QUALITY OF LIFE AMONG ELDERLY OSTOMATES: A LITERATURE REVIEW

Daniel Le

*Eastern New Mexico University, **USA***

E-mail: Michael.Shaughnessy@enmu.edu

ABSTRACT

Ostomy formation can have profound impact on the individuals undergoing such procedures. Multiple aspects of an individual's life are affected. Quality of life (QOL) is a measure of daily life satisfaction and is affected by physical, emotional, and psychological factors (Slater, 2010). To further understand the effects of ostomy formation and QOL, much research and scholarly publications have been undertaken. While there is a notable amount of available literature regarding ostomies and QOL, there is a scarce amount that specifically speaks to QOL and ostomy formation among the elderly population. This is surprising given the prevalence of ostomy formations in older individuals. Additionally, this topic carries important relevance given the growing rate of today's elderly population. As such, a literature review is provided with an aim to address an evident gap in literature regarding the specific impact of ostomies on QOL among the elderly. Areas of focus pertaining to QOL are organized in three major themes and include physical, emotional, and psychological factors. Subtopics relevant to each theme are provided. Conflicting research is included as well. Overall, there is a clear lack of literature that addresses specific ostomy-related challenges faced by the elderly. Even more lacking is the amount of literature that makes the connection of ostomy-related challenges to QOL among this population. More research is warranted given the lack of available of literature, growing elderly population, and the need to better understand and care for this unique population.

Keywords: *ostomy, elderly, older adult, quality of life, adjustment, physical, emotional, psychological, coping, self-care, review*

INTRODUCTION

Undergoing ostomy formation affects physical, emotional, and psychological well-being (Soares Mota, Calcagno Gomes, & Madalosso Petuco, 2016). Quality of

life (QOL) is a measure of daily life satisfaction and is affected by all of these factors (Slater, 2010). With this is mind, it is no surprise that having an ostomy directly affects QOL. While there is no shortage of available research on the impact of ostomies on QOL, age-specific research is lacking. This is particularly true regarding QOL among elderly ostomates. Available literature on the impact of ostomies specifically among elderly is very limited. There is a clear gap in literature that addresses the specific impact of ostomies on the QOL among the elderly. Works that address specifically the elderly ostomate and QOL are scarce and no systematic reviews appear to be available. As such, this topic warrants further investigation justifying a review of the literature. Given that QOL is affected by an array of ostomy-related factors among the elderly, relevant literature has been reviewed. This information has been summarized and synthesized thematically according to sub-topics. These include physical, mental, and psychosocial challenges among elderly ostomates that are related to QOL.

PHYSICAL FACTORS

As stated, the available literature regarding QOL among elderly ostomates is sparse. And among the little that is available, the majority directly connected to QOL revolves around the mental and psychosocial effects. This is surprising given the many physical challenges of elderly ostomates and how these would likely affect QOL. Even so, there are works that highlight physical challenges faced by elderly ostomates that are important when considering QOL.

BOWEL CONTROL

Typically, bowel contents and gas are voluntarily expelled by a combination of working rectum and anal sphincters. Given the nature of an ostomy procedure and stoma formation, there is loss of voluntary defecation due to the lack of sphincter control in stomas (Williams, 2008b). Depending on the type of ostomy, ostomy formations can result in partial or complete loss of bowel control. While some ostomy formations permit self-catheterization or self-emptying that allows for more control, it is safe to say that most do not. As such, one of the greatest concerns for those with bowel ostomies is the gas and odor that can accompany an incontinent ostomy.

OSTOMY GAS AND ELDERLY PERCEPTION

While loss of bowel control and gas production is not elderly-specific, there are some factors that seem noteworthy to address on this topic as they pertain to

this population. It is a false belief held by many in general society that age affects how often gas is passed. Rather, how often an individual passes gas is more often determined by the bacteria and physiological ability to produce gas within the intestines (Williams, 2008b). This can be an important aspect of physical and psychosocial adjustment for elderly ostomates. Those who hold a false belief that elderly individuals pass more gas may incorrectly feel that having ostomy will indefinitely make this worse. As such, the elderly ostomate can be at increased risk for psychosocial issues and decreased QOL as discussed later in this review.

