimicrobial treatment of bacterial vaginosis combined with human lactobacilli to find the best treatment and minimize the risk of relapses.

Typical symptoms of the Candida fungal infection include vulvovaginal pruritus, irritation, soreness, dyspareunia, and vaginal discharge. Clinical signs are best exemplified by vulva erythema, edema, excoriation, and fissure formation together with introital and vaginal erythema.

The discharge tends to be lumpier in texture and white in color. Normally the odor is not offensive. Diagnosis should never be based solely on the clinical findings alone because of the lack of specific findings. Recurring Candida can have a profoundly negative effect on the quality of life of affected women because of its chronic and reoccurring nature. The recurring symptoms can lead to depression and anxiety [12].

Payne, Cromer, Stanek and Palmer [13] researched the quality of women's life who experienced recurring bacterial vaginosis infections and found that the infection adversely affected the lives of these women. The women experience shame and frustration over their recurring symptoms and feel that they are inhibited in both their private life and their work life. The foul smelling discharge causes them to feel socially isolated. The research also shows that the symptoms contribute to a sense of lower self-esteem. Bacterial vaginosis has an adverse effect on the women's sex life and it is common for them to have an evasive attitude about being intimate. Factors affecting their confidence in their sexuality were studied by Heinrichs, MacKnee, Auton-Cuff and Domene [14]. The researchers examined the factors that influence the sexual self-confidence of women involved in heterosexual relationships. They found that women's sexual confidence is enhanced or inhibited by a number of factors. A negative body image, low selfesteem or depression has a negative effect on their sexual self-confidence. The stress of experiencing the symptoms has a negative effect on sexuality and discourages the women from getting close and sexually intimate with their partners. Women with bacterial vaginosis are in a vulnerable situation and to talk about their symptoms may have the feeling that they are dealing with a taboo subject. The research showed on the other hand that factors that enhanced women's sexual self-confidence included managing a crisis together with their partners enabling them to live in loving and supportive relationships [14].

Cardinal symptoms of recurrent vulvo vaginal candida (RVVC) include vulvovaginal pruritus, irritation, soreness, dyspareunia, and vaginal discharge. Clinical signs are best exemplified by vulva erythema, edema, excoriation, and fissure formation together with introital and vaginal erythema. A non-malodorous clumpy white discharge is suggestive of VVC but is extremely nonspecific. Diagnosis should never be based on clinical findings alone given their lack of specificity. RVVC, by virtue of the frequent, numerous acute recurrences or chronicity has a profound effect on the quality of life of affected women it additional systemic symptoms including depression and anxiety [15] [16]. RCCV are defined to have more than 4 episodes of symptoms per year but most women will have symptoms of introital pain and irritations every month. Candida infection can in fact also have a malodorous discharge; however it does not smell "rotten fish" but rather old sweaty gymnastic shows [17].

Previous research has studied urinary incontinence in women of reproductive age and how their quality of life is affected by the condition. A substance is not considered acceptable to discuss openly. They find three recurring themes in the stories of the women. Incontinence is a subject that cannot grab on, it affects the woman's self-image and it affects her everyday life. For women, there are many unanswered questions about the appeal because the substance is considered socially acceptable and unthinkable to discuss with their surroundings. It is common to feel alone in their symptoms, which in turn contributes to social isolation. Incontinence on women's self-image and some women feel disgusted by their own bodies and lives with a constant fear of smelling bad. Sex life is adversely affected because during life is considered as a "dirty deal" of the woman herself. Incontinence problems connected with the loss of spontaneity and freedom; everyday must be always planned [18]. Bacterial vaginosis may affect the lives of women in a similar way as it the same way as many other types of vaginal infections are perceived as a taboo subject.

#### 1.2. Live-World-Theoretical Perspective

First, Live-world is the world that we are familiar with through our lived experiences. It is the way that an individual understands and perceives their world [19]. Live-world is how we understand ourselves, along with others, and how we experience and explain our relationship to the world. It is unique and it cannot be separated from the human experience. Live-world is defined by context and meaning [20]. According to Gadamer [21] in order to understand another's live-world experience, not your own, you must be able to follow in the other persons tracks with an open and unprejudiced mind in order to free yourself from any sort of pre-understanding [21]. The open approach requires that the caregiver strives to be clear about their own preconceptions and be able to reflect and recognize them [22]. The qualitative research interview purpose was to get a picture of the live-world of each interviewee. The interviewer does not check the facts but openly accepts the story as the interviewee has told it. In a study of a human's live-world the interview is the basic interpretation of the phenomena that the interviewee has experienced [23].

