



# **Quality of life in adults with intestinal Stoma.**

Literature Review

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| <p><b>Abstract:</b></p> <p>A stoma is a surgical abdominal opening that can be linked to either digestive or urinary system to allow wastes such as urine and faeces to be directed out of the body. The goal is to extend the patient's life and assist them return to a normal and productive life. Stoma-related issues, on the other hand, produce significant changes in an individual's life as well as social isolation which effects quality of life.</p> <p>The aim of the study is to explore what factors affect quality of life on patients with abdominal stoma and how nurses can support the quality of life on patients with abdominal stoma.</p> <p>Research question were:<br/> How does the abdominal stoma affect patient quality of life?<br/> How can nurses support abdominal stoma patients in their quality of life?</p> <p>Information and data about quality of life and intestinal stoma was gathered thought literature reviews from previous research papers using resources from university library.</p> <p>Findings: All research claims that stoma effects the quality of life negatively. Patient goes through the psychological issue like anxiety and depression which influence the self-esteem to go down. Change in the body image, leakage, smell also effect to the patient, isolation from the activities or socialization, Intimate relationship, and physical activities. Nurse plays vital roles in supporting and providing services to the ostomates for example, counselling, providing proper guidance, Group therapy or group of ostomates to share ideas, organizing activities.</p> <p>Conclusion: Patient with stoma has negative effects on quality of life in every aspect. Providing proper care and supporting them can enhance quality of life.</p> |   |
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## **FOREWORD**

I would like to express my deepest appreciation to my supervisor Pauleen for your patience and guidance through this journey. I am also grateful to Pamela for Methodology and research courses which have been helpful for writing this paper. I am thankful to lecturer Terese Sjölund for reviewing my writing.

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# 1 INTRODUCTION

Medical knowledge has advanced to the point that it is now possible to treat ailments that were once deadly. Chronic illnesses can alter people's perceptions of the world, cause them to re-evaluate their life and alter their priorities. Everyone reacts differently to the reality that they are sick: some embrace the circumstance, while others reject it. From the psychological point of view, acceptance of disease is very important in order to cope with the disease. Modern medicine has many such tools that assist people in living their everyday life and help to admit their condition by making their life easier.

Stoma are such tool which help patients in psychological acceptance of gastrointestinal disease and reconsider their life choices. Stoma are surgical opening at the abdominal due to intestinal malfunction or certain types of disease condition. Stoma is created in digestive system or urinary system to excrete waste. Stoma are lifesaving procedure. (K. Szpilewska, et al 2018)

An artificial bowel stoma (Taylor, 2005) has been placed on the abdomen to prevent fecal from passing where they should. However, estimates from the United States and China suggest that around one million people in each nation have stomas, and approximately 700,000 people in Europe have stomas (Claessens, 2015; Zhang, 2005). There are no current statistics on how many people have stomas around the world. According to data from the United Kingdom and Sweden, those who have colon cancer surgery are more likely to have a stoma than those who do not. Stomas can also be produced by inflammatory bowel illness, diverticular disease, physical trauma, or incontinence. The previous and current studies indicated that after stoma surgery the quality of life of a patient changed. Most of the cases, those changes the quality of patient's life (Diniz et al., 2022). (QoL). In a study of Swedish rectal cancer patients, researchers discovered that those who did not have a stoma had a higher quality of life (QoL) than those who did (Nasvall, 2017). Overall, those with Crohn's Disease had no lower quality of life than those who did not have a stoma. People with stomas were less happy with their social duties than those without. The difference in quality of life between those with and without stomas can endure for more than two to five years.

People with stomas may experience stoma-related issues that impact their quality of life (QoL) (Vonk-Klaassen, 2016; Baxter, 2006). These concerns can be recorded using the Stoma Quality of Life Scale (SQLS). These issues have been connected to factors such as age, gender, and how long it has been since you last went to therapy. People's quality of life is not only affected by ileostomies and colostomies (Robertson, 2005; Anaraki, 2012; Brown, 2017). Physical activity has been proven to increase QOL in persons with colorectal cancer and IBD, according to an increasing body of studies (Eyl, 2018)

To yet, no one has investigated whether there are subsets of people with stomas who report a certain quality of life. In latent profile analysis (LPA), which is used to uncover subpopulations in a sample based on their answers to specific questions, a person-centered approach is applied. Because QoL can take numerous forms, this method is suitable for investigating how people's perceptions of their quality of life alter in different contexts. A person-centered approach to health care has existed for some time. This can assist in locating people who are at risk and those who may require additional assistance. It has been used for a variety of purposes in the past, including obesity (Lacroix, 2019), sexual health, drug and alcohol misuse, hypertension (Tanaka, 2018), and geriatrics. Examples: Choi et al. discovered four distinct types of health related QoL characteristics in older individuals which are physical disability, emotional disability, crisis and stable. Some single-person households did not experience as much happiness, despair, or brain degeneration as others who had greater stability in their life. They came to the opinion that this person would benefit from a mental health intervention. Examine a group of people with stomas using latent profile analysis. This can assist us in determining how to make therapy more customized and effective for everyone.

