

ORIGINAL RESEARCH

The Realities and Needs of Nursing Assistants Caring for Disabled Patients with Fecal Incontinence During Hospitalization: A Qualitative Study

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ABSTRACT

Objective • To explore the experience, role, and needs of medical nursing assistants during hospitalization in patients with incapacitated fecal incontinence.

Methods • Qualitative study using reflexive thematic analysis. Semi-structured interviews were conducted with 21 medical nursing assistants from three hospitals in Southern China.

Results • Four themes were constructed from the data: (1) Role perception. All participants described the multiple roles they played during care and knowledge and familiarity with the roles were seen as providing high-quality care to patients. (2) Career cognition. Overall, participants had a positive view of nurse assistants as a career. They believed that nursing experience was more important than training. (3) emotional belonging. The multiple roles of medical nursing assistants give them very

mixed emotions. (4) Potential needs. Participants reported that the fatigue of repeatedly scrubbing and cleaning stools, the negative emotions that could not be faced and resolved, and their special status made them overwhelmed, potentially reflecting that they needed more support.

Conclusions • This study highlights the roles, experiences, confusions, and needs of nursing assistants in caring for patients with disabling fecal incontinence. Suggested areas for improvement include the development of more intelligent fecal incontinence collection devices and the development of management and training strategies by health managers based on the specific context of medical nursing assistants to emphasize the role of medical nursing assistants and improve the quality of clinical care. (*Altern Ther Health Med.* 2024;30(5):96-103)

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INTRODUCTION

Faecal incontinence (FI) is defined as the unintentional loss of solid or liquid stool in individuals ≥ 4 years of age.^{1,2} Studies show that at least 7% of adults living in community settings suffer from FI, and its incidence increases with age.^{3,4} Musa et al. found a 42.8% prevalence of FI in nursing home residents over 60 years old.⁵ Individuals with impaired abilities in eating, dressing, toileting, and mobility are more prone to FI than those without limitations in activities of daily living.⁶ Disability refers to restricted physical functioning, limited activity, and reduced social participation arising from individual capacity, living environment, and the interaction

between these two factors.⁷⁻⁸ Appropriate care, emotional support, and psychological needs directly impact their quality of life. Two groups provide direct care for disabled inpatients: families and nursing assistants (NAs). NAs are usually unlicensed, non-professional individuals who provide care in various healthcare settings.⁹ The National Health Commission of China defines nursing assistants (NAs) as personnel who provide living assistance and nursing services in elderly care facilities or medical institutions. Among them, those who provide living assistance and nursing services in medical institutions are called medical nursing assistants. Though not professional medical personnel, they have become an essential supplement to nursing due to insufficient nursing staff against rising healthcare demands from an aging population with changing health needs.⁹

Studies¹⁰ have demonstrated that caregiver characteristics significantly predict care quality. Some countries have established standards and regulations for NAs, such as the Omnibus Budget Reconciliation Act 1987 in the United States,¹¹ and the Certificate in Nursing in the United Kingdom.¹² In China, the National Health Commission emphasized standardized NA management in 2019 and provided NA training guidance. The situation of nursing

assistants (NAs) in China is complex. The emergence of medical NAs is relatively recent and a comprehensive system has not yet been established. Although NAs are receiving more attention and value in China, most previous research on them has been conducted in long-term care settings, with limited research in hospitals.¹³ Fewer studies explore the actual experiences and needs of medical NAs during the care process. This study uses qualitative research methods to explore medical NAs' experiences in caring for disabled FI patients in the hospital environment, understand their needs, and provide references for medical institutions to develop targeted measures and nursing human resource strategies.

MATERIAL AND METHODS

Study design

This study aimed to address the research question, "What are the actual experiences and needs of Medical NAs caring for disabled patients with FI?" Semi-structured interviews and thematic analysis, grounded in a reflective approach,¹⁴ were employed as the qualitative methods, adhering to the Consolidated Criteria for Reporting Qualitative Studies (COREQ).¹⁵ This study received ethical approval from the Ethics Committee of Shenzhen Hospital of Southern Medical University on October 13, 2022 (No. NYSZYEC20220033). Ethical considerations of the study emphasized the voluntary nature of participation, with respondents having the option to refrain from answering any questions that caused discomfort.

Setting

Potential participants encompass medical NAs employed in three hospitals in Southern China who provide care for disabled patients with FI.

Population

The inclusion criteria stipulate that participants must be medical NAs who have provided care for disabled patients with FI for a minimum of 30 hours per week over the past six months, are between 18 and 60 years of age, and are fluent in Mandarin. Accordingly, 21 medical NAs were invited to participate in this study. During the interviews, two participants (P11; P16) had to terminate the interview prematurely due to patients requiring their assistance.