Healthcare science wants to understand caring for the diseased and the healthy from a patient perspective. In the past, the healthcare science perspective has been seen as opposite pole to the medical perspective. This is something that has gradually changed in recent times. The two fields or sciences have more to gain through interaction and by complementing each other. In order to more effectively manage the consequences of ill health or disease it helps both the patient and her intimate circle to have both perspectives. When an individual is suffering through an illness, it is something that affects their whole person, their whole identity, their everyday life and their prospects for the future. Therefore it is important that their situation is interpreted from a holistic perspective [20].

Vaginal infections such as bacterial vaginosis and Candida are of a very personal and intimate nature as they effect a woman at the core of her femaleness. Previous research on the topic is often based solely from a medical perspective, a perspective that has traditionally been the dominating perspective in the health care profession. As a consequence there is limited research that has studied vaginal infections from the perspective of a woman's live-world interpretation. Women who are living with the specter of recurrent symptoms from infections of this nature need specific understanding of their feelings and the need for sensitive support and care.

#### 2. Aim

The purpose of this study was to intimately describe women's experience of suffering the symptoms of bacterial vaginosis (BV) and recurrent vulvovaginal candidiasis (RCCV) and to investigate if there are a difference in between BV and RCCV.

#### 3. Method

The method used in this study was interpretive phenomenology [24], which has its basis in live-world theory [22]. This method was chosen to give the women the opportunity to openly discuss and describe in their own words their experiences of living with vaginal infections in order to gain a deeper understanding of the phenomenon. According to Kvale [25] by using the phenomenological method we get to the essence of people's lived experiences by getting them more in touch with their experiences through the process of formulating their experience into words. This leads to an expanding awareness by listening to the voice of the live-world and in the process... enhancing [22].

According to phenomenology, the live-world is the subjective world of the individual that is highly intimate and personal in nature, through which a human being understands himself, understands others and how one understands experiencing the world [19] [20]. Heidegger [23] (1962) sees mankind as a being who can choose but the choice is integrated and influenced by being in the world. Experience cannot be separated from being in the world. The interpretive phenomenology provides an understanding of the phenomenon within its individual context and perspective. The method is most useful when the purpose of the study is to interpret contextualizing human experience. These interpretations are a mixture of meanings and understanding that have been articulated by the researcher and the participant in the study [23].

In this work, the live-world was selected as the basis which means to analyze and describe the world as it is experienced by a person. According to Dahlberg and Segersten

[20] health and disease are live-world experiences. Knowledgeable caregivers focus on the patient's world and try to determine how health and illness is actually experienced by the individual and how it affects the individual. Through this process caregivers are enabled to support and strengthen the individual's health. Both health science and caregivers in practice require a solid theoretical foundation in order to encourage and enhance the individual their health processing. A caregiver who is unable to engage in the live-world experiences of others is not equipped to provide genuine and comprehensive caring. To value the live-world as the basis of care giving includes analyzing health and disease as it is experienced by a human being. To use the live-world as the foundation encourages an openness and understanding to human beings and how they understand and manage their disease. It is important to point out that the patient is more than just their illness and that the patient's health and disease extends beyond the health department's boundaries [20].

An interview with open-ended questions was chosen for a deeper understanding of the interviewees lived experience of the designated phenomenon [25]. Interpretive phenomenology does not translate the experience by itself. It is the text of the transcribed interview that is structurally analyzed for context and meaning that enables the researcher to interpret the live-world experience of the interviewee. Listening to the interview express themselves also is part of the process of understanding the experience [26].

#### 3.1. Selection

This research study was conducted at a gynecology clinic in western Sweden for women who were experiencing vaginal infections such as bacterial vaginosis or chronic vulvo-vaginal candidiasis. The women were included in a treatment study which included a long time treatment with probiotic treatment of lactobacilli for six month combined with antibiotic if BV and antifungal medication if RCCV. This study has been published [27]. There were nine of participants with RCCV who get treatment with fluconazole and lactobacilli and ten women who only get fluconazole without lactobacilli.

The study participants were undergoing treatment for the infections they were offered the possibility to participate in an interview that would become a part of this research study in order to develop a deeper and better understanding of what it is like to live with vaginal infections.