This study looked at how persons with stomas felt about their own lives to determine which groups have different health needs. The amount of physical activity, as well as the demographic and clinical characteristics of those in these groups, were also examined (PA). Because this was an exploratory study, no assumptions were established, and no previous research had investigated this group in such depth before this one.

## 2 BACKGROUND

First time in the history in 1701, Jean Méry, a surgeon at the Hôtel-Dieu hospital in Paris, was obliged to make a "anus contre nature" in a female patient with a strangulated inguinal hernia, presumably. After that different surgeon had perform the stoma surgery, trial and errors continue. The caring of the stoma was difficult. People use to use cloths or rug to clean the stoma. On 1950 Turnbull introduce the concept of rehabilitation of stoma. Intestinal stoma became a common surgery in the 20<sup>th</sup> century. First time in the history in 1954, the attachable colostomy bag was invented by Danish nurse. In 1958, Norma Gill, an ileostomy patient who had been operated on by American surgeon Turnbull for ulcerative colitis, became the first professional to provide stoma care. In the 1980s, the first device for collecting digestive contents with odour containment was developed. Patients with stomas might now choose between the conventional surgery of stoma care. (T. N. Garmanova et al 2019).

A stoma is an artificial abdominal opening that can be linked to either digestive or urinary system to allow wastes such as urine and faeces to be directed out of the body. In a comprehensive surgical procedure, for patients that have advanced gastrointestinal diseases such as Colon Cancer, rectal cancer; a stoma is made so that the patients can cope with the loss of important physical functions. Stomas can be temporary or permanent depending on disease and conditions of the patient. The common two types of intestinal stoma are ileostomy and colostomy. The quality of life deteriorates as the patients start using stoma for managing the bodily wastes, which might be temporary in case of temporary stoma. The permanent stoma has a broad and long-term effects on a patient's Quality of Life (QOL), requiring daily care adjustments as well as challenging psychological and social adaptations. (Ayalon & Bachner, 2019)

According to the World Health Organization, colon and rectal cancer are the third and second most frequent cancers in men and women, respectively. However, referring to demographic trends, the number of new colorectal cancer patients is predicted to rise. In ten percent of patients, surgery for colorectal cancer results in a permanent ostomy. The concept of quality of life is multifaceted. The World Health Organization defines QOL as "Individuals' view of their place in life in relation to their objectives, aspirations,



standards, and concerns in the context of the culture and value systems in which they live”. (Ayalon & Bachner, 2019)

Whatever the reason for stoma surgery, the goal is to extend the patient's life and assist them return to a normal and productive life. Stoma-related issues, on the other hand, produce significant changes in an individual's life as well as social isolation. Individuals' lifestyle styles and quality of life are influenced by changes in their physiological, psychological, and social lives. Many quantitative studies have been published in the literature that focus on the psychological, physiological, sexual, and compliance issues that people with stomas face while in the hospital and after discharge. However, qualitative research on the experiences of people who have a stoma following surgery is limited. According to several studies, stoma has a considerable impact on patients' lives, including emotional, physical, sexual, and social changes. In addition, the adaptation process differed in patients who received social and professional assistance. It is recommended that patients obtain professional care beginning in the pre-operative phase and continuing in the post-operative period in order to adjust to living with a stoma. Patients who have positive or negative experiences with stoma can seek social support by joining support groups.

## **2.1 Types Of Stoma intestinal stoma**

Stoma type is determined by the method used to make it, so this is important (Anaraki, 2012).

### **Colostomy:**

Colostomy is operation done creating a stoma on the abdominal wall for the colon or large intestine. (Dr. M. Thomas et al 2021). Generally, it is located on the right side or upper abdominal area as with transverse loop colostomy also depends on which part of colon is affected. For example, Transverse colostomy the upper abdomen, ascending colostomy right side of the abdomen, descending colostomy left side of the abdomen and sigmoid colostomy is few inches lower than descending colostomy. (Johns Hopkins medicine

## **Ileostomy:**

Ileostomy: Ileostomy is created when ileum is diverted through the abdominal wall opening which is normally created in the right iliac fossa and detrends to be spouted greater than 1 cm above the skin. Faecal matter from ileostomy contain. (Dr. M. Thomas et al 2021). Ileostomy is created to allow small intestine or colon heal after the surgery and to relief inflammation of the colon in patient with chron's disease and ulcerative colitis. Mainly there are two types of ileostomy loop and end ileostomy. In loop ileostomy loop of small intestine is created stoma and in end ileostomy ileum is separated from colon and created stoma. (Johns Hopkins medicine). Loop ileostomy is temporary where end ileostomy is usually permanent.

After surgery, the patient's stoma and ostomy pouch will be cared for, and he or she will be taught how to. They must relax and avoid strenuous activity for a few weeks after leaving the hospital (Thoker M, 2014). Some doctors advise low-fiber meals for the first several months to let the body adjust to the new foods.

Most people experience a lot of gas in the first several weeks after surgery. Also, when one's body heals, their stoma may shrink in the first several months.

Most people can return to work 6-8 weeks after surgery.

