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Review Article

Sexual Dysfunction in Inflammatory Bowel Disease: A Nursing Approach

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ABSTRACT

Background: Inflammatory bowel disease (IBD) occurs frequently in industrially developed societies, and studies have shown that the highest reported prevalence was in Europe and North America. Sexual Dysfunction (SD) seems that could affect patients with IBD and this is a finding that is widely studied with the use of standardized tools. The aim of the present study is to approach the sexual dysfunction issue in patients with IBD through the most recent biographic data, focusing on the nurses' role, which can significantly contribute to the improvement of the care provided to those patients.
Findings: According to the definition of the World Health Organization, sexual health is a state of physical, emotional, mental, and social well-being in relation to sexuality, and it is not merely the absence of disease, dysfunction, or infirmity. Sexual health is a basic determinant for the health quality of a person and is correlated with the subjective perception that an individual has, into the context of their values, culture, educational level, and the role models in their life. Patients with IBD are highly concerned for their sexual life as a result of the negative self-image, whereas, the difference of SD before and after the surgery is quite significant, with a clear burden after the surgery, regardless if the operation included an ileostomy or not. The investigation of SD is a difficult procedure for the health care workers but it can take place via a patient's holistic management. In order for a patient to express a dysfunction it is of paramount importance that feelings of confidence in doctors, nurses and the rest of the team be strengthened.

Key Words: Sexual Dysfunction, Inflammatory Bowel Disease, Patients, Crohn's Disease, Ulcerative Colitis.

INTRODUCTION

Inflammatory bowel disease (IBD) is a medical condition which usually denotes disorders including chronic inflammations of the digestive system, of unknown etiology and pathogenesis, with main manifestations from the gastrointestinal tract, whereas the disease can be attributed both to hereditary and environmental factors. The clinicopathologic spectrum of IBD, is covered by Ulcerative Colitis (UC), Crohn's Disease (CD) and Indeterminate Colitis (IC) and differs from the Irritable Bowel Syndrome. [1]

IBD occurs frequently in industrially developed societies since the end of the 20th

century, mainly in northern Europe, North America and Australia, whereas, the disease's incidence shows also an increase in other countries that have recently become industrialized. In the Mediterranean countries, UC is estimated to affect 5/100.000 inhabitants of urban areas. [2-4]

From a recent systematic review it was shown that the highest reported prevalence values were in Europe and North America. The prevalence of IBD exceeded 0·3% in North America, Oceania, and many countries in Europe. Since 1990, the incidence has been rising in newly industrialized countries in Africa, Asia, South America and Taiwan. [5]

It seems that almost 25% of patients diagnosed with IBD, were patients of very young ages, 15-35 years old, whereas the incidence of the disease also shows an increasing rate in adolescents life. [6,7] In Europe, the annual incidence of IBD was 24.3 per 100,000 person-years for UC, and 12.7 per 100,000 person-years for CD, whereas lower incidence for the UC, and much higher for the CD, were found in North America. Furthermore, the increasing rates of IBD have been recorded in several countries and it seems that this trend will be continued in the years to follow. [8-10]

According to the definition of the World Health Organization, sexual health is a state of physical, emotional, mental, and social well-being in relation to sexuality, and it is not merely the absence of disease, dysfunction, or infirmity. Sexual health is a basic determinant for the health quality of a person and is correlated with the subjective perception that an individual has, into the context of their values, culture, educational level, and the role models in their life. [11]

Causes that can lead to SD, Erectile Dysfunction, or can burden the sexual function and fertility, are endocrinologic and metabolic diseases, as Diabetes Mellitus, Several Neurologic conditions, as Alzheimer's Disease, Parkinson's Disease, Brain or Spinal Tumors, Multiple Sclerosis, Stroke and Temporal Lobe Epilepsy. Patients who are taking certain medications (e.g. alpha-adrenergic blockers, including tamsulosin (Flomax) beta-blockers, cancer chemotherapy medications, central nervous system depressants, codeine or amphetamines, diuretics, and synthetic hormones) may have affected blood flow which can lead to Erectile Dysfunction. Additionally, cardiovascular diseases, atherosclerosis, high cholesterol and high blood pressure, but also, depression, anxiety, smoking and alcohol abuse are associated with increased risk for impotence. [12,13]

The chronicity of IBD and the continuous difficult periods of its relapses are an exhausting condition for the patient with a significant impact on his quality of life. The IBD, apart from the symptoms from the digestive system, as pain, diarrhea, and weariness, can cause complications as obstructions, fistulas, abscess, toxic mega colon, increased risk of cancer, etc. [14] Given the disease's onset, in young ages, it seems only rational that the international data for the effects of IBD include multiple extra-intestinal symptoms, both on biomedical and psychological level. As a result of the above comes also the SD, which seems to affect patients with IBD, and this is a finding that has begun to be widely studied with the use of standardized tools. [15]

The aim of the present study is to approach the SD issue, in patients with IBD, through the newest literature findings, focusing on the nurses' role, which can significantly contribute to the improvement of the care provided to those patients.