The study participants in the study were asked by the staff at the clinic if they were interested in participating in an interview. The interviewees received written information about the purpose of the study, that it was voluntary, and were informed consent and confidential nature of the study. The women were informed about the how the study was to be conducted and they were informed of possible advantages and disadvantages of participating.

There were specific instructions provided to the staff at the clinic with regards to inclusion and exclusion criteria for participation in the study. Inclusion criteria included women that were experiencing foul smelling vaginal discharge, irritation or itching of the vagina. Normal menstruation was criteria for inclusion as well. Exclusion criteria included women that were planning a pregnancy or women that had been treated for

bacterial vaginosis in recent weeks. The participants were examined by a gynecologist and received a long term medical treatment. These women were instructed on how to self-take vaginal samples for cultures every month for six months.

# 3.2. Participants

All of the women interviewed had symptoms that were interpreted as Bacterial Vaginosis at inclusion of staff in telephone counseling during gynecological clinic in accordance with the instructions of the study as described above. Participants in the study were between 18 - 44 years. All women except one were living in stable relationships (see Table 1).

**Table 1.** Information about the informants.

Interview number	The informant's perception of their trouble diagnosis according to patient	Diagnosis according to patient journal	Months of trouble	Age Years	Para	Other dieses	Solid relationship	Contraceptive	Outcome i Months/	Outome one year	Interview Length
1	Bacterial Vaginosis	Bacterial Vaginosis	24	41	2	Crohn, CIN	No	non	Relapse	;	40 min
2	Bacterial Vaginosis	Bacterial Vaginosis	24	43	3	-	Yes	non	Cleared	Cleared	35 min
3	Yeast Infection	Bacterial Vaginosis	12	19	0	-	Yes	Pill	Cleared	Cleared	39 min
4	Bacterial Vaginosis	Yeast Infection	60	22	0	-	Yes	Pill	Cleared	Cleared	24 min
5	Bacterial Vaginosis	Yeast Infection	>10 year	39	2	Chron	Yes	Non	Cleared	Relapse	25 min
6	Yeast Infection and Bacterial Vaginosis	Yeast Infection and Bacterial Vaginosis	24	36	2	High risk HPV	No	Non	-	Cleared	36 min
7	Yeast Infection	Yeast Infection	24	36	3	Thyrodea	Yes	IUD, Cu	Cleared	Relapse	27 min
8	Bacterial Vaginosis	Bacterial Vaginosis	24	22	0	-	No	Pill	Relapse	-	30 min
11	Yeast Infection	Yeast Infection	12	41	2	-	Yes	Mirena	Cleared	Cleared	45 min
12	Bacterial Vaginosis	Yeast Infection	12	24	2	Salpingit	Yes	Pill			40 min
14	Bacterial Vaginosis	Bacterial Vaginosis	12	43	2	Early BV	Yes/no	Non	Cleared	Cleared	20 min
15	Bacterial Vaginosis	Bacterial Vaginosis	1	20	0	Op hymen	Yes	Non	Cleared	Cleared	47 min
16	Yeast Infection	Yeast Infection	24	25	1	Early Yeast Infection	Yes	Non	Cleared	Claered	32 min
17	Yeast Infection	Bacterial Vaginosis	24	26	2	Tidigare BV	Non	Non	Relapse	-	38 min
18	Bacterial Vaginosis	Bacterial Vaginosis	24	33	2	TVT	Yes	Mirena	Cleared	Cleared	42 min
20	Bacterial Vaginosis	Bacterial Vaginosis	12	36	3	-	Yes	Mirena	Cleraed	Cleared	60 min

All of the sixteen women who participated in the study had symptoms that were indicative of bacterial vaginosis as they were related to staff through telephone counseling originally. After the microbiological examination revealed that seven of the women were diagnosed with BV, seven of the women were diagnosed with fungal infection and four women had been diagnosed with both BV and yeast infection (see **Table 1**).

#### 3.3. Data Collection

Sixteen women ended up participating in an interview study of a total of twenty women that were asked to participate. These sixteen participants were interviewed and the interviews lasted between 24 and 60 minutes. The interview setting was either at the gynecology clinic, at the women's home or at the university according to the woman's preference. Three open ended questions were asked to make up the interview. The questions were as follows: Can you describe for me how you have experienced the symptoms of your infection? How has the condition affected your everyday quality of life? How has it been since you were diagnosed with the bacterial vaginosis or yeast infection (Candida)?

