International Wound Journal

WILEY

IWJ

REVIEW ARTICLE OPEN ACCESS

Social Determinants of Health Influencing the Health of Patients With a Stoma: A Discursive Paper

Sultan Ayaz-Alkaya

Faculty of Nursing, Gazi University, Ankara, Turkey

Correspondence: Sultan Ayaz-Alkaya (sultan@gazi.edu.tr)

Received: 7 October 2024 | **Revised:** 4 March 2025 | **Accepted:** 11 March 2025

Funding: The author received no specific funding for this work.

Keywords: health | nursing | ostomy | social determinants

ABSTRACT

Social determinants of health are responsible for health inequalities. There is increasing agreement that addressing the social determinants of health is vital to achieving health equity, especially for vulnerable people such as patients with a stoma. This paper aimed to examine social determinants of health that influence the well-being of patients with a stoma. The literature published between 2014 and 2024 in PubMed, CINAHL, SCOPUS and EMBASE was searched. This paper examined selected social determinants of health, including education opportunities, employment and working conditions, income, access to health services and quality, and social support. Several studies have found that social determinants of health are causative factors that impact the health of patients with a stoma. Social determinants of health are a prevalent topic in developed and developing countries worldwide. Factors such as access to health services, education opportunities, income level, employment and social support can influence the health and quality of life of patients with a stoma. Nurses could assess patients with a stoma regarding social determinants of health and provide them with equally accessible health care by caring for and educating them, considering their social needs and gaining insights that can help patients better adapt to healthy living.

1 | Introduction

Social determinants of health (SDH) are receiving increasing attention due to their impact on health disparities, health outcomes, and overall quality of life [1, 2]. SDH are "the social conditions that affect the health status of individuals in the environments where they are born, grow, live, work and age." These conditions are shaped by the local, national, and global levels of distribution of money, power, and resources. SDH are held responsible for unjustifiable and preventable differences in health status (health inequalities) within and between countries [3, 4]. Although isolating the impact of SDH is difficult, studies suggest that social and environmental factors are responsible for 75% of population health [1, 2].

World Health Organization (WHO) provides examples of the SDH, which can influence health equity in positive and negative ways: income and social protection, education, working life conditions, food security, housing, basic amenities, and the environment, social inclusion and non-discrimination, access to health services of decent quality [4]. Social protection is defined as the set of policies and programmes designed to reduce poverty, vulnerability, and social exclusion across all life stages and thereby fulfil a basic human right to social security [5]. Healthy People 2030 has generally grouped SDH into five domains: economic stability, education, health and health care, social and community context, and neighbourhood and built environment. Examples of SDH include education, job opportunities, income, safe housing, transportation, neighbourhoods, polluted air

Summary

- This paper could serve as a foundation for further research on social determinants of health in stoma patients.
- This paper contributes to developing more interventions and strategies for supporting stoma patients regarding social determinants of health.

and water, language, and literacy skills [3]. These factors have been consistently linked to health inequalities and poor health outcomes. SDH play a more critical role in shaping health outcomes compared to traditional clinical care [6]. In this context, SDH need to be considered to improve health and reduce health inequalities.

There is a growing consensus that addressing SDH is critical to achieving health equity, especially for the most vulnerable groups [6]. A faecal stoma is a disadvantage for anyone but may be necessary based on the disease necessitating ostomy surgery. Removal of the diseased colon and creation of colostomy (ostomy) is often the gold standard treatment for colorectal cancers [7]. An ostomy refers to a surgically created opening in the body for the discharge of metabolic waste [8]. Although ostomy surgery increases patients' survival rates, it can often negatively impact the physical, emotional, and social health of individuals and thus their quality of life [7, 9]. On the other hand, a stoma is the end of the small or large bowel that can be seen protruding through the abdominal wall [8]. Patients with a stoma are likely to experience physical, social, and psychological dysfunction to varying degrees [9, 10].