SENSES

Loss or decrease in senses are among the physical challenges elderly face when dealing with ostomies. Auditory, visual, and dexterity alterations that can occur with age make it difficult to learn and perform ostomy care. An example of this is that of arthritis and the ability for elderly to perform finite tasks such as cutting required for ostomy appliance preparation and application (Black, 2015). Diminished reaction time, energy levels and memory are not uncommon among the elderly and can be real obstacles within ostomy care (Williams, 2008a).

BODY DISPOSITION

There is a substantial amount of research concerning body disposition and elderly ostomates. In brief, an ostomy procedure involves segmenting a piece of intestine and advancing it to the skin layer. To do so, the selected intestinal segment must be brought through and secured to a number of layers, including fatty tissue, muscle, and skin. The stoma, or visible piece of intestine, is ideally placed in a location that is easily visible and accessible to increase chance of successful management. With this in mind, changing anatomy with age can create additional ostomy challenges. Physical changes to weight, body fat distribution, loss of muscle tone, functional capability, and urological changes can all occur with age (Skeps et al., 2013; Black, 2009). Such changes can lead to decreased ability to perform regular self-care tasks, including ostomy care. As body composition physically changes with age, there is risk that ostomy care will be impacted as well. Specifically, body mass index (BMI) has been noted to be potentially associated with ostomy-related problems. Potential issues related to BMI include challenging ostomy appliance application, leaking, peristomal skin issues, clothing fitment, and increased amount of time required for ostomy care (Skeps et al., 2013).

RISK OF SKIN COMPLICATIONS

One of the essential functions of human skin is to provide protection against a number of environmental factors. To better protect, skin is genetically hardwired to regenerate. With aging, skin does not regenerate as fast. Additionally, skin thins out and loses elasticity over time (Rinnerthaler, Streubel, Bischof, & Richter, 2015). Overall, this leads to decreased functional ability of skin to withstand and protect as an individual ages. This is an important concept given the increased risk of skin complications and damage that can occur following ostomy formation in the elderly.

Nichols and Inglese (2018) note that new research indicates ostomy-related skin issues, or peristomal skin issues, affect QOL. As mentioned previously, physiological body disposition occurs with age. Accompanying these changes is the increased risk for secondary peristomal skin complications (Skeps et al., 2013). Soares Pinto et al. (2017) also note that older age can be attributed to increased risk of peristomal skin issues. These authors point to peristomal complications as a result of skin exposure to pouching products, ostomy output, and physical rubbing combined with thinning skin in the older patient.

HEALTH CONDITIONS

A variety of health conditions among elderly populations pose additional challenges for ostomy education, independence of ostomy care, and subsequently, QOL. Conditions linked with ageing such as stroke and multiple sclerosis have been found to pose additional physical challenges to managing ostomy care (Williams, 2008a). Of note, one article did suggest activities of daily living and QOL of elderly ostomates to be more affected by the actual procedure and mobility than the stoma (Slater, 2010). Nonetheless, the article does not dispute the physical effect of ostomy procedures among elderly. Overall, these age-related physical changes can hinder ostomy self-care and increase the likelihood of decreased QOL (Skeps et al., 2013). While many authors recognize the physical challenges faced by elderly ostomates, how these challenges directly impact QOL is still widely unknown.

