Biological and Clinical Sciences Research Journal

eISSN: 2708-2261; pISSN: 2958-4728

www.bcsrj.com

DOI: https://doi.org/10.54112/bcsrj.v6i4.2013
Biol. Clin. Sci. Res. J., Volume 6(4), 2025: 2013

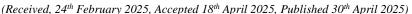
Original Research Article

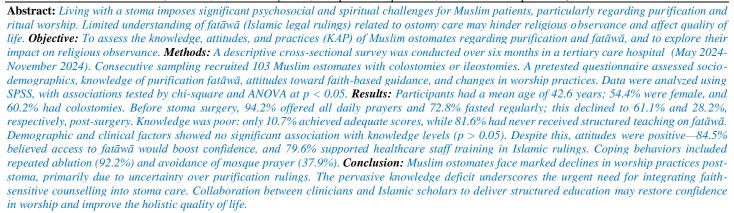


Knowledge, Attitudes and Practices Regarding Muslim-Specific Fatāwās (Protocols) Regarding Purification (Ablution) Amongst Muslim Ostomates

Hafiz Yahya Iftikhar^{1*}, Farhan Zaheer², Syeda Mahjabeen¹, Amber Ali¹, Tayram Khalid¹

¹Surgical Unit 5, Dr Ruth K M Pfau CHK, Karachi, Pakistan ²Department of Surgery 5, Institute Dow University of Health Sciences, Karachi, Pakistan *Corresponding author`s email address: dr.yahyaiftikhar@gmail.com





Keywords: Ostomy, Muslim patients, Purification, Fatāwā, Ablution, Quality of life, Knowledge-attitude-practice

[How to Cite: Iftikhar HY, Zaheer F, Mahjabeen S, Ali A, Khalid T. Knowledge, attitudes and practices regarding muslim-specific fatāwās (protocols) regarding purification (ablution) amongst muslim ostomates. Biol. Clin. Sci. Res. J., 2025; 6(4): 231-234. doi: https://doi.org/10.54112/bcsrj.v6i4.2013

Introduction

An intestinal stoma (IS) is a surgically created opening on the abdominal wall that allows fecal diversion when continuity of the gastrointestinal tract cannot be maintained. Globally, stoma formation remains a standard procedure in colorectal and gastrointestinal surgery, with an estimated 102,000 people living with a stoma in the United Kingdom alone (1) and similar burdens across Europe, the Middle East, and South Asia (2). Despite advances in sphincter-preserving techniques, sphincter-sacrificing operations leading to permanent stomas remain frequent, especially in low- and middle-income countries where late presentations of colorectal and enteric pathologies are common (3). Stoma creation often saves life but carries substantial psychological, social, and spiritual consequences, compounding the physical morbidity of colorectal disease (4,5).

Among Muslim patients, the burden of stoma formation is particularly complex. Multiple studies indicate that Muslims report poorer quality of life (QoL) after stoma surgery compared to non-Muslims, regardless of geography (6,7). In the UK, where Muslims constitute approximately 2.7 million people, predominantly of South Asian origin (8), colorectal cancer patients from this community often present younger, at more advanced disease stages, and have higher permanent stoma rates (9). Socioeconomic disadvantage, language barriers, and lower engagement with bowel cancer screening further exacerbate outcomes (10). Comparable challenges are documented across Muslim-majority nations, including Pakistan, Bangladesh, and Saudi Arabia, where ostomates experience stigma, social withdrawal, and significant disruption to religious life (11,12).

Recent regional data highlight the scale of the problem. In Pakistan, hospital-based studies have begun quantifying stoma caseloads. At the Allama Iqbal Memorial Teaching Hospital in Sialkot, among 2,243 abdominal emergency surgeries, 107 patients required stoma formation—equating to 4.8% of emergency procedures (13). Other tertiary hospitals report similar steady caseloads, underscoring that stomas remain a frequent outcome in emergency gastrointestinal surgery. In India, national-level estimates suggest a significantly larger burden: a survey by the Asia South Pacific Ostomy Association and the Ostomy Association of India (2010–2012) reported approximately 300,000 ostomates nationwide (3 lakh people) (14). This Figure, frequently cited in stoma care literature, reflects the absence of centralized registries but provides the best available indicator of prevalence. Both Pakistan and India thus represent regions with large, underserved populations of ostomates, many of whom are Muslim.