Following ostomy surgery, the normal anatomy and function of the gastrointestinal system are changed, and the intestinal contents are diverted to the exterior by an abdominal opening that is created in the small or large intestine. Therefore, ostomy surgery creates a sense of alteration in body image and a change in awareness of both the appearance and the function of an individual [11]. These changes may lead to substantial problems, such as decreased self-esteem, loneliness, and social isolation [7, 9, 12]. Despite their direct and significant impact on health outcomes, SDH are often overlooked by the traditional healthcare system. Most healthcare providers' training focuses solely on physiological factors that impact health [2]. Therefore, it is essential to evaluate patients with a stoma, one of the disadvantaged groups, regarding SDH and provide appropriate care.

Comprehensively addressing the issues affecting the health status and outcomes of patients with a stoma can contribute to providing quality care and supporting resource needs. It is thought that this paper would guide the determination of strategies for providing quality care by considering the social determinants associated with the health status of patients with a stoma. The aim of the present paper was to examine SDH that influence the well-being of patients with a stoma.

2 | Methods

2.1 | Search Strategy

This article was designed as a discursive paper which was written to emphasise an important gap in the issue. A discursive essay attempts to provide the reader with a balanced argument on a topic supported by evidence. The main aim of a discursive essay is to inform the reader of the key arguments and allow them to arrive at their own conclusion [13]. The journal articles published from 2014 to 2024 in PubMed, CINAHL, SCOPUS and EMBASE were searched for in this discursive paper exploring social determinants associated with health outcomes in patients with a stoma.

The search strategy included search terms such as: 'social determinants of health', 'ostomy', 'colostomy', 'stoma', 'nursing practice', and 'health inequality'. Scientific evidence was included if they met the following inclusion criteria: (1) participants are aged over 18 years old and have undergone colostomy or ileostomy surgery, (2) evidence available in full length, and (3) evidence that is published in English. The exclusion criteria were that the literature includes patients who received urostomy. All scientific evidence, such as study titles, abstracts and full-text articles, were reviewed by the researcher who performed PhD thesis on patients with a stoma and has scientific studies about this topic and public health. The researcher is a member of several interdisciplinary research teams. Also, the researcher gives conferences about stoma care at the Colon and Rectal Surgery Congresses in the international area and also contributes to scientific committees in the field.

3 | Results

The initial search resulted in 264 articles through database searching. After 182 duplicates were removed, there were 82 articles for title and abstract screening for eligibility. After excluding 46 articles, 38 articles remained for full-text screening. Thirty-one studies met the inclusion criteria from the full-text review.

SDH were grouped under five headings: education (academic) opportunities, employment and working conditions, income, access to health services and quality, and social support. Of the included articles ($n = 31$), seven were used to discuss education opportunities, eight were selected to discuss employment and working conditions, nine were used to discuss income, six were used to discuss access to health services and quality, and seven were used to discuss social support. Four articles were used to discuss the five headings.

4 | Discussion

This section discusses the effects and possible consequences of the selected SDH in patients with a stoma.

4.1 | Education Opportunities

Education is a strong determinant that affects an individual's health, socioeconomic status, occupation, employment and

social status [14]. The knowledge and skills gained through education contribute to individuals being more conscious about health, making better decisions and accessing health services more efficiently. People with higher levels of education are more likely to be healthier and live longer [3].

Since education, health, and well-being are interconnected, education level is an important determinant for the quality of life of patients with a stoma. Studies examining the education levels of patients with a stoma generally show that the education level is medium (secondary education) or low (primary education) [15–17]. A survey conducted in five European countries (Netherlands, Denmark, Sweden, Spain and Portugal) determined that most ($n = 1560$, 70%) of the patients with a stoma had ≤ 10 years and 11–14 years of education [16]. Davis et al. found that 12 (21.8%) patients had no formal education, 9 (16.4%) were primary school graduates and 25 (45.5%) were secondary school graduates [15]. In a study conducted in Türkiye, it was determined that 53 (53%) patients with a stoma were primary school graduates, and 17 (17%) were literate [17].

Education level is linked to the health levels of individuals. People with higher levels of education tend to be healthier than those with lower levels of education [18]. A systematic review of 95 articles found that information provided to people with a stoma is invaluable for care and that the amount of information included in education should be appropriate and presented in clear, simple language [19]. The same review showed that knowledge, communication and life experiences were the determinants of patients' responses to ostomy surgery and adaptation to their new daily life [19]. Education changes health behaviours, provides a better understanding of the disease and reduces the incidence of complications [18]. Therefore, education programmes should be organised considering the education level of patients with a stoma.

