

PSYCHOSOCIAL ADAPTATION IN PATIENTS WITH COLOSTOMY: A LITERATURE REVIEW

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Summary: Colostomy, a surgical procedure most commonly performed due to colorectal cancer, inflammatory bowel disease or trauma, causes significant changes in patients' physical, emotional and social functioning. The aim of this review was to synthesize the existing literature on psychosocial adaptation after colostomy creation, identify key influencing factors, challenges and possible interventions. A search was conducted in PubMed, Scopus, Google Scholar and PMC using keywords related to psychosocial adaptation and quality of life in stoma patients (1995–2025). The literature indicates a high prevalence of anxiety and depression (30–50%) in the first months after surgery, as well as issues with body image, social isolation and sexual dysfunction. Key factors for successful adaptation include social and family support, disability acceptance, time since surgery and early education. A multidisciplinary approach involving support groups and psychological counseling significantly improves outcomes. The lack of local studies in Serbia highlights the need for further research in our context.

Keywords: colostomy, ostomy, psychosocial adaptation, quality of life, social support.

Introduction

Colostomy represents a surgical intervention in which an artificial opening is created on the abdominal wall for the elimination of digestive waste products. It most commonly results from the treatment of colorectal cancer, inflammatory bowel diseases (Crohn's disease or ulcerative colitis), or trauma [1]. The procedure for creating a colostomy can be temporary or permanent. It is estimated that more than 100,000 colostomies are performed annually in Europe and North America, with a growing number of patients surviving the underlying disease owing to advances in oncology and surgery [1]. Although colostomy, as part of emergency or elective surgical procedures, saves lives, it leads to significant changes in patients' daily functioning, which can substantially affect their physical, emotional, and social well-being [2].

Psychosocial adaptation of patients after colostomy creation is a complex process of adjustment to numerous changes. This process encompasses emotional reactions, social interactions, alterations in body image perception, and sexual function [2, 3]. The literature indicates that 30–50% of patients experience significant psychological difficulties

in the first months following surgery, including feelings of stigma, loss of control, and diminished quality of life [1]. Factors such as gender, time elapsed since surgery, and the level of social support play a crucial role in this process. For instance, acceptance of disability and participation in support groups facilitate better adaptation [3].

Despite the clear medical benefits, psychosocial challenges remain insufficiently recognized in clinical practice. This creates a need for a holistic, patient-centered approach that integrates psychological support and education [2]. However, in Serbia, there is a notable lack of local empirical studies on the psychosocial adaptation of patients with colostomy. The majority of available data originate from Asian and Western European countries, which limits the direct applicability of these findings to our specific cultural, social, and healthcare context — particularly in rural areas with limited access to multidisciplinary care.

The aim of this literature review is to synthesize the existing body of literature on psychosocial adaptation in patients with colostomy, to identify key influencing factors, challenges, and potential interventions, with a special emphasis on the implications for

biopsychosocial care in modern medicine and the urgent need to conduct similar research in Serbia..

Methods

For this literature review, a comprehensive search of the available literature was conducted to identify relevant sources on the psychosocial adaptation of patients following colostomy creation. The following databases were searched: PubMed, Scopus, Google Scholar, and PubMed Central (PMC). These databases were selected because they provide extensive coverage of both medical and psychosocial literature and offer substantial open-access resources.

The search keywords included: “stoma adaptation”, “psychological effects ostomy”, “psychosocial adaptation stoma”, and “quality of life colostomy patients”. The search covered articles published between 1995 and 2025 in order to include both recent findings and earlier seminal works relevant to the core concepts. Only articles written in English and Serbian language were included. No relevant results were identified in the Serbian language.

Inclusion criteria encompassed review articles, empirical studies, case studies, and meta-analyses that addressed the psychosocial aspects of colostomy. Articles were excluded if they focused exclusively on the surgical technique of stoma creation without addressing psychosocial issues, or if they had significant methodological limitations (e.g., sample size smaller than 10 patients or lack of clearly described methodology).

Results

The literature review identified numerous studies addressing the psychosocial aspects of life in patients with colostomy. The findings were synthesized thematically into the following domains: psychological aspects, social aspects, sexual and intimacy-related issues, factors influencing adaptation, and implemented interventions.