To keep stoma drainage inside, an ostomy pouch is used. You should replace the pouch every three to seven days. Wash and dry the skin around your stoma after changing the pouch. If you're going to use soap, be sure it doesn't have a strong odour or feel to it. This one is correct. While removing the pouch, observe for any signs of discomfort, changes in the size or color of your stoma and bleeding. Inform the doctor if they observe any (Hüser N, 2008). If users observe changes in the shape or size of their stoma, they should consult a doctor.

Users should also change the bag every few days, but it should also be emptied on a regular basis. Empty it when it's roughly a third full to avoid spills.

As the patient recovers, they can begin to reintroduce new foods into their diet. Whether you're experiencing problems digesting specific foods, go gently at first to discover if that's the issue (Chow A, 2009). Remember that some things that users used to eat may be difficult for them to digest. Users can also examine the waste from the bag for indicators of dehydration or other issues.

## **Reversible**

Depending on what caused it, a stoma might be long-term or short-term. If one's bowels or bladder are not permanently injured, their stoma may be able to reappear if surgery is performed. Users should know if their stoma will be permanent before undergoing surgery. Stomas that are only present for a brief period are often removed three months to a year following the initial surgery (Chow, 2009). It allows one's organs to be repaired.

Bowel must be left over for the two ends to reconnect. The doctor will reconnect their gut and shut their ostomy during reversal surgery, allowing you to eat again. Taking care of one's bowels can be time-consuming.

## **2.2 Complication**

Stoma itself is a surgical procedure where intestine is attached to the abdominal wall.

**An itchy skin:** The glue on the ostomy equipment is to blame for this. It might be time to switch to a new appliance and/or change the adhesive on your stoma.

**Dehydration:** If they have a lot of waste coming out of their stoma, they might not be able to drink water. Most cases of dehydration can be treated by drinking more water, but in some cases, going to the emergency room may be necessary because the person is so thirsty. One can cut down on dehydration by not eating salty, sugary, or fatty foods. In the case of colostomy dehydration is a major complication as the main function of the colon is to absorb water and minerals.

### **Leakage:**

If the stoma appliance doesn't fit right, there could be leaks. It's usually time to buy a new appliance if this happens to you. Leakage causes skin irritation and causes skin breakdowns.

### **Constipation:**

A blocked intestine could happen if you don't chew your food or drink enough water after you eat, which could hurt your body. When there is a blockage, people may have

cramps, stomach pain, and a drop in waste production that they didn't expect. A doctor should be called if there are any signs that there is a blockage (Corman ML, 2013). Even though some blockages can be cleared up on their own, there are some that need more help.

**Retraction:**

Because to weight gain, scar tissue, or poor location, the stoma retracts. Retraction makes it difficult to secure the appliance and might result in pain and leaking. Retraction also makes it hard to attach the appliance. Sometimes, there may need to have the stoma changed. Accessories like a stoma bag might help.

**Prolapse:**

Peristomal skin damage:

Irritant contact dermatitis is one of the most prevalent peristomal skin complications, and it's caused by prolonged or recurrent contact with GI fluids, feces, or other potentially irritating substances. Irritant contact dermatitis should be evaluated and treated by a stoma care nurse. Irritant contact dermatitis is one of the most common peristomal skin complications, and it is caused by prolonged or repetitive contact with GI fluids, feces, or other potentially irritating substances. Patients who have irritating contact dermatitis should be evaluated and treated by their stoma care nurse.

**Hernia in the peritoneum, or inside the body:**

A lot of people have problems when their intestines start to push through the cut. These happen a lot and usually go away on their own. However, some people may need surgery.

**Necrosis:** When there isn't enough blood flow to the stoma, it can die. This is called necrosis. When you have surgery, this is most common in the first few days afterward. But it can happen at any time (Corman ML, 2013).

There are a lot of minor problems with the stoma, but necrosis and dehydration can be very dangerous. If anyone has any of the following symptoms:

(a) vomit a lot but don't see any waste in the pouch, (b) skin around the stoma look blue, purple, or very dark red and (c) always nauseous, lightheaded, and can't stay on feet; they should visit their doctor immediately.

### 3 THEORETICAL FRAMEWORK

American psychologist Abraham Harold Maslow is most known for his development of Maslow's hierarchy of needs, a theory of psychological health that emphasizes achieving one's most basic human desires in order to achieve one's full potential as an individual. Abraham Maslow (1968) designed a hierarchy of basic human needs that can be used to determine which needs are most important to a person at any time. Certain needs are more fundamental or critical than others, and they must be addressed at the very least before other wants can be considered.

Maslow's hierarchy is beneficial for determining care priorities and recognizing the relationships between basic human needs. People often seek to address certain needs (at least to a minimal level) before attending to other needs, even though everyone has all of them all the time.

The five levels of needs are as follows, with physiological being the most basic.