The structure of the interview allowed the women to speak freely about their experience with the infection and after they had spoken the interviewer posed the three questions to them [25]. The structure allowed the women to "warm up" by speaking freely before the interviewer asked for specifics. According to Dahlberg *et al.* [22] there are different ways to deepen and to broaden an interview which can include asking the interviewee to connect to a particular circumstance to the general overall experience.

#### 3.4. Data Analyze

After getting the women to consent to tape recorded interview, which incidentally was recorded with a smartphone application and downloaded on to a computer. In this manner only the researcher who worked on the study had access to the material interviews which thereby further insured confidentiality. Then all of the interviews were transcribed verbatim to paper. Transcriptions were made of each interview in order to obtain a comprehensive overall picture of each of the individual interviews. The interviewers listened to the recorded interviews and read through transcripts very carefully and meticulously several times for a precise and accurate overall view [25]. An intuitive reading of each transcript was made and the interviewers wrote down a condensed version of the intuitive reading of the transcript which averaged in the neighborhood of five to ten lines. The intuitive reading and subsequent condensing has the effect of creating a macro view of the interview.

The next step was to extract each and every one of the meaning bearing units from the transcript of the interview in its entirety to best describe the woman's experience of the phenomena. An interpretation was done of each of the meaning bearing units that were each individually categorized. A single meaning bearing unit may be a category in itself or several meaning bearing units may be interpreted as to belonging to a single category. The method of using interpretive phenomenology in research requires that the researcher begin with their own preunderstanding. Then by working with the interviewee and their interpretation, objectivity, consistency and accuracy are more realisti-

cally achieved. Through this process of collaboration between the researcher and the participant the goal of a more comprehensive understanding of the participant's live-world experience is possible. The interpretation is to clarify and shed light on what is incomplete, confused or hidden [28].

The categories were divided into subthemes before taking the final step of the research process which is to develop the essence. In a qualitative study arriving at the essence is the objective of the study. The essence is the core of the material from the interviews of the sixteen participants regarding their experience of the phenomena of having symptoms of bacterial vaginosis and Candida (yeast infection).

The goal of interpretive phenomenology is to gain a deeper understanding of the phenomenon of the individual [23] [24]. To fully understand an individual's behavior or their explanations of what has happened to them, careful consideration must be paid to the context in their world [26].

It is not the scientist who gives the phenomenon its essence. Essence is not the result of interpretation. The essence is what the participant intended to say and you find this by reading between the lines through using the interpretive phenomenology method [29]. In order to capture the essence of the woman's live-world experience the authors constantly oscillated with each other between the transcripts, the meaning bearing units and the interpretations, the categories and subsequent subthemes. According to [25], they liken the process to an analysis that goes back and forth between the parts and the whole **Table 2**. This work is part of a research project that has been authorized by the Regional Ethical Review Board in Gothenburg Dnr. 443-06.

#### 4. Results

Essence-Managing relapses of vaginal infections and the effect it has on a woman's life.

#### 1) Bacterial Vaginosis

Women who experience bacterial vaginosis may suffer for long periods of time with the condition. They can never seem to feel healthy and may not be receiving the proper diagnosis.

"I can't do it today. I cannot go for a walk...I cannot go to the gym. It hurts too much! There is a lot of irritation and itching in my crotch. But it isn't just the itching...it's that everything is dependent upon the condition. My day depends upon how it feels...the week can be disrupted because of the irritation. In fact...my whole life is dependent upon the condition and my life is in fact disrupted because of it." Interview#3.

Table 2. Description of meaning bearing units, interpretation of sentence, Category, Subteam and Essence from the data analyze of the transcribed interviews.

Meaning-Bearing unit	Interpretation of meaning-bearing unit	Category	Sub-theme	Essence	
Thank God what a relief when you have gone through a treatment. Finally it's over!	Positive expectations for each treatment	Positive expectation	Positive expectations bring hope and relief	Managing	
As soon as I feel the symptoms I draw away	Isolate themselves from their partner when symptoms felt	Negative impact on intimacy	Intimacy changes	relapses of vaginal infections and the effect it has	
For sure it affects the sex life, when it is at its worst I do not want to be close to anyone	The symptoms are sometimes so obvious that the woman refrains from any intimacy	Negative impact on intimacy	Intimacy changes	on a woman's life	

It was a big step in the right direction to get the women in the study the appropriate information regarding their bacterial vaginosis condition. It was a relief to know what exactly was causing their discomfort and a relief to know that it wasn't something more serious. The condition isn't effecting their overall health but they could never feel fresh and clean, which makes it terribly uncomfortable to be intimate or even to be physically close to their partners. They always felt the irritating itching and burning sensation, which is bad enough, but it is the fear of smelling foul which is truly devastating. It feels personally disgusting.