The effect of IBD on patients' sexual life

Studies regarding the impact of IBD to the patient's life, don't focus only on the bodily symptoms, but also investigate the physiological and social consequences that affect their quality of life. As far as the evaluation of the impact of IBD to the SD is concerned, it seems that have not existed several studies, although this tends to change during the latest years. Sexual health is a determinant which defines the

qualitative characteristics of an individual's life and regardless whether this component is a priority for someone's life or not, the depiction of this parameter, can give significant information about a person's quality of life.

The appearance of physiological disorders is usually a natural consequence of IBD, given that epidemiological studies have shown that a high percentage of patients with IBD will develop depression sometime later in their lifetime. The evaluation and management of an important depressive disorder should be a part of the clinical approach for these patients, which apart from the high depression rates, also show significant SD rates as well. [16]

Studies have also found that the male patients more often display higher rates of a psycho-emotional burden compared with female patients, whereas the higher rates of SD have been recorded in patients with CD, compared to patients with UC (Cho et al, 2011). Furthermore, the activation of the symptoms unlike their remission is responsible for further burden on both the psychological condition and the sexual life of these patients. [17,18]

Besides the psychological-emotional effect of SD, the pharmaceutical regime on its own can have a significant influence. Methotrexate, azathioprine, infliximab, adalimumab and prednisone, are drugs that can contribute to erectile dysfunction, while sulfasalazine is more rarely considered responsible for this dysfunction. [19]

The causes that cause SD can differ between men and women. More specifically, men consider that depression is an important cause of SD, since the feelings of attractiveness and masculinity, especially when an active disease already exists, seem to contribute to the sexual dysfunction's burden.

Diabetes Mellitus is a significantly related disease which can affect the erectile function in men with IBD disease. Men seem to consider the existence of SD as a significant problem more than women, which, in their turn, identify other problems such as lubrication problems, dyspareunia and vaginal infections. [16]

The systematic literature review on the sexual dysfunction in patients with IBD, showed that women report more frequently problems in their sexual life, while stress, symptoms and comorbidity, as well as the patient's age, form a vicious circle that makes their condition even more complicated. [20] The frequency of sexual contacts, also, seems to be mostly influenced in male patients compared to female, a fact that can be explained from the erectile (dys) function which is an obvious problem to them; furthermore smoking can be an additional factor of decreased erectile function as well. [21]

The condition that can emerge after a surgical operation, and especially after a stomy, is a complicated and time-consuming procedure, in which patient should get adapted to. This adaptation includes physical disorders, as physical fatigue, nutritional changes, skin alterations in the stomy site, leakage from the stomy, the presence of odour etc., which can disrupt the psychological and social function of the individual. Studies have shown that the persons that had undergone colectomy, carry negative emotions as depression, loneliness, low self-esteem, insecurity, which are connected with their quality of life (Papadopoulou and Papoulia 2014; Muller et al, 2010; Borum et al, 2010). [22-24]

Increased concern for their sexual life is also expressed by the patients, as a result of their negative self-image, whereas the difference of sexual function in patients with IBD, before and after the surgery, is significant with a clear burden after the surgery, regardless if the operation included an ileostomy or not. [21,25] In a clinical study that included patients with IBD, a high percentage of them (70%) reported impaired body image, with a greater incidence in women compared to men (75% vs 51%) as well as in patients that had undergone a surgical operation compared to those that hadn't undergone one (81% vs 51%). [13]

The sexual desire seems to be significantly decreased, due to the change of self -image that the patients had before the stomy, whereas the fear of a possible leakage and odour, can limit sexual life. In all the above, we should also add the reaction of the sexual partner who frequently experiences difficulties to the acceptance of the new image. [26,27] The restoration of this dysfunction originated from the change of image, needs time and significant scientific and family support. [21,28] Other issues affecting sexual desire and satisfaction include the change of the patients' self-image, which can be related to the intake of corticosteroids, the exaggerated weight loss and often the surgical scars. [29]

Nursing approach

A chronic disease may affect both the individual and his/her social environment and bring changes to his/her life. IBD is a medical condition which has difficulties as far the diagnosis, both chronically and in laboratory level. Nevertheless, the science has now significantly contributed to the decrease of the time needed for diagnosis, which depends also on the effective communication between physician and patient and keeping the patient fully informed. The IBD, which is increased in young people, is a serious health problem which influences not only the patient but also his family and their entire social environment.