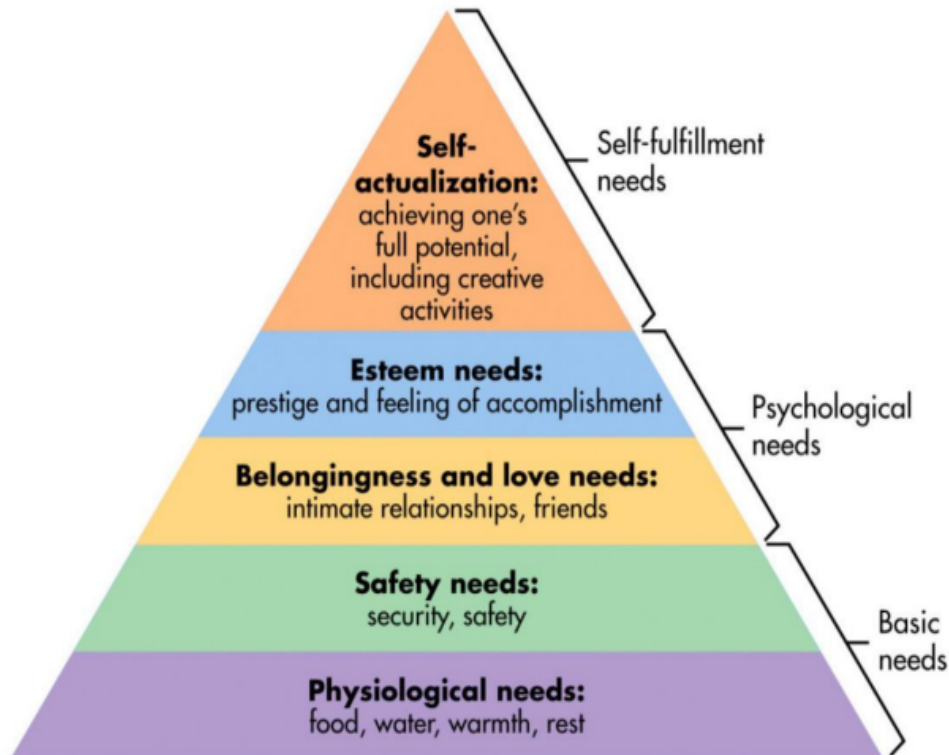


Figure 2. A chart of Maslow's hierarchy of needs) (Nrvcs.org, 2022)

### **3.1 Physiologic needs**

Physiological needs must be met at least minimally to maintain life such as Oxygen, water, food, temperature, elimination, sexuality, physical activity, and rest.

These are the most basic needs in the hierarchy of needs, the most fundamental to life, and hence receive the highest priority. Oxygen is the most essential of all need cells requiring oxygen for survival. Elimination is essential to a life which balances intake and output. Stoma are created if the normal functioning of elimination is disturbed. Food is a physiological need which provides nutrients to every cell in the body. Temperature is another vital element where body function best within plus and minus 98.6 F. Sexuality is integral component of every individual effect by physical and emotional conditions which depends on various factor such as individual age, sociocultural background, self-esteem and health level. Physical activity and rest also fall under physiological needs which helps for better neuromuscular and skeletal system functioning whereas rest allow time for rejuvenation and free of stress. (C. R. Taylor 2011)

### **3.2 Safety and security needs**

Second priority is safety and security involve physical and emotional components.

There is always a change of leaking with the stoma bag which is not safe for the patients and people around as contamination perfective view. Generally patient with stoma feels insecurity of having stoma. Individuals with stoma experience embarrassment as a result of their stoma; aside from the stench, gas, and impact on their physical appearance, simply having a stoma is a source of humiliation for them. (C. R. Taylor 2011).

### **3.3 Love and belonging needs**

After safety and security needs next priority is love and belongings which include the understanding and acceptance of others in both giving and receiving love, and the feelings of belonging to have friends, family, a neighborhood, and a community. Patient with stoma has the insecurity of not being loved or feel of belonging to the society. (C. R. Taylor 2011)

### **3.4 Self-esteem needs**

Self-esteem needs are the second greatest priority on the hierarchy, which include the desire for a person to feel good about oneself or herself, to experience pride and accomplishment, and to believe that others admire and respect your achievements. Individuals with high self-esteem have more confidence and freedom. Changes in the body affects the individual self-esteem. (C. R. Taylor 2011)

### **3.5 Self-actualization needs**

Self-actualization wants are at the top of the hierarchy of needs, and they include the need for people to attain their greatest potential through the development of their abilities. Each lower level of need must, in general, be met to some extent before this need may be met. The journey to self-actualization is one that lasts a lifetime. (C. R. Taylor 2011)

Health, cultural, social, and psychological values, as well as a person's overall well-being are all included under the umbrella term "quality of life" (QL) (WHO, 2020). In certain cases, persons with stomas have a negative outlook on their body and the way they appear to others. Their physical, mental, and social well-being may be affected by this. This hierarchy of needs can directly apply to understand the factors affecting the quality of life of stoma patients.

## **4 THE AIM OF STUDY**

The aim of the study is to explore what factors affect quality of life on patients with abdominal stoma and how nurses can support the quality of life on patients with abdominal stoma.

This proposal is based on the understanding that, following stoma surgery, the patient experiences plenty of negative feelings as a result of physiological, psycho-emotional, and socio-cultural changes that invade his or her life, causing, to a greater or lesser extent, impacts that will affect his or her quality of life.