"If s terrible to smell bad. I couldn't get any help. I have children and I don't want to have any more but I have taken out my intrauterine device because I thought that it might be the source of my problem. I have smelled this after sex for the last 15 or 20 years. Now I have a fungus infection and bacterial vaginosis...if feels as if I have a ring of pain at the opening of the vagina but not inside. Interview #15.

When the women first notice the foul smell and the irritation they don't know what it is at first.

"I didn't know what it was at first so I just went around with it. It was the odor that motivated me to seek treatment. It was a horrible experience to feel so icky and to smell this disgusting odor. It forced me to avoid being around others because I was afraid that the people around me could smell it. So I find myself running to the bathroom all of the time to change my liner or pad...even using tampons in the hope that it wouldn't smell. The treatment that I got in the beginning didn't last. The symptoms would reoccur after menstruation." Interview #17.

# 2) Yeast Infection—Candida

Getting through to the specialist and going through all of the hassle to get answers to their uncomfortable questions comes as a relief to the women. Even to be able to call if the symptoms come back is a positive respite. It itches all of the time even after trying everything and it seems as if nothing helps. Women often bite the bullet and do not share their issue with others while they refrain from socializing with others.

"I take the children to swimming twice a week even though it will irritate my condition. It doesn't seem right to talk about a vaginal infection with friends...it's just not acceptable. I try to live a normal life with the itching and irritation." Interview #7.

"Besides the constant itching and irritation...it just makes it so damn difficult because it is in my head all of the time. It is constant without let up. It has a strong influence on how I feel all of the time." Interview #9.

"This all started back in 2007 for the first time and it was so uncomfortable with the itching and the burning sensation. There was a thick mucus discharge at the time for which I tried to treat myself with something that I got from the pharmacy. It would come back month after month between the time of ovulation and menstruation. Interview #13.

# 4.1. Frustration-Mood Disorders

# 1) Bacterial Vaginosis

Women generally talk with their friends who have problems with a foul smelling vaginal discharge. The symptoms of bacterial vaginosis were discovered in connection

with the monitoring and treatment of cell changes in the vaginal environment. Women had experimented with a number of self-medicating treatments before getting the proper treatment in connection with the study.

The discharge that comes in association with bacterial vaginosis has an effect on the activities that the women can participate in. It is not advisable to be in a hot tub as this can make the condition worse and it is also likely that the condition can be spread to others. Even riding a bicycle or traveling in a car can be uncomfortable. The women have to choose the clothes that they wear accordingly. It is best to wear clothes that encourage ventilation. Clothes that are too tight or restricting ventilation can make the condition more uncomfortable.

"The condition can make limitations in the clothes that I feel that I can wear. It feels bad in general, sometimes it's better but I never feel truly healthy and clean. I can get sad and depressed every day. It can make me feel guilty to the point where I am asking myself what is wrong with me. I don't feel like talking and I find myself keeping to myself...closing myself off. I withdraw from the pain. Interview#3.

The discharge that is associated with the bacterial vaginosis gives the women a dispiriting feeling. This is a disease but it isn't a serious disease. It's uncomfortable, it's personally disgusting and it's really tough to feel that one is fresh and clean. At work it can feel that you are sweating, even smelling bad and feeling unclean.

"I think that I smell bad today and I am constantly going to the toilet to check on myself. My worrying is actually a bigger concern to me than the actual smell. The first time I thought that I had a sexually transmitted disease (STD)...but I have been together with the same man for twenty years. I got treatment at the health center." Interview #1.

Women end up seeking treatment for the foul smelling, strange colored discharge which can occur several times within a two to three year period. It is fairly common that women with bacterial vaginosis are being treated for misdiagnoses such as in between menstruation bleeding and menstrual pain. All women have discharge but this is different and it can cause pain in the ovaries.

It feels hopeless. I don't want to be seen in a bikini when there is this discharge. The midwives working at the youth clinic gave standard advice for fungal infections and they advised birth control pills to regulate heavy bleeding." Interview #8.

"You can have a discharge and spotting between periods. I thought that sperm during intercourse was giving me fungal infections, but I got a bacterial vaginosis diagnosis. We used condoms sometimes and also I had to have an abortion. I thought the problem may have been that I ate too much chocolate. I got advice to wear light clothing when it itches and stings. I had never used soap to wash myself down there and my mother also had many fungal infections." Interview #14.