MENTAL FACTORS

Available literature briefly mentions mental and cognitive factors with regards to ostomies and the elderly. Conditions such as Huntington's disease, Parkinson's disease, and dementia are specific examples of more common conditions affecting behavior among the elderly. These in particular are known to have negative consequences related to ostomy outcomes. While there appears to

be a healthy amount of literature that addresses cognitive challenges elderly ostomates face, there is a lack of QOL-related literature tied to these factors. This lack of available literature calls for research related to this topic. That said, one area with notable research related to cognition and QOL among the elderly is that of learning. While little is mentioned specifically to that of QOL and ostomy learning in the elderly, learning among the elderly is well researched. There remains room to explore a connection between what is known about learning in later years for adults and how this specifically impacts QOL among elderly ostomates. Still, some related aspects are provided in this regard.

CONDITIONS AFFECTING BEHAVIOR

As mentioned, conditions such as Huntington's disease (HD), Parkinson's disease (PD), and dementia are specific examples of more common conditions affecting behavior among the elderly. Such underlying conditions can have profound behavioral impact on ostomy learning and care. As a result of the pathological process of HD on the brain, those with HD can become very dedicated to a fixed schedule (Black, 2015). It may be difficult for these individuals to adjust to variations outside normal routine. For a someone with a new ostomy, new information concerning ostomy education and care may unwelcomed. While PD may not directly affect behavior and cognition, dementia related to PD can do so. Dementia is a multifactorial condition that involves memory loss, among other mental capacities. Behaviorally, dementia can result in hostile attitude, confusion, hallucination, and feelings of distrust in others. Such effects of dementia pose challenges for all individuals involved, including both patient and caregivers (Black, 2015). Skeps et al. (2013) remark that the lack of caregivers or lack of caregivers willing to assist with care of ostomy can negatively impact QOL.

LEARNING IN OLDER AGE

Marton (As cited in Boulton-Lewis, 2010) describes high-level learning as "an understanding, seeing things differently, and, perhaps, changing as a person" (p.214). This fundamental understanding of advanced learning holds true in older age as well. This is due to the numerous health benefits gained and the societal role that is needed from learned individuals in older age. That said, research has proven that certain cognitive abilities decline with age. Learning-specific cognitive abilities that weaken over time include rate of processing, memory ability, and executive functions. Specifically, the deterioration of the hippocampus is known to have a negative effect on learning and memory functions. While these learning obstacles are the primary focus for our purposes, it should be noted that elderly are capable

and often do learn new things. Interestingly, research does support the amount of learning and education in previous years as being correlated to how well an individual may learn in older age (Boulton-Lewis, 2010).

IMPACT ON OSTOMY-RELATED LEARNING

New ostomy formation requires a substantial amount of education and learning for any individual with an ostomy, particularly after an initial ostomy formation procedure. Broadly, nursing education focuses on positive adjustment in order to foster the highest level of independence and acceptance into society (Cristina Mauricio, de Oliveira Souza, da Costa, & Oliveira Dias, 2017). This educational approach holds true for ostomy teaching as well. Specifically, much of ostomy education revolves around proper procedure. This includes emptying an ostomy system, cleaning and caring for peristomal skin, cut and fit of ostomy products, and disposal. Other topics include dietary changes, ordering appropriate supplies, follow-up ostomy care, and ostomy-related support services in the community (Slater, 2010). Clearly, there are many different pieces of ostomy education that must be learned for positive outcomes. Such in-depth learning of a new procedure can be daunting for any patient, especially an older patient undergoing age-related cognitive decline. For this reason, the complex learning of ostomy formation, ongoing assessment, and care can be detrimental to QOL in the elderly patient. Further research is warranted.

PSYCHOSOCIAL FACTORS

There appears to be more available QOL-related literature regarding older ostomates and psychosocial factors. Body image, sexuality, embarrassment, shame, and isolation are common themes (Alves de Lima, Muniz, Salome, & Ferreira, 2018; Williams, 2008a). Patients with colorectal issues have a QOL that is similar to younger patients until an ostomy procedure is performed (Mastracci, Hendren, O'Connor, & McLeod, 2006).