4.2 | Employment and Working Conditions

Employment is a social determinant of health and substantially benefits both personal and societal health. A person who is paid and has a job or a business is considered employed. Working conditions include work hours, breaks, work scheduling and compensation [20]. People need to work in meeting their needs. Unemployment is among the most critical factors that put health at risk. Being unemployed can lead to a decrease in physical and mental well-being [21]. The risk of unemployment or job loss leads to adverse health behaviours such as poor diet, addiction (tobacco, alcohol and drugs) and inactivity [21].

Patients with a stoma may experience difficulties in returning to professional life due to several emotions, such as fear, insecurity and anxiety related to the new living situation [22]. Following the ostomy surgery, many people may quit their jobs, often due to fear of social exclusion or the inability to work [22]. Alenezi et al. found that 101 (24%) patients changed their jobs, and more than half ($n = 238$, 56.5%) did not have a full-time job after the ostomy surgery, which affected their employment status [23]. Geng et al. found that only 126 (17.3%) of patients with a stoma were employed, and most ($n = 603$, 86.7%) were retired [24]. Nichols stated that job loss is one of the consequences of colostomy [25]. Therefore, it was concluded that work is of great importance in reintegrating the individual with ostomy into society, and nursing has a fundamental role in their adaptation and rehabilitation in the workplace [26].

Ostomy-related complications and the high price of stoma care products can lead to economic problems. This continues to be a burden for both retirees and private workers, especially those without jobs. Changes in economic or financial circumstances for sick people without suitable employment affect the family economy [7, 27]. The contribution of other people to the household income can reduce the economic difficulties experienced by the patient and their family [22]. Therefore, the adaptation of patients with a stoma to daily life should be ensured as soon as possible, and they should be encouraged to maintain social relationships and especially to continue working.

4.3 | Income

Income is an essential factor that determines the general living conditions, nutrition and physical activity levels of individuals, and it has physiological and psychological effects [28]. According to the World Development Indicators database, low income is $1045 or less, middle income is $1046 to $12 745, and high income is $12 745 or more [29]. Since there is a high correlation between income and education, an individual's education determines whether they have a job or a profession, and thus, their lifetime income [28].

Undergoing ostomy surgery due to colorectal diseases may affect the income level of individuals. After ostomy surgery, patients require stoma care products, including an ostomy bag or pouching systems that come with one or two pieces to manage the stoma effectively. The bag also comes with a barrier and a disposable plastic pouch [30]. The quantity of ostomy products needed by a beneficiary is determined primarily by the type of ostomy, its location, its construction and the condition of the skin surface surrounding the ostomy [31]. Medicare's coverage of ostomy supplies is explained in its Local Coverage Determination policy, and the allowable quantity limits are in this policy [32]. United Ostomy Association of America reported that patients with a stoma often have difficulty obtaining stoma care supplies in quantities greater than the limits allowed by Medicare [33]. Stoma care appliances are fully reimbursed in Belgium, Denmark, England, and the Netherlands via universal health insurance programmes. In France, patients pay between 10% and 20% of the cost of appliances that are prescribed, although many French citizens have supplemental health insurance which helps to minimise the level of additional out-of-pocket expenses [34]. The emergence of new costs caused by stoma care products and the inaccessibility of these products due to low income hinder the adaptation process of the individual and reduce the welfare level [31].

Maintenance of the peristomal skin is often challenging for patients with a stoma, and peristomal skin complications are prevalent [35]. Several products, including barrier creams and films, powders, pastes, seals, cleansers, lotions and stoma accessories, can be used to protect and treat the skin, and misuse of these products can increase costs [36]. One study found that patients with

a stoma with peristomal skin complications were more likely to be readmitted to the hospital than those without complications. The average total healthcare cost over 120 days was approximately $7000 higher in patients with peristomal skin complications [35].