Psychological aspects

Psychological problems are among the most common challenges faced by patients with colostomy, with the prevalence of anxiety and depression reaching 30–50% in the first months after surgery [1,7,8]. The literature highlights that patients frequently experience a sense of loss of control over their body, leading to changes in body image perception, decreased self-confidence, and possible body dysmorphia

[2,8,9]. For example, one review study noted that anxiety often arises from the fear of leakage or odor from the colostomy, which affects daily activities and contributes to social isolation [1]. Qualitative studies show that these symptoms tend to decrease over time but may persist in the absence of early intervention, particularly in patients with a permanent colostomy [4, 10]. Contradictions in the literature include cultural variations, where patients in Asian countries report higher levels of stigma compared to those in Western countries, which further exacerbates depression [3,11]. Additionally, older patients tend to demonstrate greater emotional resilience, whereas younger patients often experience a more intense sense of loss [5].

Social aspects

Social isolation is a frequent problem, as many patients avoid social contacts due to fear of stigmatization or practical difficulties related to the colostomy [8,9,10]. Studies emphasize the important role of family and social support in mitigating these effects. Patients with a strong support network show better adaptation and lower levels of loneliness [3,4,8]. Support groups, such as those in stoma clinics, contribute to the normalization of the experience through sharing personal stories, thereby reducing social anxiety and improving social integration [6,7,12]. However, some findings suggest that men more commonly experience social isolation due to cultural expectations of strength and independence, while women tend to make better use of social resources [5]. The literature also indicates that lack of family support leads to prolonged isolation, especially in rural areas with limited access to healthcare services [3,9].

Sexual and intimacy issues

Sexual dysfunction represents a significant aspect, with reports indicating that up to 40% of patients experience decreased libido or fear of intimacy due to changes in body image perception and physical limitations [1, 2]. The literature shows that these problems negatively affect partner relationships, as patients often avoid sexual activity out of fear of complications such as leakage from the stoma [8,9]. Women tend to report greater difficulties with the emotional aspects, while men more frequently report physical problems, such as erectile dysfunction, which can lead to increased marital tension [5,7,8]. Positive findings suggest that education and counseling can significantly improve sexual adaptation after 6–12 months,

provided that the problems are identified early [4,10]. Cultural differences are evident, with patients from more conservative societies reporting higher levels of sexual stigma [3,11].

Factors influencing adaptation

Several factors modulate the adaptation process, including time since surgery (better adaptation after 1–2 years), gender (women often adapt better socially, while men may adapt better psychologically), and the level of perceived stigma [3,5,10]. Acceptance of disability has emerged as a key predictor, with patients showing higher levels of acceptance demonstrating lower levels of depression and better quality of life [6,9,10].

Social factors such as family support and cultural context also play an important role. For example, patients of rural origin in Nepal experience greater difficulties due to a lack of resources, whereas patients in developed countries make better use of professional assistance [3,8,11]. Limitations of the literature include the scarcity of longitudinal studies, which hinders the tracking of long-term effects, as well as the frequent focus on specific populations, particularly oncology patients [2,9]. Additionally,

factors such as education and employment status influence adaptation, with patients having higher education levels showing better adjustment [1,8].

Interventions

Interventions primarily focus on education, psychological counseling, and support groups. Studies demonstrate that support groups significantly improve adaptation by enabling the sharing of experiences and practical advice, reducing anxiety by 20–30% [4,7,12]. Nurses play a crucial role in early education on colostomy management, which decreases anxiety and enhances patient autonomy [5,6]. A multidisciplinary approach, including psychologists and social workers, is recommended for holistic care, with an emphasis on individualized programs [1,8,9]. The effectiveness of these interventions varies, with better outcomes observed in structured programs; however, there are conflicting findings regarding their long-term efficacy without continuous support [2,9]. The literature suggests that the integration of technology, such as online support groups, may improve access to support, particularly in rural areas [3,10,11].