For Muslims, ritual purity (tahārah) and religious practice are central to daily living. Acts such as ablution (wudū'), prayer (salāh), fasting (sawm), and pilgrimage (ḥajj/ʿumrah) require specific states of physical cleanliness and spiritual readiness. The presence of a stoma bag often generates confusion: does leakage invalidate wudū'? Is the bag itself a source of impurity? Must it be cleaned before every prayer? Such uncertainty creates religious anxiety, with some patients skipping prayers or avoiding communal worship altogether (15,16). Research shows that patients with abdominal stomas in Muslim contexts are more likely to reduce prayer frequency, avoid mosques, or modify fasting practices compared with other groups (17,18).

In response, scholars and clinicians have begun developing stomaspecific fatāwā. Landmark work by Iqbal et al. engaged Islamic Faith leaders (IFL) alongside Muslim patients to issue rulings clarifying that: (1) the presence of a stoma bag does not nullify wudū'; (2) discharge from the stoma is involuntary and exempt from impurity rulings akin to chronic illness; and (3) protective covers are sufficient during prayer (19). Such faith-sensitive protocols have been shown to reduce patient anxiety, improve adherence to religious practice, and enhance overall QoL (19,20).

Theological analyses reinforce that Islamic jurisprudence emphasizes ease and removal of hardship: where water use is difficult, tayammum (dry ablution) may substitute; when prosthetic or stoma appliances cannot be removed, wiping suffices; and exemptions are granted when purity rituals would endanger health (21–23). By integrating such guidance into clinical counselling, healthcare providers can significantly improve spiritual wellbeing, compliance, and adjustment among Muslim ostomates (20,16).

Despite these advances, awareness of stoma-related fatāwā among both patients and healthcare providers remains low in Pakistan, India, and other Muslim-majority contexts. Many patients rely on informal advice from family or local Imams rather than structured pre-operative counselling (11,12). The knowledge-attitude-practice (KAP) gap persists: some patients know of religious concessions but do not practice them, while others maintain misconceptions that hinder worship. Structured, culturally and religiously sensitive education is therefore urgently needed. This study seeks to explore the knowledge, attitudes, and practices regarding Muslim-specific fatāwā on purification among ostomates, providing evidence that can inform faith-sensitive counselling, improve patient confidence in religious observance, and ultimately enhance quality of life in this vulnerable group.

Methodology

A descriptive cross-sectional survey was conducted over six months (May 2024-November 2024) in the surgical department of a tertiary care teaching hospital to assess knowledge, attitudes, and practices of Muslim gastrointestinal ostomates regarding purification and related fatāwā.

Adult patients with gastrointestinal stomas (colostomy or ileostomy), either temporary or permanent, were included. Patients with urinary diversions (urostomies) or those declining participation were excluded. Sample size was calculated using the WHO Sample Size Calculator (recommended by CPSP), at 95% confidence, 5% margin of error, and assumed knowledge prevalence of 50%, yielding a minimum of 100. Consecutive non-probability sampling was used to recruit all eligible patients during the study period.

A structured, pretested questionnaire was used, developed after a literature review and adapted from validated tools. It comprised:

After informed consent, the questionnaire was interviewer-administered in the local language to minimize literacy bias. Data were entered into IBM SPSS (version 27). Means and standard deviations summarized continuous variables, while frequencies and percentages described categorical data. Associations between knowledge scores and demographic/clinical variables were tested using chi-square or Fisher's exact test, with significance at $p < 0.05. \ \,$

Ethical approval was obtained from the Institutional Review Committee. Written informed consent was taken from all participants. Coding responses ensured confidentiality, and data were used solely for research purposes.

Results

A total of 103 Muslim ostomates participated. The mean age was 42.6 years (range 18–72), with 31.1% between 25 and 40 years. Females made up 54.4% of the sample. Educational attainment was limited, with 66.0% reporting only matriculation or below. Regarding clinical profile, 60.2% had colostomies, 33.0% ileostomies, and 6.8% double-barrel stomas. Duration since stoma formation was <1 year in 57.3% and >2 years in 21.4%.

Prior to stoma creation, 94.2% offered all five daily prayers, and 72.8% reported fasting regularly during Ramadan. After surgery, these figures dropped significantly: 61.1% maintained five daily prayers, while only 28.2% continued regular fasting (Table 1). Anxiety about ritual impurity, fatigue, and fear of leakage were the most cited barriers. Stoma type did not significantly influence prayer frequency ($\chi^2 = 16.8$, p = 0.40).