A significant relationship was found between increased monthly income and better quality of life in patients with a stoma [22]. In a study conducted in Switzerland, it was determined that patients living with a permanent stoma incurred a significantly higher economic burden on the healthcare system and that the cost was higher for people with a new stoma [37]. A Danish study reported that patients with a stoma experience a significant health and financial burden attributable to ostomy-related complications, leading to increased health expenditures and reduced ability to work [38]. Therefore, stoma care needs to be better managed and supported for the benefit of patients with a stoma and at the cost of society.

4.4 | Access to Health Services and Quality

Healthcare access and quality include key issues, such as access to health care, access to primary care, health insurance coverage and health literacy [39]. In the healthcare setting, patients after ostomy surgery are quickly discharged from the hospital and pass the long-term care phase at home. Therefore, it is essential to maintain continuous care and access to health services to ensure that people with a stoma can continue to benefit from professional care services [40].

Reduced access to health services can lead to the early onset of complications and challenges for people with a stoma. Challenges may be compounded by loneliness, limited peer support, especially for those living in rural and regional areas, and poor access to mental health services [41]. In this context, access to quality healthcare services is vital for stoma care and prevention of complications.

Continuing care as an extension of post-discharge care is recognised as essential for high-quality health care and is believed to be indispensable for patients [40]. However, it was found that patients with a stoma did not receive the health services they needed after discharge [19]. Continuous care includes all elements of stoma care that facilitate patients living independently after discharge and returning to their everyday lives sooner [40]. According to the systematic review, participants reported positive aspects of having access to a multidisciplinary team of health professionals such as nurses, physicians and psychologists, and they placed great importance on the specialisation of nurses as stoma therapists [19]. Therefore, access to comprehensive and high-quality healthcare services for people with a stoma should be increased. In this context, it is thought that technology-based applications, such as mobile applications and online counselling, can be integrated into the continuous care of patients with a stoma.

4.5 | Social Support

Social support refers to the care and support that an individual has access to through ties with other individuals, groups and the wider community [41]. Social support perceived by individuals from family members, friends and health professionals positively affects the quality of life [10].

Ostomy surgery changes the physical appearance of the individual, which is essential for well-being and social interaction [22]. In addition, individuals tend to restrict themselves and isolate themselves from society due to problems such as anxiety, decreased self-esteem, faecal leakage and fear of sound/odour [9]. Patients with a stoma are often embarrassed to participate in social activities or may isolate themselves from social functioning [10]. Therefore, social support is vital to ensure the psychosocial adaptation of patients to living with a stoma.

Family members, health professionals, and other sources of social support play an important role in reducing the problems that arise after ostomy surgery, helping individuals adapt to the ostomy and overcome social difficulties [7, 10]. This support can also facilitate acceptance of life with a stoma and prevent social isolation. Moreover, support from the family is the most important resource for facing the pain [9]. A study determined that married patients with a stoma had higher psychological, social, and spiritual well-being than those living alone [42]. Therefore, psychosocial adaptation programmes can be implemented to facilitate the adaptation process of patients with a stoma and to ensure their rapid inclusion in daily life.

Support groups are among the most important tools for meeting social support needs. A study revealed that the ostomy adjustment level of patients with a stoma gradually increased in the 6th and 10th weeks after planned group interactions [43]. Support groups enable individuals to share their knowledge, experiences and problems in a safe environment and provide support to people with similar diseases [43, 44]. Establishing support groups for patients with a stoma increases social support and facilitates their social adaptation [43].

4.6 | Relevance to Practice

Nurses have a vital role in addressing health inequities to promote quality healthcare. Nursing has a clear mandate to ensure access to health and health care by providing responsive care to those experiencing inequalities and working to change the underlying social conditions that result in and perpetuate health inequalities [45].

While nurses have traditionally been taught to use a holistic perspective when caring for patients, little is known about nurses' perspectives on SDH. Given that health equity is a priority in health systems in general, nurses need to be knowledgeable about SDH and to intervene effectively in groups and communities to improve individual health [2, 6]. The nurse should be aware of factors that influence health beyond the choices of the individual, including social determinants, when assessing families and communities, planning and implementing interventions that promote positive change, and advocating for policies that address the root causes of disease and health inequities. Nurse leaders must take an active role in advocating strategies that address these critical issues.