"The smell is really bad. Really bad. It's as embarrassing as it is disgusting. Like shit. It is that bad. It happens especially after menstruating. Even during pregnancy. My partner is affected by the smell even before I am aware of it. At the age of 13 my hymen was surgically opened and menstrual blood came out with significant discharge. This was considered normal. I was changing my liner a lot...every two hours and even using paper with the liner for extra security. Interview #17.

Women are often leery of fungal infections which occur rather frequently and they get penicillin and antibiotics for treatment. Many times when a woman receives a diagnosis of bacterial vaginosis it is the first time that they have heard of it. Therefore they are motivated to get more information and they investigate on the internet. They find out that the condition is not so unusual which helps them to realize that it isn't something that is their fault. This helps them to somewhat manage the condition.

#### 2) Yeast Infection—Candida

When a woman is treated for a yeast infection such as Candida she has built up a lot of hope that the treatment is going to return her to normal. She may be a little unsure of herself going into the treatment. Candida causes a woman to have a discharge and it also causes itching and burning of the genitals. The results of these symptoms have a terrible effect on that woman's self-esteem as she feels that she is undesirable as a woman. This can be a very sensitive and private matter and it is helpful if the woman has someone that they can confidentially confide in such as their mother, mother-in-law or even friends.

After a woman gives birth and with the returning menstrual cycle, fungus infections can recur on a monthly basis. Many women try to self-medicate with different remedies such Pevaryl, sour milk, cooking oil and potato flour. The self-remedies do not work on their own. This study has shown that relief from Candida symptoms can be had with a combination of a prescription of fluconazole and the appropriately prescribed medicinal vaginal inserts.

Fungal infections can have a pronounced effect on a woman's mood or her general feeling about herself. She can feel irritable and have a feeling of general malcontent. If she has been unsuccessful with the self-remedies and if the prescribed treatment of fluconazole and inserts does not give her relief she may start to find herself feeling somewhat hopeless.

"It doesn't really matter what I do. Nothing seems to work so why should I even get dressed to go anywhere? I don't feel like it. It's just to bite the bullet. If you haven't had a yeast infection...you don't know what you are missing." Interview #9.

When a woman is treated for a yeast infection such as Candida she has built up a lot of hope that the treatment is going to return her to normal. She may be a little unsure of herself going into the treatment. Candida causes a woman to have a discharge and it also causes itching and burning of the genitals. The results of these symptoms have a terrible effect on that woman's self-esteem as she feels that she is undesirable as a woman. This can be a very sensitive and private matter and it is helpful if the woman has someone that they can confidentially confide in such as their mother, mother-in-law or even friends.

"The meds can give temporary relief but the symptoms return. Sometimes I wonder if there is any connection with stress. I don't feel comfortable...I don't want to exercise. It might irritate the condition. I can just sit home in sweatpants. The symptoms always come back." Interview #13.

#### 4.2. Intimacy Change

#### 1) Bacterial Vaginosis

The condition bacterial vaginosis has a rather direct effect upon the sex life of a couple.

"Even after six months of abstinence my husband is still understanding but how can you take care of each other if you cannot have sex?" Interview #3.

The understanding husband tries to find a level of intimacy that will work within the framework of her level of genital discomfort at a particular moment. The woman is feeling quite understandably a lack of "freshness" in her intimate zones and she isn't motivated to have close encounters.

"If you are single this bacterial vaginosis has a big influence on your life. I don't feel so comfortable but I want to have a life and I don't want to not have a sex-life even if it isn't totally perfect. It can be painful and swollen down there. It can smell. There isn't a real pattern." Interview #8.

The discomfort of bacterial vaginosis can sometimes be managed by changing positions to find a position where the woman is more comfortable in her role as a sex partner.

"It isn't easy to relax on demand. This was the case with me...it was troubling to find a comfortable position. For me there was less pain and discomfort when I was on top of him and I could control the movement and the pressure. But when he was on me, I was in pain all of the time. By being in control and on top I could make the decisions. It is sort of psychological." Interview #20.

Bacterial vaginosis can have a pronounced effect on the intimate lives of both partners... the woman and her mate. It can make both partners feels extremely self-conscious to the point where there are extreme demands on the tolerances of both in their intimate world. Such stress on the intimate bonds of a relationship can be enough to separate a couple when they cannot find a solution to the problem of getting close and intimate with each other.