### **Research Questions**

1. How does the abdominal stoma affect a patient's quality of life?
2. How can nurses support abdominal stoma patients in their quality of life?



## **5 METHODOLOGY**

This research method is qualitative literature review. The methodology chapter demonstrate this study is a literature review with a qualitative inductive approach to data collection and analysis. The methods and techniques chosen are the most appropriate for the study's purposes and objectives and will produce valid and reliable results. A methodological approach guides the implementation of specific components such as procedures, projects, processes, strategies, and tools to a problem in general. (Ishak and Alias, 2005). The goal of a literature review, according to Webster and Watson (2002), is to lay the groundwork for future research. There are areas that need more research and others that have an abundance of it, which can help with theory development

### **5.1 Data collection**

Here the author had used the common data collection method used for qualitative literature review. For data collection online database were used from Arcada University of Applied Sciences. Search engines like PubMed, CINAHL with full text, Sage and Google scholar were used for articles selection. Other databases where data was not taken were excluded like ScienceDirect, SpringerLink etc. Boolean phrase "Quality Of life" AND "Stoma" OR "Colostomy" OR "Ileostomy" OR "Enterostomy" were used. Only the data between 2019 to 2022, English language and with open access were included. The past and current articles which has similar research findings and were conducted in Europe were collected for reference. The table 1 and 2 below shows how the literatures are search and selected for this study. The most relevant articles in Europe were collected. The publication dates, languages, and ages of the materials were considered during the search. During the selection of articles author went through the articles and the articles those were relevant to the research question were selected. The chosen articles have a adequate information about the research questions.

**Table 1. Inclusion and Exclusion considerations**

| Inclusion Criteria  | Exclusion Criteria  |
|---|---|
| <ul style="list-style-type: none"> <li>• Retrieval from a scholarly database like PubMed, CINAHL with Full Text, Sage and Google scholar is necessary</li> <li>• There must be full-text articles relevant to the research topic.</li> <li>• They must be in English.</li> <li>• The publication date period for these articles must be between 2019 and 2022.</li> <li>• Articles should be available for free.</li> </ul> | <ul style="list-style-type: none"> <li>• Full-text articles that are not included.</li> <li>• Non-English language articles</li> <li>• Articles that are not relevant</li> <li>• Non-free articles</li> </ul> |

**Table 2. Table presenting data selection**

| Database              | Search word  | Criteria   | Result | Selected |
|-----------------------|--|--|--------|----------|
| PubMed                | “Quality of life” AND “Stoma” OR “ostomy” OR “Colostomy” OR “ileostomy” OR “Enterostomy” | 2019 – 2022<br>Language English<br>Research articles | 20     | 4        |
| Cinahl with full text | “Quality of life” AND “Stoma” OR “ostomy” OR “Colostomy” OR “ileostomy” OR “Enterostomy” | 2019 – 2022<br>Language English<br>Research articles | 61     | 3        |
| Sage                  | “Quality of life” AND “Stoma” OR “ostomy” OR “Colostomy” OR “ileostomy” OR “Enterostomy” | 2019 – 2022<br>Language English<br>Research articles | 380    | 1        |
| Google scholar        | “Quality of life” AND “Stoma” OR “ostomy” OR “Colostomy” OR “ileostomy” OR “Enterostomy” | 2019 – 2022<br>Language English<br>Research articles | 66     | 2        |
| Total                 |  |  | 527    | 10       |

### 5.1.1 Presentation of chosen data:

1. A physical activity intervention to improve the quality of life of patients with a stoma: a feasibility study  
Gill Hubbard; Claire Taylor, Angus J. M. Watson; Julie Munro; William Goodman and Rebecca J. Beeken BMC 2020
2. Body Image, Self-esteem and Quality of Life among Stoma Patients  
Somaya Elsayed Abou-Abdou; Samia Gaballah, 2019. OSR Journal of Nursing and Health Science; 2019
3. Challenges faced by people with a stoma: peristomal body profile risk factors and leakage.  
Lina Martins, Birgitte Dissing Andersen, Janice Colwell, Gillian Down, Louise Forest-Lalande, Svatava Novakova, Rosalind Probert, Chris Juul Hedegaard, Anne Steen Hansen; 2022 British journal of nursing
4. Factors influencing health-related quality of life of those in the Netherlands living with an ostomy.  
Jimena Goldstine, Ruud van Hees, Dick van de Vorst, George Skountrianos and Thomas Nichols, 2019; British Journal of Nursing
5. Overview of psychosocial problems in individuals with stoma: A review of literature  
Ayaz-Alkaya S, Sultan Ayaz-Alkaya C, 2019 Psychological issues affecting patients living with a stoma Patricia Black and Joy Notter, 2021 International wound journal
6. Quality of life profiles and their association with clinical and demographic characteristics and physical activity in people with a stoma: a latent profile analysis

William Goodman, Amy Downing, Matthew Allsop, Julie Munro, Claire Taylor, Gill Hubbard, Rebecca J. Beeken 2022. Quality of life research