Ostomy surgery puts the individual at risk in terms of social determinants. In this context, nurses should not neglect the areas and social conditions in which patients with a stoma grow up and continue their lives. Nurses may tend to believe that factors affecting the health outcomes of patients with a stoma, such as unemployment and low income, are outside their scope of work. Therefore, patients with a stoma should be evaluated regarding SDH, and they should be provided with equal and equitable access to health services. Future studies, including correlational or cross-sectional studies, could be designed to measure the relationships between the health status and social determinants of patients with a stoma. Qualitative studies could be planned to investigate in depth the experiences of patients with a stoma regarding the social determinants affecting their health. Moreover, experimental studies could be conducted to examine the effectiveness of interventions in reducing the negative effects of SDH on patients with a stoma.

5 | Conclusion

SDH are a prevalent topic in developed and developing countries worldwide. SDH significantly impacts people's health, well-being and quality of life. SDH also contributes to wide health disparities and inequities. Several social determinants can influence the health and quality of life of patients with a stoma. Determinants such as access to health services, educational opportunities, income level, employment and social support are important factors that guide the lives of patients with a stoma. Due to the differences regarding access to health resources and living and working conditions, patients with a stoma have more disadvantages than the general population. Therefore, it is essential to consider these social determinants and provide the support needed to improve the health and quality of life of patients with a stoma. Based on this discursive paper, the effects of SDH while meeting the stoma care and education needs of patients with a stoma should be considered by healthcare providers to minimise the adverse effects of SDH and facilitate their independence. Moreover, SDH should be integrated into strategic plans, health professions education curricula, research programmes and policy advocacy activities.

Conflicts of Interest

The author declares no conflicts of interest.

Data Availability Statement

The author has nothing to report.

References

1. S. Persaud, "Addressing Social Determinants of Health Through Advocacy," *Nursing Administration Quarterly* 42, no. 2 (2018): 123–128.

2. K. Schroeder, S. K. Malone, E. McCabe, and T. Lipman, "Addressing the Social Determinants of Health: A Call to Action for School Nurses," *Journal of School Nursing* 34, no. 3 (2018): 182–191.

3. Healthy People 2030, "Social Determinants of Health," U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, accessed May 10, 2024, https://health.gov/healthypeople/objectives-and-data/social-determinants-health.

4. World Health Organization, "Social Determinants of Health," accessed May 10, 2024, https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1.

5. J. Midgley, *Advanced Introduction to Social Protection* (Edward Elgar Publishing, 2022).

6. J. Phillips, A. Richard, K. M. Mayer, M. Shilkaitis, L. F. Fogg, and H. Vondracek, "Integrating the Social Determinants of Health Into Nursing Practice: Nurses' Perspectives," *Journal of Nursing Scholarship* 52, no. 5 (2020): 497–505.

7. A. Stavropoulou, D. Vlamakis, E. Kaba, et al., "Living With a Stoma: Exploring the Lived Experience of Patients With Permanent Colostomy," *International Journal of Environmental Research and Public Health* 18, no. 16 (2021): 8512.

8. Changi with General Hospital, "Advice on Ostomy (Stoma) Care," accessed February 12, 2025, https://www.cgh.com.sg/about-us/newsroom/healthlibrary/Documents/Gastro/Ostomy%20Stoma%20Care.pdf.

9. S. Ayaz-Alkaya, "Overview of Psychosocial Problems in Individuals With Stoma: A Review of Literature," *International Wound Journal* 16, no. 1 (2019): 243–249.

10. S. Bunkong, M. Arpanantikul, Y. Sirapo-Ngam, S. Monkong, C. Viwatwongkasem, and K. Olson, "A Model of Factors Influencing Health-Related Quality of Life Among Thais With Colorectal Cancer and a Permanent Colostomy," *Pacific Rim International Journal of Nursing Research* 27, no. 1 (2023): 185–199.

11. U. Jayarajah and D. N. Samarasekera, "Psychological Adaptation to Alteration of Body Image Among Stoma Patients: A Descriptive Study," *Indian Journal of Psychological Medicine* 39, no. 1 (2017): 63–68.

12. W. C. Zewude, T. Derese, Y. Suga, and B. Teklewold, "Quality of Life in Patients Living With Stoma," *Ethiopian Journal of Health Sciences* 31, no. 5 (2021): 993–1000.