Knowledge levels were notably poor. (Table2) Only 10.7% achieved adequate knowledge (\geq 4/6 correct responses). The majority (62.1%) answered 2–3 correctly, while 27.2% had \leq 1 correct. Lack of clarity regarding purity was common, with 74.8% unsure if stoma leakage invalidated ablution. Importantly, 81.6% had never received any structured teaching about purification fatāwā. Chi-square tests revealed no significant difference in knowledge adequacy by gender ($\chi^2 = 1.82$, p = 0.18) or educational status ($\chi^2 = 5.73$, p = 0.12). Similarly, mean knowledge scores did not vary significantly across age groups (ANOVA F = 1.46, p = 0.21).

Attitudinal responses were strongly positive toward structured guidance. Nearly 84.5% believed access to fatawā would boost their religious confidence, and 79.6% felt healthcare staff should be trained in Islamic purification rules. However, 71.8% expressed dissatisfaction with their current level of knowledge. More than half (56.3%) reported discussing their concerns with imams for clarity. These findings reflect the gap between need and the current provision of guidance.

Religious practices shifted after stoma formation. Almost all patients (92.2%) reported performing ablution more frequently, often repeating it multiple times per day due to leakage concerns. However, this increased vigilance was accompanied by reduced participation in core rituals: 41.7% decreased Quran recitation, and 37.9% avoided mosque congregational prayers, preferring to pray at home to limit embarrassment and anxiety. Fasting during Ramadan had decreased in nearly three-quarters of the group, mainly due to fears of dehydration, leakage, or physical strain.

Overall, the results highlight a sharp decline in ritual practices postsurgery, closely linked to poor knowledge and high uncertainty about purity. Statistical tests confirmed that demographic factors such as age, gender, and education did not significantly predict knowledge adequacy, underscoring that the deficit is widespread. Patients expressed strong interest in fatāwā-based education, particularly if integrated with medical counseling.

Table 1: Religious Practices Before and After Stoma Formation

Table 1. Rengious Fractices Delote and Arter Stoma Formation					
Practice	Before (%)	After (%)			
Regular five daily prayers	94.2	61.1			
Regular fasting in Ramadan	72.8	28.2			
Ablution repeated multiple times/day.	-	92.2			
Quran recitation decreased	-	41.7			
Avoided mosque congregational prayers	-	37.9			

Table 2: Knowledge Levels Regarding Purification Fatāwā

Table 2. Knowledge Levels Regarding I di incation Fatawa		
Knowledge Score	n (%)	
Adequate (≥4/6 correct)	11 (10.7%)	

	-,	, (====)
Moderate (2–3 correct)	64 (62.1%)	
Poor (≤1 correct)	28 (27.2%)	
Unclear if stoma leakage invalidates ablution	77 (74.8%)	
Received structured teaching	19 (18.4%)	

Discussion

This study provides important insight into how Muslim ostomates in Pakistan navigate the complex interface of surgical care and religious obligations. The sharp drop in prayer and fasting frequencies postoperatively—despite near-universal adherence before surgery—reflects the profound spiritual disruption caused by uncertainty over purification. This pattern is consistent with prior qualitative and quantitative reports from Muslim societies: in Turkey, post-stoma fasting dropped from ~87% to ~44% and prayer adherence similarly declined (Cavdar et al.) (24). A Saudi Arabian study found significant reductions in mosque attendance post-ostomy, particularly among female patients concerned about cleanliness and stigma (Alenezi et al.) (25).

The extremely low proportion (10.7%) of ostomates achieving "adequate knowledge" underscores a critical educational gap. The absence of association between knowledge and demographic factors (gender, education, age) suggests that these gaps are systemic and pervasive rather than confined to disadvantaged subgroups. This aligns with findings from Iqbal et al., who reported that even in Muslim communities with higher educational levels, awareness of stoma-specific fatawā was rare among patients and providers alike (19). The lack of structured teaching reported by 81.6% of participants signals a failure of healthcare systems to incorporate faith-sensitive counselling.

Despite low knowledge, attitudes were strongly favorable: >84% believed fatawā access would boost confidence, and >79% supported healthcare training in purification rulings. The fact that over half sought guidance from imams suggests that patients are actively attempting to fill the knowledge void. These findings echo qualitative studies from Pakistan and Bangladesh, where spiritual counseling was consistently requested by ostomates struggling with religious anxiety (Ahmad et al.; Rahman et al.) (26,27). In Gulf settings, collaborations between clinicians and Faith scholars have successfully published pamphlets clarifying purification among stoma patients, which were positively received (Iqbal et al.; Habib et al.) (19,20).