7. Self-Care and Health-Related Quality of Life in Patients with Drainage Enterostomy: A Multicenter, Cross-Sectional Study  
Eladio J. Collado-Boira, Francisco H. Machancoses, Ana Folch-Ayora, Pablo Salas-Medina, Desamparados Bernat-Adell, Vicente Bernalte-Martíand M. Dolores Temprado-Albalat International Journal of Environmental Research and Public Health (2021)
8. Effects of the Quality of Life on the Adaptation of People with An Intestinal Stoma. Iraktania Vitorino Diniz, Isabelle Pereira da Silva, Renan Alves Silva. (2022)
9. Physical activity after colorectal cancer surgery-a cross sectional study of patients with a long-term stoma.  
Marianne Krogsgaard, Rune Martens Andersen, Anne K. Danielsen, Thordis Thomsen, Tobias Wirenfeldt Klausen, Bo Marcel Christensen, Ismail Gögenur, Anders Vinther. (2021)
10. Psychological issues affecting patients living with a stoma. Black P and Notter, J. British Journal of Nursing. (2021).

## **5.2 Data Analysis**

Ten articles were chosen from different database. The information for this paper has been thoroughly read and analyzed to ensure that it has been correctly applied and understood. The codes were created and structured in order to answer the research questions and make the outcome chapter easier to understand and follow. According to the finding data eight topic were categorized. Data were compared to each other's. Topic are physical activity, Leakage and skin irritation, Psychological, Condition of stoma, Adaptation to the situation, Exclude social function, Sexuality and Finance.

## **6 FINDINGS**

### **6.1 Factor affecting quality of life with stoma patients**

#### **Physical activity:**

Study finds the barriers to being physically active with stoma like fear of hernia, difficulties bending down, fatigue, pain prolapse, surgical wounds, stoma appliance, fear of pouch leaks, feeling self-conscious and stigma. Fear of the complication has the effects on quality life as Physical activity are essential for proper functioning of the body. And the instructors helped them to address barriers. And suggests that these stoma-related barriers to physical activity can be overcome in a structured Physical activity program for this patient group, as objectively measured physical activity increased post-intervention. (Hubbard et al., 2020).

A specific encourage should be given in the type and intensity of physical activity. In people who are inactive, even a little increase in physical activity is linked to relatively big gains in health benefits. (Krogsgaard et al., 2021 1). This is significant because concern of harming, developing a hernia, or producing unpleasant ant sensations as a result of a parastomal bulge can limit or modify physical activity and function. Moderate physical activity support hernia formation (Goodman et al., 2022)

#### **Leakage and skin irritation**

Leakage seems to form the obstruction towards being physically active with a stoma. (Krogsgaard et al., 2021 and Hubbard et al. (2020). Patients with stomas participate in physical exercise to maintain functional abilities, manage weight and bowel function, and improve their quality of life, even though these issues appear to be hurdles to being physically active with a stoma. Leakage and peristomal skin abnormalities continue to be two of the most major concerns affecting ostomy patients' daily lives, and many people with these conditions do not seek help even though they are affecting their quality of life.

These issues can make it difficult to utilize the stoma product and reduce one's quality of life. (Martins et al., 2022) Similarly, patients who had leakage under their ostomy barrier experience quality of life (Goldstine et al., 2019, Goodman et al., 2022 and Diniz et al., 2022).

### **Psychological**

Psychological issues such as depression, anxiety, changes in body image, low self-esteem, feelings of insecurity, and societal problems such as decreased participation in social activities, decreased working activities, decreased contact with friends or relatives, and sexual issues can all negatively impact a person's adaptation to a stoma and ability to cope. (Ayaz-Alkaya. 2019 and Diniz et al., 2022). Patients with stomas had a negative perception of themselves due to feelings such as being ugly, filthy, unusual, unimportant, uncomfortable, humble, prostration, unable, male or feminine, weak, and incomplete.

This low self-esteem arises from their beliefs that they aren't as valuable as others, that they aren't as natural as others, that they can't do good work as well as others, and that they don't have a positive attitude toward themselves. This could be because a person's self-esteem is determined by their perception of their body; changes in body image as a result of a stoma, together with feelings of fear, anger, and grief, induce a decrease in self-esteem.

Stoma-related changes in physical appearance and physiological issues can lead to negative self-perception, seeing oneself differently from others, and feeling embarrassed of oneself.

Stoma's body image, self-esteem, and quality of life Patients may face rejection from family and friends, as well as a decrease in social activities, all of which can have a negative effect on their self-esteem. Low self-esteem had a significant detrimental impact on the physical, social, psychological, spiritual, and sexual lives of the patients. (Ahmed et al., 2019).