13. P. Williamson, *Planning a Discursive Essay—Academic Writing Skills* (University of Queensland Publishing, 2021).

14. A. Zajacova and E. M. Lawrence, "The Relationship Between Education and Health: Reducing Disparities Through a Contextual Approach," *Annual Review of Public Health* 39 (2018): 273–289.

15. D. Davis, L. Ramamoorthy, and B. Pottakkat, "Impact of Stoma on Lifestyle and Health-Related Quality of Life in Patients Living With Stoma: A Cross-Sectional Study," *Journal of Education Health Promotion* 9, no. 1 (2020): 328.

16. M. Krogsgaard, H. Ø. Kristensen, E. J. Furnée, et al., "Life With a Stoma Across Five European Countries—A Cross-Sectional Study on Long-Term Rectal Cancer Survivors," *Support Care Cancer* 30, no. 11 (2022): 8969–8979, https://doi.org/10.1007/s00520-022-07293-y.

17. A. Turkmen and A. Ozbas, "Investigating the Effect of the Health Status of Patients With Stoma on Illness Perception: Descriptive-Cross Sectional Study," *International Journal of Caring Sciences* 12, no. 2 (2019): 1–8.

18. R. M. Pour, A. Darvishpour, R. Mansour-Ghanaei, and E. K. Leyli, "The Effects of Education Based on the Nursing Process on Ostomy Self-Care Knowledge and Performance of Elderly Patients With Surgical Stoma," *Nursing Research & Practice* 2023 (2023): 2800796.

19. C. Capilla-Díaz, C. Bonill-de Las Nieves, S. M. Hernández-Zambrano, et al., "Living With an Intestinal Stoma: A Qualitative Systematic Review," *Qualitative Health Research* 29, no. 9 (2019): 1255–1265.

20. International Labor Organization, "Working Conditions in a Global Perspective," http://eurofound.link/ef18066.

21. E. E. Dean, K. A. Shogren, M. Hagiwara, and M. L. Wehmeyer, "How Does Employment Influence Health Outcomes? A Systematic Review of the Intellectual Disability Literature," *Journal of Vocational Rehabilitation* 49, no. 1 (2018): 1–13.

22. C. A. Kimura, R. M. Silva, D. B. Guilhem, and K. R. Modesto, "Sociodemographic and Clinical Factors Related to the Quality of Life in

Intestinal Ostomy Patients," *Revista Baiana de Enfermagem* 34 (2020): e34529.

23. A. Alenezi, K. Livesay, I. McGrath, and A. Kimpton, "Ostomy-Related Problems and Their Impact on Quality of Life of Saudi Ostomate Patients: A Mixed-Methods Study," *Journal of Clinical Nursing* 32, no. 13–14 (2023): 3707–3719.

24. Z. Geng, D. Howell, H. Xu, and C. Yuan, "Quality of Life in Chinese Persons Living With an Ostomy: A Multisite Cross-Sectional Study," *Journal of Wound, Ostomy, and Continence Nursing* 44, no. 3 (2017): 249–256.

25. T. R. Nichols, "Quality of Life in US Residents With Ostomies as Assessed Using the SF36v2," *Journal of Wound, Ostomy, and Continence Nursing* 42, no. 1 (2015): 71–78.

26. G. Barbosa, H. C. Paschoalin, R. M. Greco, and S. M. Dias, "Experiences of People With Stoma in the Workplace," *Estima – Brazilian Journal of Enterestomal Therapy* 16, no. 1 (2018): 1–9.

27. F. Alwi, S. Setiawan, and A. Asrizal, "Quality of Life of Persons With Permanent Colostomy: A Phenomenological Study," *Journal of Coloproctology (Rio de Janeiro)* 38, no. 4 (2018): 295–301.

28. P. Kuehnert, J. Fawcett, K. DePriest, et al., "Defining the Social Determinants of Health for Nursing Action to Achieve Health Equity: A Consensus Paper From the American Academy of Nursing," *Nursing Outlook* 70, no. 1 (2022): 10–27.