The increase in repeated ablution is a vivid behavioral surrender to anxiety: 92.2% reported performing wudū more often, often multiple times per prayer. However, these compensatory behaviors did not prevent declines in worship: ~42% reduced Quran recitation and ~38% avoided mosque attendance. This mirrors findings in the Middle East, where ostomates described social withdrawal from mosques to avoid scrutiny or discomfort (Alenezi et al.; Miah et al.) (25,28). The decline in fasting for nearly three quarters of participants is particularly concerning, given the central role of Ramadan in Muslim life; similar reductions in fasting have been documented in Turkish and Middle Eastern ostomy cohorts (Altuntaş et al.; Cavdar et al.) (24,29).

These practice changes appear less related to physical incapacity than to religious anxiety. The perception that purity is uncertain—or possibly invalidated—deters worship even among physically healthy patients. This underscores that psychosocial and theological interventions are as necessary as physical care in ostomy follow-up.

The findings reinforce that coupling medical advice with religiously contextualized guidance is not optional but essential in Muslim-majority settings. The successful model of co-developing fatāwā through clinician-scholar partnerships (as in Iqbal et al.) offers a blueprint (19). Healthcare providers should be trained not only in stoma care but also in conveying permissible Islamic rulings: for example, that stoma discharge is involuntary and exempt from impurity, that protective covers suffice, and that tayammum is permitted when water is difficult (21–23). Counseling at the time of stoma creation—ideally preoperatively—must include a religious literacy component, obviating patient anxiety later.

Further research should pilot structured education modules (videos, pamphlets, workshops) and test their impact on knowledge, attitude, and worship adherence longitudinally. Validating a robust KAP instrument with better internal consistency is also critical. This study is not without limitations. First, its cross-sectional design limits causal inference regarding the decline in worship practices. Second, the sample size (n=103) is moderate and drawn from a single tertiary hospital, potentially limiting generalizability. Third, the knowledge and attitude instrument showed poor internal consistency (which we observed during preliminary reliability testing), raising concerns about measurement validity. Fourth, reliance on self-reported data introduces recall and social desirability biases—some participants may overreport religious activity. Finally, the absence of longitudinal follow-up precludes assessment of adaptation over time.

Conclusion

In Muslim ostomates, stoma formation is associated with stark reductions in prayer, fasting, and mosque participation, mainly driven by knowledge deficits and uncertainty about purification fatawā rather than lack of religious intent. Attitudes favor access to guidance, and many patients actively seek counsel from imams. Given that demographic factors did not predict knowledge, interventions must be universal rather than targeted. Integrating faith-sensitive teaching into stoma counselling, partnering clinicians with religious scholars, and developing validated educational tools represent urgent priorities. By addressing both the medical and the spiritual dimensions of ostomy care, we can help restore confidence in worship and improve the holistic quality of life for Muslim patients.

Declarations

Data Availability statement

All data generated or analysed during the study are included in the manuscript.

Ethics approval and consent to participate

Approved by the department concerned. (IRBEC-24)

Consent for publication

Approved

Funding

Not applicable

Conflict of interest

The authors declared the absence of a conflict of interest.

Author Contribution

HYI (Surgical Resident)

Manuscript drafting, Study Design,

FZ (Professor)

Review of Literature, Data entry, Data analysis, and drafting articles.

SM (Surgical Resident)

Conception of Study, Development of Research Methodology Design,

AA (Surgical Resident)

Study Design, manuscript review, and critical input.

TK (Surgical Resident)

Manuscript drafting, Study Design,

All authors reviewed the results and approved the final version of the manuscript. They are also accountable for the integrity of the study.