### **Condition of stoma:**

Patients with normal peristomal skin had significantly higher average Quality of life score than with severely irritated skin. (Goldstine et al., 2019). Peristomal skin

irregularities remain two of the most significant issues affecting the daily life of patient with stoma. These issues can make it difficult to use a stoma product and have a detrimental influence on one's quality of life. (Martins et al., 2022). Patients who had a stoma-related complication had lower quality of life. (E.J Collado Boira et al 2021)

### **Adoptation to the situation:**

It is recognized that adjusting to a stoma is a dynamic and ongoing process involving negative feelings and battles to gain control over situations that negatively impact one's quality of life. A study revealed a major relationship between quality of life and the level of psychosocial adaptation as dimensions: ongoing concern, a positive approach to life, and acceptance of the psychological burden, social contact, stoma management, and daily routine. Patients with greater psychosocial adaptation had a better quality of life. The level of adaptation influences not only the general quality of life but also the physical, psychological, and social well-being of the patient. (Diniz et al., 2022)

### **Exclude social function:**

Study says more than half of the respondents in the current study avoided a variety of physical and social activities because to their stoma (Martins et al., 2022; Ayaz-Alkaya. 2019). Such anxieties impact on long-term family and social interactions, adding to the risk of increasing social isolation (Black & Notter. 2022)

As well as a decrease in social activities, all these factors have a negative impact on the patient's self-esteem. Low self-esteem had a significant negative impact on the physical, social, psychological, spiritual, and sexual lives of the patients. (Ahmed et al., 2019)

### **Sexuality:**

Sexual dysfunction or sexual issues such as impotence, dyspareunia, frigidity, and avoiding from sexual intercourse might negatively impair an individual's adaptation to illness and ability to deal with it. (Ayaz-Alkaya. 2019). Low self-esteem leads to the decrease sexual life. (Ahmed et al., 2019)

### **Finance:**

Those who are older and maybe retired may have more confidence in their financial condition than those who are younger and may be anxious about the impact of their stoma on their employment or financial situation. (Goodman et al., 2022)

## **6.2 Nursing roles.**

Patients' concerns about the stoma, leakage, and lack of understanding about acceptable forms and intensities of physical activity should also be addressed by stoma care nurses, as these issues appear to be barriers to being physically active with a stoma.

Activity trackers, educational programs, and social and psychological support from health care professionals, relatives, or peers are all possible options for promoting physical activity in survivors.

Encourage any possible increase in the type and intensity of physical activity as a specific focus. In people who are inactive, even a little increase in physical activity is linked to relatively big gains in health benefits. (Krogsgaard et al., 2021)

Patients who have access to nurses who specialize in supporting people with ostomy requirements and are educated to handle these main stressors have a better chance of achieving a good and enhanced HRQoL as they adjust to life with a stoma. So arranging the such visit should be organized. Early detection and treatment of peristomal skin diseases can also assist to reduce stoma-related healthcare costs. (Goldstine et al., 2019)

Individualized care will be provided by specialist nurses, who will supply items that are developed to support optimal skin health, such as ostomy skin barriers that are infused with ceramide or contain pH buffering technology. Clinical services and products that enhance skin health are essential for improving clinical outcomes and a person's quality of life.

Relaxation training, supportive group therapy, cognitive-behavioral therapy, emotional and social support, and general interactional skills such as supportive communication, listening, and counselling can all be used to solve and avoid psychosocial issues.

Nurses might give appropriate interventions and teach patients about stoma care after surgery, as well as assist in the creation of social platforms such as stoma support groups and serve as a consultant for psychosocial issues. (Ayaz-Alkaya. 2019). To create personalized long-term care plans, health practitioners must develop tools to recognize diverse coping strategies and change their approach accordingly.



Clinical nurse specialist's that specialize in stoma care can use their knowledge, experience, education, and training to provide physical and emotional support to patients and their families, coordinate care services, and inform and advise patients on clinical and practical difficulties, resulting in positive patient outcomes. (Black and Notter, 2022) Nurse should provide the proper equipment like wipes, spray, powder, stoma paste, strip paste, ostomy ring, ostomy seal, sheet and adhesive remover to prevent leakage and support stoma.

## **7 DISCUSSION**

The findings of this study indicated that different factors are affecting the quality of patient's life after stoma. The factors such as physical activity, psychological thinking, body leakage and irritation, sexuality, lack of socialization and burden of finance mostly affected personal quality of life. Where it was found that after the application of the Ostomy Adjustment Inventory, the patients presented a mean level of adaptation which indicates a low level of adaptation in general.

Due to physical activities after stoma, leakage seems to be formed (Krogsgaard et al., 2021; Hubbard et al., 2020). Leakage and peristomal skin abnormalities were two most major concerns which affected the daily quality of life (Goldstine et al., 2019; Goodman et al., 2022; Diniz et al., 2022). Psychological issues such as diminish self-esteem arises due to thinking of negatives believes towards themselves, low self-esteem, feelings of insecurity, and social problems such as decreased participation in social activities, working activities, contact with friends or relatives, and sexual issues all negatively impact a person's adaptation to a stoma and ability to cope (Ayaz-Alkaya. 2019 and Diniz et al., 2022). Low self-esteem had a significant detrimental impact on the physical, social, psychological, spiritual, and sexual lives of the patients. (Ahmed et al., 2019).

The different studies also indicated that more than fifty percent of respondents avoided different physical and social activities due to their stoma (Martins et al., 2022; Ayaz-Alkaya. 2019). The continuous avoided social activities with friends and family added to the risk of increasing social isolation (Black & Notter. 2022). The adaptation to the situation could help to improve the quality of life. Patients with greater psychosocial adaptation had a better quality of life. The level of adaptation influences not only the general

quality of life but also the physical, psychological, and social well-being of the patient (Diniz et al., 2022).