29. World Health Organization, "The Global Health Observatory," https://www.who.int/data/gho/indicator-metadata-registry/imr-details/193.

30. M. White, "Stoma Care: Choosing the Right Appliances and Accessories," *Nursing and Residential Care* 20, no. 5 (2018): 190–193.

31. R. S. Andrade, L. P. de Meiros, L. S. Freitas, C. G. Queiroz, S. P. Lucena, and G. de Vasconcelos Torres, "Quality of Life Regarding People With an Ostomy: Integrative Review About Related Factors," *International Archives of Medicine* 9 (2016): 202.

32. Centers for Medicare & Medicaid Services, "Ostomy Supplies," https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?LCDId=33828.

33. United Ostomy Associations of America, "Access to Supplies With Medicare—The Never-Ending Story," https://www.ostomy.org/access-to-supplies-with-medicare-the-never-ending-story/.

34. MedTech Europe, "Access to Ostomy Supplies and Innovation: Guiding Principles for European Payers," accessed February 12, 2025, https://www.medtecheurope.org/wp-content/uploads/2015/09/20020 12_MTE_Access-to-Ostomy-Supplies-and-Innovation-Guiding-Princ iples-for-European-Payers_Backgrounder.pdf.

35. C. Taneja, D. Netsch, B. S. Rolstad, G. Inglese, D. Eaves, and G. Oster, "Risk and Economic Burden of Peristomal Skin Complications Following Ostomy Surgery," *Journal of Wound, Ostomy, and Continence Nursing* 46, no. 2 (2019): 143–149.

36. S. K. O'Flynn, "Peristomal Skin Damage: Assessment, Prevention and Treatment," *British Journal of Nursing* 28, no. 5 (2019): S6–S12.

37. E. Carlsson, A. Forsmark, C. Sternhufvud, G. Scheffel, F. B. Andersen, and E. I. Persson, "Short-and Long-Term Direct and Indirect Costs of Illness After Ostomy Creation—A Swedish Nationwide Registry Study," *BMC Health Services Research* 23, no. 1 (2023): 837.

38. F. B. Andersen, J. Kjellberg, R. Ibsen, C. Sternhufvud, and B. Petersen, "The Clinical and Economic Burden of Illness in the First Two Years After Ostomy Creation: A Nationwide Danish Cohort Study," *Expert Review of Pharmacoeconomics & Outcomes Research* 24, no. 4 (2024): 567–575.

39. Centers for Disease Control and Prevention, "Health Care Access and Quality," https://www.cdc.gov/prepyourhealth/discussionguides/healthcare.htm.

40. Y. Jin, X. Tian, Y. Li, M. Jiménez-Herrera, and H. Wang, "Effects of Continuous Care on Health Outcomes in Patients With Stoma: A Systematic Review and Meta-Analysis," *Asia-Pacific Journal of Oncology Nursing* 9, no. 1 (2022): 21–31.

41. S. Yu, X. Yao, Y. Sang, et al., "The Mediating Role of Resilience in the Relationship Between Social Support and Quality of Life Among Patients After Radical Cystectomy: A Structural Equation Model Analysis," *Nursing Open* 10, no. 3 (2023): 1574–1581.

42. I. V. Diniz, I. K. F. Costa, J. A. Nascimento, I. P. D. Silva, A. E. O. D. Mendonça, and M. J. G. O. Soares, "Factors Associated to Quality of Life in People With Intestinal Stomas," *Revista da Escola de Enfermagem da USP* 55 (2021): 1–8.

43. H. K. Karabulut, L. Dinç, and A. Karadag, "Effects of Planned Group Interactions on the Social Adaptation of Individuals With an Intestinal Stoma: A Quantitative Study," *Journal of Clinical Nursing* 23, no. 19–20 (2014): 2800–2813.

44. J. Kittscha, V. Wilson, G. Fairbrother, and V. Bliokas, "The Role of Peer Support Groups in Adjustment to Stoma: A Qualitative Study," *Collegian* 31, no. 3 (2024): 173–179.

45. V. Tiase, C. D. Crookston, A. Schoenbaum, and M. Valu, "Nurses' Role in Addressing Social Determinants of Health," *Nursing* 52, no. 4 (2022): 32–37.