References

- 1. Slater R. Intestinal stomas: UK prevalence. *Colorectal Dis.* 2013;15(5):e246–52.
- 2. Heikens JT, et al. Quality of life after colorectal surgery with or without stoma. *Dis Colon Rectum.* 2012;55(4):400–6.
- 3. Norwood MG, et al. Ethnic variation in presentation and outcome of colorectal cancer. *Colorectal Dis.* 2009;11(7):745–52. https://doi.org/10.1111/j.1463-1318.2008.01675.x
- 4. Alves A, Panis Y, Pocard M, Regimbeau JM, Valleur P. Management of complications after stoma surgery. *Dis Colon Rectum*. 2005;48(10):1780–6.
- 5. Brown H, Randle J. Living with a stoma: a review of the literature. *J Clin Nurs*. 2005;14(1):74–81. https://doi.org/10.1111/j.1365-2702.2004.00945.x
- 6. Holzer B, et al. Quality of life after stoma surgery in Muslim vs non-Muslim patients. *Int J Colorectal Dis.* 2005;20(1):19–25.
- 7. Soulsby R, et al. Quality of life after stoma formation in Asian vs non-Asian patients. *Colorectal Dis.* 2011;13(12):1323–8. https://doi.org/10.1111/j.1463-1318.2010.02209.x
- 8. Office for National Statistics (ONS). *Muslim population of the UK: 2013 census report.* London: ONS; 2013.
- 9. Harris R, et al. Deprivation and colorectal cancer outcomes in the UK. *Br J Cancer*. 2009;101(3):459–64.
- 10. Habib A, Connor MJ, Boxall NE, Lamb BW, Miah S. Improving quality of life for Muslim patients requiring a stoma: a critical review of theological and psychosocial issues. *Surg Pract*. 2020;24(1):29–36. https://doi.org/10.1111/1744-1633.12409
- 11. Ahmad N, et al. Quality of life in Muslim stoma patients: a Pakistan perspective. *APIMS*. 2011;7(4):123–9.
- 12. Alenezi A, et al. Ostomy-related quality of life challenges in Saudi Arabia. *J Clin Nurs*. 2023;32(5–6):1124–34.
- 13. Iqbal J, et al. Prevalence of intestinal stoma formation in abdominal emergencies: experience at Sialkot. *Pak J Surg*. 2016;32(3):201–5.
- 14. Kaur P. Ostomates in India: survey data by Asia South Pacific Ostomy Association. *Med Res Publ.* 2024.
- 15. Akgül B, Karadağ A. The effect of colostomy and ileostomy on acts of worship in the Islamic Faith. *J Wound Ostomy Continence Nurs*. 2016;43(4):392–7. https://doi.org/10.1097/WON.00000000000000237
- 16. Cavdar I. Religious worship in patients with abdominal stoma. *Int J Caring Sci.* 2013;6(3):295–302.
- 17. Altuntaş YE, et al. Ramadan fasting in patients with a stoma. *J Wound Ostomy Continence Nurs*. 2013;40(4):e1–e7.
- 18. Miah S, et al. Islam and the urinary stoma: a contemporary theological and urological dilemma. *Eur Urol Focus*. 2019;5(2):331–5. https://doi.org/10.1016/j.euf.2017.06.015
- 19. Iqbal F, Zaman S, Karandikar S, Hendrickse C, Bowley DM. Engaging with Faith councils to develop stoma-specific fatāwā. *J Relig Health.* 2016;55(3):803–11. https://doi.org/10.1007/s10943-013-9772-4
- 20. Habib A, et al. Improving quality of life for Muslim patients requiring a stoma: a critical review. *Surg Pract.* 2020;24(1):29–36. https://doi.org/10.1111/1744-1633.12409
- 21. Albar AA. Permanent diversion stomas: guidelines for Muslim patients. *Saudi Med J.* 1995;16(6):613–6.
- 22. IslamQA. Ablution and prayer for a person who had colostomy surgery [Internet]. IslamQA; 2019 [cited 2025]. Available from: https://islamqa.org/en/answers/90768
- 23. IslamQA. Ruling on wiping over artificial limbs in ablution (Fatwa 396849) [Internet]. IslamQA; 2019 [cited 2025]. Available from: https://islamqa.info/en/answers/396849

- 24. Cavdar I, Yildirim A, Bilen K, Uğur Ö. Changes in religious practices after stoma surgery: a Turkish experience. *J Wound Ostomy Continence Nurs*. 2016;43(4):398–404.
- 25. Alenezi A, Osman N, Al-Mutairi E. Impact of stoma on worship life and social participation in Saudi ostomates. *J Clin Nurs.* 2023;32(5–6):1138–47.
- 26. Ahmad N, Hussain M, Farooq U. Spiritual challenges and coping among Muslim ostomates: a mixed-methods study in Pakistan. *APIMS*. 2020;9(2):56–64.
- 27. Rahman T, Azizullah S, Faheem M. The role of imams in post-operative counselling for Muslim surgical patients in Bangladesh. *Bangladesh Med J.* 2021;45(1):12–8.
- 28. Miah S, Neal DE, McDonald F. Faith, stigma and the stoma: qualitative study among British Muslim stoma patients. *BMJ Open.* 2020;10(8):e038810. https://doi.org/10.1136/bmjopen-2020-038810
- 29. Altuntaş YE, Vural D, Aslan S. Fasting and stoma: patients' perspectives during Ramadan. *J Wound Ostomy Continence Nurs*. 2013;40(6):e34–e42.



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, http://creativecommons.org/licen-ses/by/4.0/. © The Author(s) 2025