However, this study aims to explore the factors affect quality of life on patients with abdominal stoma and how nurses can support the quality of life on patients with abdominal stoma. All the study represents that stoma has affected individual life in different aspect like physical. psychological, social-economical. The majority study finds psychological patient are affects due to changes in the normal functioning of their life. Insecurity, change in body image, leakage leads to anxiety and depression as studies reflect.

Nursing care could help a lot for some of the factors which affect the patients after stoma. Proper physical functioning is vital for body. Study indicated that there were fear feeling in patients regarding the disbalance of body physical functioning after stoma. The nursing care and instructors helped address the physical functioning of body barriers. These stoma-related barriers to physical activity can be overcome through structured physical activity program (Hubbard et al., 2020).

The nursing role are very important to overcome all the barrier and for improvement of quality of patient life. The physical activities can be addressed by stoma care nurses, as these issues appear to be barriers to being physically active with a stoma. Activity trackers, educational programs, and social and psychological support from health care professionals, relatives, or peers are all possible options for promoting physical activity in survivors.

In people who are inactive, even a little increase in physical activity is linked to relatively big gains in health benefits. (Krogsgaard et al., 2021)

Patients who have access to nurses who specialize in supporting people with ostomy requirements and are educated to handle these main stressors have a better chance of achieving a good and enhanced HRQoL as they adjust to life with a stoma. So, arranging such visit should be organized. Early detection and treatment of peristomal skin diseases can also assist to reduce stoma-related healthcare costs (Goldstine et al., 2019)

Individualized care will be provided by specialist nurses, who will supply items that are developed to support optimal skin health, such as ostomy skin barriers that are infused with ceramide or contain pH buffering technology. Clinical services and products that

enhance skin health are essential for improving clinical outcomes and a person's quality of life.

Relaxation training, supportive group therapy, cognitive-behavioral therapy, emotional and social support, and general interactional skills such as supportive communication, listening, and counselling can all be used to solve and avoid psychosocial issues.

Nurses might give appropriate interventions and teach patients about stoma care after surgery, as well as assist in the creation of social platforms such as stoma support groups and serve as a consultant for psychosocial issues (Ayaz-Alkaya. 2019). To create personalized long-term care plans, health practitioners must develop tools to recognize diverse coping strategies and change their approach accordingly.

Clinical nurse specialist's that specialize in stoma care can use their knowledge, experience, education, and training to provide physical and emotional support to patients and their families, coordinate care services, and inform and advise patients on clinical and practical difficulties, resulting in positive patient outcomes. (Black and Notter, 2022)

Nurse should provide the proper equipment like wipes, spray, powder, stoma paste, strip paste, ostomy ring, ostomy seal, sheet and adhesive remover to prevent leakage and support stoma.

In the reference to Maslow hierarchy of needs author has found the physical activity, sexuality as the basic needs or physiological need. Whereas financial insecurity, social insecurity and emotional insecurity were discovered. In the context of love and belongings, patient being insecurity of being loved by friends and family or partner was found. Most study also the reflects that the patient with stoma has low self-esteem which has affected the overall quality of life affects. Self-actualization is the situation where individual accepts itself. In the study, patient with adaption to the situation has help to maintain the quality of life which represent the self-actualization

In a summary, patients with stoma have anxiety of the body image, complication, leakage which result isolation from socialization and functioning other roles. Stoma related change rises physically and psychologically which alters the normal functioning of the individual. Some of above study indicated that adaptation to the stoma and physical activity has help to maintain quality of life. Study also suggested, ostomates should have access to regular counselling, group therapy, available of reliable stoma product can helps to increase the quality of life. The family or partner inclusion is very important

and positive toward the patient's life. Study has shown that a married person has more quality of life than unmarried. Easily assess to cure the complication and regular checkup prevent furthermore complication to rise which indirectly affects patient quality of life. Patients with low physical activity have the chance of stoma hernia formation that affect patient psychological state, social isolation arise changes in sexual life and financial problems may arise. Conclusively, the above factors and components are somehow related to each other and directly or indirectly affect the life of stoma patients.

## **8 CONCLUSIONS**

Patient with stoma face different problems which effects the quality of life. Not feeling of being normal effects the psychological aspects. Anxiety of the complication and embarrassment of body image or leakage prevents from socialization and any physical activity. Having low self-esteem effects all the aspects of life like physical, social, psychological, spiritual and sexual. Patient adaptation to stoma helps to increase the quality of life. Accepting stoma as the part of body and normal functioning and family and friend's support. Nursing guidance and easily accessible to patient, regular follow to prevent complication so group activities might help to encourage patient helps in the process of self-actualization.

## **9 ETHICAL CONSIDERATION**

In this writing, Finnish National Board on Research Integrity TENK guidelines were followed. The study was accepted by Arcada University of Applied Science, Helsinki. Authors have used the database from university online library Thesis Format was provided by university. Plagiarism was considered and paraphrased are appropriately reference both in-text and in reference chapter. Data and other information were gathered from open source hence does not contain any sensitive information.

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