SELF-ESTEEM

Low self-esteem is common among elderly ostomates. Already dealing with age-related challenges, older ostomates can feel deserted from their social circles and family due to humiliation or perceived imposition if they reach out for assistance (Salome, Aguinaldo de Almeida, & Silveira, 2014). Lack of self-esteem has specific impact on the learning capacity for elderly ostomates. Boulton and Lewis (2010) claim that motivation and confidence are key aspects of the learning

process and even more so for the elderly. The authors found that health was among the top three learning desires among older patients. With this in mind, it is that much easier to understand the negative impact that self-esteem can have on a number of QOL factors for the elderly patient with an ostomy.

GAS AND ODOR

Literature confirms that gas and odor are among the greatest psychosocial concerns for those with ostomies. For many, the gas and odor that accompany an ostomy procedure can be detrimental to their psychosocial adjustment. Challenges include difficulty returning to work following an ostomy procedure related to fear of malodourous gas. Additionally, fear of escaping ostomy contents, seeping odor, and audible sounds have been noted to contribute to feelings of being overwhelmed. As a result, some feel confined to their homes and struggle in interactions with others. One related phenomena that has been identified to be particularly negative to psychosocial adjustment is that of body betrayal. This involves passing gas in a social setting due to lack of bowel control. Such events are known to be severely harsh on an individual's psyche resulting in a major setback to personal and social perception.

CULTURE

Generally speaking, issues concerning defecation are considered intimate and private within Western culture. Though recognized as a critical aspect of early development, there is a somewhat of a quiet and guarded approach when discussing defecation. Western culture endorses the idea of defection as unclean and even damaging with respect to other individuals. Further cultural aggravation comes from the importance of individual perception in Western society. Media outlets and general public promote unrealistic physical expectations with regards to appearance. With a backdrop of high societal expectations of physical achievement, those with ostomies are at risk for negative consequences following their procedure (Williams, 2008b).

GENERATIONAL CULTURE

There seems to be additional psychosocial issues among elderly ostomate when ostomy care issues arise. Blackley (as cited in Williams, 2008b) points out that elderly ostomates are affected by the time and culture from which they were raised. This means that many do not want to ask for help given that discussion of body-related issues was considered taboo in the past. As such, this could

perpetuate a negative cycle of ostomy care issues and further seclusion from family and support. Generational culture can be an influential factor in the adjustment of elderly individuals to a new ostomy.

CONFLICTING RESEARCH

Though a number of sources agree on certain causative factors that affect QOL among elderly ostomates, controversy exists. Not all literature agrees that elderly ostomates will certainly have a lesser QOL. For example, a study by Orsini et al. (2013) showed similar QOL between elderly ostomates and those without ostomies. Skeps et al. (2013) acknowledge that while some elderly ostomates do indeed suffer more psychologically following ostomy formation, some also appear to have an increased resolve as a result. These authors hold resilience as the determining coping factor that is associated with positive outcomes among new elderly ostomates. While more literature is available for QOL and psychosocial factors among elderly ostomates, there is still a very limited amount. More research is therefore needed.

CONCLUSION

Indeed, while some available research does directly and indirectly address the topic, available literature on the impact of ostomies on QOL among the elderly is overall very limited. While much research has been done concerning QOL and ostomies, most is not age-specific. There is a clear gap in literature that addresses the specific impact of ostomies on the QOL among the elderly. Such publishing is scarce and no systematic reviews appear to be available. Given that QOL incorporates physical, emotional, and psychosocial factors, questions specific to these areas can be utilized for future inquiry. Ultimately, the lack of available literature regarding elderly ostomates and QOL calls for further research on this subject.

REFERENCES

1) Alves de Lima, J., Muniz, K., Salome, G., & Ferreira, L. (2018). Association of sociodemographic and clinical factors with self-image, self-esteem and locus of health control in patients with an intestinal stoma. *Journal of Coloproctology, 38*(1), 56-64. https://doi.org/10.1016/j.jcol.2017.11.003
2) Black, P. (2009). Care of the older ostomate in the residential care setting. *Nursing & Residential Care*, *11*(3), 123-127.