#### 2) Yeast Infection—Candida

From the interviews, four different women discuss that there are difficulties in intimate relations when it is associated with their problems with the Candida yeast infection.

"The sex-life doesn't work." Interview#6.

"I had to withdraw from intimate encounters because the fungal infection came like a letter in the mail the very next day after intercourse." Interview #7.

"A very active sex-life with the same partner seems to increase my yeast infections." Interview #9.

"My partner understands when I have 'my problem' and he respects it...even if he doesn't completely understand it." Interview #13.

It requires a lot of communication and trust to discuss a problem of such an intimate nature. Women are understandably self-conscious about the intimate zones of their bodies and it takes a lot of understanding, sensitivity and empathy on the part of the man to be able to manage a sexual relationship. It takes some work to overcome the symptoms of the yeast infection to maintain any kind of higher level of intimacy in a relationship. If both partners are not committed to the work then it is entirely possible

that they will quit in their efforts with the results being detrimental to the whole of their union.

# 4.3. Hope and Relief

#### 1) Bacterial Vaginosis

The treatment of BV started first with clindamycin vaginal cream for seven days and at the same time oral treatment with clindamycin 300 mg BID for seven days and the same treatment for the partner. After clindamycin lactobacilli capsules (EcoVag®) was given for 10 days. After the next menstruation treatment with metronidazole vaginal cream for five days followed by 10 days of lactobacilli. Lactobacilli was then given once every week for the next four month. The whole treatment regimen did last for six month interim treatment is a six month. The interim treatment program gives the patient relief from her symptoms and gives her room to breathe and to feel good about the prospects for the future. It gives her hope. Hopefully the symptoms will never return. Virtually all of the women that participated in the study left with these high hopes for the future. After six months all of the women were free from relapse of the infection.

"It helped me to have a positive attitude to take part in the study and use the vaginal inserts. It gave me hope for the future. The study gave me the feeling that a cure is possible and I can be free of the foul smelling discharge." Interview #3.

"This has been a chronic disease and a miserable situation for me. The study has given me a lot of hope instead of the dreadful feeling that I have lived with. I really hope that the stink is a thing of the past with the treatment." Interview #1.

"From what I know there hasn't been a participant in the study that didn't become healthy. This is a good reason to feel positive about my results." Interview #8.

"It felt as if they took responsibility for everything...from the treatment to the follow-up care. It was easy to get a hold of the doctor and the nurse who were in charge of the study. I was even able to get a quick answer to a question with an instant message. It was a difficult period up to entering in the study...I needed some really solid support." Interview #20.

During the study the women were able to take monthly samples themselves and send them to the healthcare center for quick evaluation. This had a very positive effect on the women's morale when they were able to get quick efficient results.

#### 2) Yeast Infection—Candida

The women in the study believed that it was very productive to be in consultation with professional healthcare workers who had knowledge and expertise in the area where they were suffering. All of the women appeared to get relief but there were occurrences of relapses and were cured from their condition. Getting relief from their symptoms had a very pronounced and positive effect on their lives and their hopes for the future.

"I felt that the response from the healthcare center and the gynecology clinic was really good. I was so glad to get immediate and professional consultation with my issues. It was good to be able to talk to my mother and my partner while at the same time

consulting with the professionals in the clinic. It gave me hope to get this level of support." Interview #7.

"I was in contact with the specialist in the study for a year and received a long term treatment with fluconazole for six months. I didn't have any relapses in this time. I did have some problems related to intercourse when there was sperm involved...but I still have not given up on intercourse. Instead of trying to self-medicate it is much more productive to get an appointment with the doctor. I am wondering if I am cured for life or if I will need long term treatment." Interview #9.

"There wasn't any Candida during pregnancy or during the breastfeeding. The six month treatment came with follow up self-testing. It was a blessing to come to a specialist clinic to be treated where they actually knew what they were talking about. It felt really good and it was a relief...believe me." Interview #13.