Nowadays, nurses, through the special knowledge that receive via their school's educational programs, know the way to manage these patients. The therapeutic goals for IBD management, are: life improvement, including pain and discomfort relief, avoidance of surgical operation –if possible-, and decreased duration of hospital stay, as well as the prevention of mortality due to the disease. [1]

The individuation of each case is considered a given, apart from the underlying disease. However, support through an interdisciplinary approach is important for the patient with IBD, since there are several parameters that may have to be addressed, and therefore all these parameters and factors should be fully coordinated and appropriately satisfied. [30]

The investigation of SD is a difficult procedure for healthcare scientists and it can take place via the patient's holistic management. In order for patients to report a dysfunction, feelings of confidence to the doctor and the rest of the treatment team have to be strengthened. In this therapeutic team, the nurse is a health care professional that has a constant contact with the patient, and it is important not only to educate the patient, but also to periodically monitor the progress of his health condition.

It is obvious that through the nurse-patient relationship, and through the accessibility to complete and updated medical records, it will be possible to gauge the risk for SD. In a related survey it was found that the majority of women with IBD (80%) reported that the gastroenterologist who was monitoring their health problem didn't investigate or ask them something about any problems related to the alteration of their body image or about sexual dysfunction. On the contrary, gynecologists or midwifes in the Primary Health Care were more focused on these problems (Borum et al, 2010). [24]

Especially approaching an adolescent or a younger patient in general, regarding his sexual life is a very difficult procedure and several times can create a gap between him and the health scientist. Routine assessment of sexual dysfunction as part of the overall neurological examination will help nurses to introduce more open communication with their patients. A special attention is needed to the questions that are necessary to be made and therefore a special education of the interviewer is needed for this. In the international literature, there are guides that can be followed in order for common mistakes during the interview to be avoided. [31,33] The PLISSIT model may help to establish communication with IBD patients in order

to fully discuss any SD they may be experiencing. [26,33] Other tools also, such as the Female Sexual Function Index (FSFI) for assessing the key dimensions of sexual function in women and the International Index of Erectile Function (IIEF), which is the most widely used, being considered as the "gold standard" by global health entities, can investigate the patients' SD, giving valid and reliable results. [34,35]

This guides, firstly include getting the patient's consent and agreement for an interview within a setting of trust without criticism and with the flexibility of avoiding questions that concern sensitive issues. Giving a full explanation about the reason for the interview, as well as the professional's support of this procedure, will enhance the relationship between patient and health professional, and will add a more optimistic point of view. It is important to be noted that women and men with IBD in remission, doesn't seem to display decreased fertility compared with the general population. However, international studies have shown that the fertility in patients with IBD is clearly influenced, and to this several pre-analyzed factors may have contributed. Especially the use of methotrexate in male patients is considered responsible for decreased fertility. [36,37]

Regarding the nursing intervention in cases of SD, it includes educating the patient and informing them about the methods of individual therapeutic approach. Also types of physical activity that can reduce dyspareunia and vaginal lubrication, nutritional interventions aiming at eliminating the lack of nutritional components such as zinc, the decrease or cessation of smoking, and the avoidance of alcohol consumption can significantly help the patient.

CONCLUSIONS

The SD of patients with IBD is a finding which has been studied by the scientific community in the recent years. It seems that it affects significantly the psychology of the patients and, through a complex net of symptoms and complications of the disease, may put a burden on their life quality.

A nurse is a health scientist who due to the extended contact with the patient can approach him more easily and recognize the problem in time. The frame of trust that can be developed between patients and nurses, accompanied with the scientific knowledge of the latter, can contribute to the improvement of health care in patients with IBD, especially regarding their sexual dysfunction.

The scientific investigation of this issue in a representative sample of patients will give reliable and valid results concerning the rates of SD's in patients with IBD, and to further define all the factors affecting this function.

Conflicts of Interest: There is no conflict of interest of any of the Authors

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