3) Black, P. (2015). Caring for stoma patients with arthritis and mental incapacities. *British Journal of Community Nursing*, *20*(10), 487. doi:10.12968/bjcn.2015.20.10.487
4) Boulton-Lewis, G. M. (2010). Education and learning for the elderly: Why, how, what. *Educational Gerontology*, *36*(3), 213–228. https://doi.org/10.1080/03601270903182877
5) Cristina Maurício, V., de Oliveira Souza, N.V.D., da Costa, C.C.P., & Oliveira Dias, M. (2017). The view of nurses about educational practices targeted at people with a stoma. *Anna Nery School Journal of Nursing / Escola Anna Nery Revista de Enfermagem*, *21*(4), 1–8. https://doi.org/10.1590/2177-9465-EAN-2017-0003
6) Mastracci, T., Hendren, S., O'Connor, B., & McLeod, R. (2006). The impact of surgery for colorectal cancer on quality of life and functional status in the elderly*. Dis. Colon Rectum, 49*, 1878-1884.
7) Nichols, T., & Inglese, G. (2018). The burden of peristomal skin complications on health utility and quality of life. *World Council of Enterostomal Therapists Journal*, S11–S13. Retrieved from http://glbvv001.enmu.edu/login?url=https://search-ebscohost-com.glbvvproxy.enmu.edu/login.aspx?direct=true&db=ccm&AN=129149972&site=eds-live&scope=site
8) Orsini, R.G., Thong, M.S., van de Poll-Franse, L.V., Slooter, G.D., Nieuwenhuijzen, G.A., Rutten, H.J., & de Hingh, I.H. (2013). Quality of life of older rectal cancer patients is not impaired by a permanent stoma. *European Journal of Surgical Oncology, 39*(2), 164- 170.
9) Rinnerthaler, M., Streubel, M. K., Bischof, J., & Richter, K. (2015). Skin aging, gene expression and calcium [Abstract]. *Experimental Gerontology*, *68*, 59–65. https://doi.org/10.1016/j.exger.2014.09.015
10) Salome, G., Aguinaldo de Almeida, S., & Silveira, M. (2014). Quality of life and self-esteem of patients with intestinal stoma. *Journal of Coloproctology, 34*(4), 231-239. https://doi.org/10.1016/j.jcol.2014.05.009
11) Skeps, R., McMullen, C.K., Wendel, C. S., Bulkley, J., Grant, M., Mohler, J., & Herrinton, L.J. (2013). Changes in body mass index and stoma related problems in the elderly. *Journal of Geriatric Oncology*, *4*84-89. doi:10.1016/j.jgo.2012.10.172
12) Slater, R. (2010). Managing quality of life in the older person with a stoma. *British Journal of Community Nursing*, *15*(10), 480-484.
13) Soares Mota, M., Calcagno Gomes, G., & Madalosso Petuco, V. (2016). Repercussions in the living process of people with stomas. *Texto & Contexto Enfermagem*, *25*(1), 1.

doi:10.1590/0104-070720160001260014

14) Soares Pinto, I.E., Moreira Queirós, S.M., Ribeiro Queirós, C.D., Rodrigues da Silva, C.R., Vilaça de Brito Santos, C.S., & Correia de Brito, M.A. (2017). Risk factors associated with the development of elimination stoma and peristomal skin complications. *Revista de Enfermagem Referência*, *4*(15), 155–165. https://doi.org/10.12707/RIV17071

15) Williams, J. (2008a). Caring for the older ostomate. *Nursing & Residential Care*, *10*(2), 64-67.

16) Williams J. (2008b). Flatus, odour and the ostomist: Coping strategies and interventions. *British Journal of Nursing*, *17*(2), S10-4. Retrieved from http://glbvv001.enmu.edu/login?url=https://search-ebscohost-com.glbvvproxy.enmu.edu/login.aspx?direct=true&db=ccm&AN=105971888&site=eds-live&scope=site