#### 5. Discussion

The aim of this research was to describe the experience of women who had symptoms of bacterial vaginosis or the candida infection. The qualitative approach with open interviews gave the participants in a treatment program to share their live-world experience with the authors. During the treatment program there were instances of relapse of both the bacterial vaginosis and the candida infection and this became a part of their live-world experience as to how they managed their relapse. Women who experience bacterial vaginosis or the candida infection can suffer for long periods of time with the condition. They never seem to feel completely healthy and it is possible that they are not receiving the proper diagnosis. Getting in direct contact with the specialist and having the possibility of bypassing administrative red tape to get the proper answers to their uncomfortable questions regarding such a personal condition as bacterial vaginosis and the yeast infection candida comes as a big relief to the women in the study. Having the possibility to be get back in contact with the program if the symptoms come back is a another source of comfort to the women. The intimate nature of the condition can cause women to sit back and bite the bullet while isolating themselves instead of sharing their private issues and seeking the proper treatment.

The women felt particularly vulnerable regarding their conditions in large part because of the bad odor that they carried around with them as a result of their infections. They could feel themselves closing off to social situations that involved being in close proximity to others. The odor made them very self-conscious at work, in social situations and in their intimate lives. This of course has a big impact on job performance, job attendance and gratification in their social lives. Previous research confirms this isolating phenomenon in women that suffer from symptoms of bacterial infection [13].

The frustration that the women experienced was multi-dimensional in the sense that it was due to both physical and mental or emotional influences [29]. The physical symptoms were self-evident but it was the mental and emotional anguish that made it very difficult for the women to cope with their symptoms. Their symptoms and the resulting suffering made them feel inadequate as women and contributed to a general overall sense of poor self-esteem [13].

In many respects it is the discharge that is associated with both bacterial vaginosis

and the yeast infection candida that really give the women that sinking feeling. In the case of the bacterial vaginosis it is the bad odor that is the main source of their uncomfortable lack of clean hygiene feeling and it is the itchy nature of the discharge as it is related to the candida yeast infection. Even though the results show that this is a disease, it is not considered a serious or a serious disease. The infections are very uncomfortable, personally disgusting and it makes it really difficult for the woman to feel fresh, clean and hygienically healthy [30].

The intimate nature of the infections can have a very negative effect on the sex life of the woman suffering from the symptoms Bilardi *et al.* [29] [31] (2013, 2016). It was a source of great strength and support if their partners were supportive and understanding. Living in a supportive and loving relationship can promote sexual self-confidence [14]. Sometimes the intimate nature of a disease can make it a difficult subject to deal with in the context of their relationship. The nature of the infection can make it an extremely sensitive subject of an almost taboo nature, which of course discourages intimate relations. Women need understanding and support from their partners to encourage them to manage their symptoms in intimate exchanges [18].

Complicating the nature of these infections of the women's feminine parts is that there can be some confusion in the healthcare system when the women initially contact the system for treatment. Sometimes because of the similarity of the symptoms of bacterial vaginosis are confused with those of candida and treated accordingly. To differentiate between the two it is necessary to examine the discharge culture with a microscopic examination [32].

Clinical management of bacterial vaginosis could be improved through the use of standardized diagnostic approaches, increased sensitivity and better understanding of the impact of bacterial vaginosis on women's lives [31].

# 6. Conclusion and Practical Use

In order for medical professionals to be able to respond to women who are suffering and experiencing symptoms of vaginal infections in an efficient and understanding manner as possible, it requires that the staff has a comprehensive understanding and sufficient knowledge to be competent for their situation. The staff needs to learn to differentiate between the symptoms and treatment of bacterial vaginosis and candida because the treatment and the advice are different in both cases. Well-developed guidelines within the system may help women with these disorders have a better quality of life if they can manage their symptoms better. Any lack of communication or lack of consistency in their care leads to the women feeling vulnerable and perhaps with the perception that they are not being taken seriously.

Several women in the study felt that they needed professional support with regards to their emotional issues and their sexual dysfunction so they sought additional psychological or sexologist consultation. This is probably a good idea if there are issues surrounding the women with regard to their symptoms that they are having a difficult time resolving. The more awareness that there is within the healthcare system, the better able the system is as a whole to help women with their emotional issues.

#### **Bacterial** vaginosis

- The symptoms is coming and going
- · Long time to search
- · Usually after menstrual period
- Sexual intercourse makes it worse

#### Candida

- Each menstruation cycle
- Usually after ovulation
- · Which gives symptoms before the period
- The day after sexual intercourse the woman felt the pain and irritation worse

#### 7. Continued Research

It may be seen as important and constructive to conduct an interview study with the women's partners of this study. The perspective of the partner is a very important variable in the management of the women's symptoms. By understanding the partner's perspective we get insight as to how to better and more effectively support women who are experiencing these types of infections. Because of the intimate nature of the conditions the partner becomes an integral part of the solution.

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