Table 1: Comparison of key findings from selected

Study	Year	Type of Study	Main Focus	Key Findings	Main Limitations
Ayaz-Alkaya [1]	2019	Literature review	Psychosocial problems	High prevalence of anxiety and depression (30–50%)	Review article, no new empirical data
Bekkers et al. [2]	1995	Literature review	Adaptation to stoma	Emotional and social factors are important; interventions improve outcomes	Older study, limited contemporary context
Gautam & Poudel [3]	2016	Cross-sectional survey	Psychosocial adaptation	Family support is crucial; rural patients face greater difficulties	Small sample, limited to Nepal
Gautam & Poudel [5]	2016	Comparative study	Effect of gender	Gender differences in psychosocial adjustment	Limited to colorectal cancer patients
Xi et al. [10]	2022	Multicenter cross-sectional	Stigma and disability acceptance	Disability acceptance reduces depression and improves adaptation	Cross-sectional design, no longitudinal follow-up
Aker et al. [8]	2025	Correlational study	Social support and self-efficacy	Positive relationship between perceived social support and stoma self-efficacy	Correlational design, only permanent colostomies
Eraydın et al. [7]	2025	Descriptive cross-sectional	Adaptation and sleep quality	Poor sleep quality is associated with poorer adaptation and depression	Cross-sectional design, limited to Turkey
Kittscha et al. [4, 12]	2022/2024	Integrative review & qualitative	Adjustment to ostomy and peer support	Support groups significantly facilitate adaptation	Qualitative approach (for [12])
Repić [13]	2017	Prospective cohort study	Quality of life and depression in	QoL lowest at 1 month; depression 57.1% →	Older study (2017); limited to Vojvodina

			permanent colostomy	32.1%; depression significantly worsens QoL	
Bogdanović et al. [14]	2023	Literature review	Factors affecting quality of life	Psychological aspects, body image and multidisciplinary support are crucial	Narrative review, no original data

Discussion

The synthesized findings from the literature confirm that psychosocial adaptation to colostomy is a complex, dynamic, and multidimensional process encompassing emotional, social, and sexual challenges. The early postoperative phase is also the most difficult, characterized by high levels of anxiety, depression, and body image disturbances, while patients' quality of life and autonomy gradually improve over time, particularly with adequate support [1,4,10].

These findings are largely consistent with the limited local research conducted in Serbia. Repić [13], in a prospective study, demonstrated that quality of life was poorest one month after permanent colostomy creation, with a high prevalence of depressive symptoms (57.1%) that significantly declined by the sixth month (32.1%). Similarly, Bogdanović et al. [14] emphasized the dominant influence of psychological factors, changes in body image perception, and the critical importance of early education and multidisciplinary support.

Key protective factors for successful adaptation include strong social and family support, acceptance of the new body image, and early education [3, 8, 10]. Although these findings are mostly consistent across the literature, some contradictions exist regarding the influence of gender and cultural context. The majority of studies were conducted in Asia (Nepal, Vietnam, China, Turkey) or Western Europe, whereas data from the Western Balkans, including Serbia, remain scarce [3, 8, 10, 11]. This constitutes a significant gap in the literature, given that cultural attitudes toward disability, body image, and sexuality vary considerably among populations.

The main limitations of the reviewed literature include the predominance of cross-sectional studies, small sample sizes, heterogeneity of populations (most studies focus on oncology patients) [2], and the lack of long-term longitudinal research. In the Serbian context, only two relevant publications are currently available — Repić's doctoral

dissertation [13] and the review by Bogdanović et al. [14]. While these works provide valuable local insights, they are limited in scope and do not offer long-term follow-up beyond six months or representation of patients from all regions of the country.

Implications for Clinical Practice In Serbia, a holistic biopsychosocial approach is essential in the care of patients with colostomy. Early screening for anxiety and depression, regular education by trained stoma care nurses, establishment of support groups in hospitals, and inclusion of psychologists in the multidisciplinary team are strongly recommended [1, 4, 8]. Particular attention should be paid to patients from rural areas and younger individuals [7, 8, 12].

Recommendations for Future Research Longitudinal studies in Serbia are needed to follow patients during the first five years after surgery, examining factors such as cultural context and access to healthcare services. These studies should ideally employ mixed-methods designs to provide a deeper understanding of individual experiences, with special focus on subgroups such as younger patients or those with permanent colostomies [3]. Furthermore, research on the effectiveness of digital interventions (e.g., online support groups) would be particularly valuable in the contemporary setting [9].

Conclusion

Psychosocial adaptation in patients following colostomy creation is a complex and dynamic process that involves emotional, social, and sexual challenges. The early phase of adaptation is most often characterized by high levels of anxiety, depression, and alterations in body image perception. However, over time and with adequate support, patients' quality of life and autonomy significantly improve. The key factors for successful adaptation include strong social and family support, acceptance of the new condition, early education, and participation in support groups.

Early identification of problems and multidisciplinary support (involving physicians, nurses, and psychologists) can substantially reduce long-term negative consequences and help patients regain control over their lives.

Future research, particularly longitudinal studies conducted in the local

Serbian context, would be of great value for a better understanding of the specific factors and needs of this population. Such studies would enable more effective and tailored care for patients with colostomy.

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