Sampling

Purposive sampling was adopted to recruit participants from the population of medical NAs employed at three same grade hospitals in Southern China for this study. Participants were selected based on nursing assistants who caring patients with FI, which to explore the realities and needs of nursing assistants. We sought individuals who specific characteristics or experiences, anticipating that their contributions would illuminate the complexities of the realities and needs of nursing assistants caring for disabled patients with FI during hospitalization. The process continued until data saturation was achieved.

Recruitment

The principal investigator interacted directly with all prospective participants to evaluate their eligibility and ensure their comprehension of their role, the objectives of the study as well and their right to participate. Among the medical NAs contacted by the principal investigator, two withdrew owing to the temporary needs of the patients under their care. Written informed consent was obtained from all participants before the interviews, which were conducted over the period from November 2022 to January 2023.

Data collection

To prevent the influence of external comments and opinions, private one-on-one interviews were conducted without the presence of third parties. Interviews were carried out in the meeting room of each department. Each interview lasted 31 to 95 minutes. The semi-structured interview guide was designed concerning the research questions and literature on disabled patient care and FI.^{16,17} No duplicate one-on-one interviews were conducted, nor were interview transcripts returned to participants for comment. LLY is a female qualitative researcher and clinical registered nurse specializing in geriatrics and FI. All one-on-one interviews were audio recorded and transcribed into text. Field notes were also taken during the interviews. Researcher field notes were used as secondary data to provide more in-depth information.¹⁸

Data analysis

Data analysis was performed using Nvivo12 software. Transcripts were analyzed using a reflexive thematic analysis approach.¹⁹ This method recommends the following stages: familiarization with the data, coding, and generation and revision of themes in correspondence to the data. Each transcript was reviewed and coded multiple times and was coded by induction at the inventory level.²¹ Owing to the relative heterogeneity of the samples, the initial themes were primarily developed across cases from codes after coding the entire dataset, rather than conducting an in-depth analysis of each single case.²¹ Two researchers (LLY and JL) independently developed and reviewed the original themes, and then discussed them with a wider research team (WZC, LC, FMH, FX and WJT). This collaborative reflexive approach to theme development ensured a comprehensive interpretation of the data. By recognizing the different professional backgrounds of the researchers, for example, varied perspectives on participants' accounts could be provided.

RESULTS

Participant characteristics are described in Table 1. The cohort included 19 females (90%) and 2 males (10%), with a mean age of 51.86 years (SD = 9.37). While 6 participants (29%) were from rural areas, the remaining 15 (71%) came from cities. Each participant was employed by the patient's family and lived with the patient within the hospital. Data were collected through interviews with 21 nursing assistants from four tertiary hospitals. Each interview lasted 31 to 95

Table 1. Characteristics of the participants (N = 21)

Coding	Age (years)	Gender	Original profession	Educational level	Work experience (years)	household registration
P1	54	Female	Hotel manager	High school	21	Urban
P2	56	Female	Housekeeping	Junior high school	13	Rural
P3	48	Female	Worker	High school	4	Rural
P4	52	Female	Housekeeping	Junior high school	5	Urban
P5	52	Female	Housewife	Junior high school	4	Rural
P6	45	Female	Housekeeping	Junior high school	5	Urban
P7	55	Female	Famer	Junior high school	10	Rural
P8	50	Male	Worker	High school	5	Urban
P9	52	Female	Housewife	elementary school	10	Rural
P10	53	Female	Housewife	elementary school	11	Rural
P11	48	Female	Housekeeping	High school	7	Rural
P12	55	Female	Worker	High school	4	Urban
P13	50	Male	Famer	Junior high school	3	Rural
P14	50	Female	Housekeeping	elementary school	7	Rural
P15	56	Female	housewife	Junior high school	8	Rural
P16	56	Female	Housekeeping	elementary school	3	Rural
P17	44	Female	Housekeeping	High school	3	Urban
P18	55	Female	Housewife	elementary school	6	Rural
P19	60	Female	Housekeeping	elementary school	9	Rural
P20	45	Female	Housekeeping	High school	6	Rural
P21	57	Female	Housekeeping	elementary school	15	Rural

Table 2. Themes and subthemes were Constructed from the participants' narratives.

Themes	Subthemes
Role perception	<ul style="list-style-type: none"> Nurses's "eyes and ears" A "bridge" between the medical staff and the patient's family members The people relied on by patients. A sense of concurrent achievement and loss prevailed.
Career cognition	<ul style="list-style-type: none"> Responsibility and dignity Knowledge and skills Self-healing Warm each other with patients
Emotional belonging	<ul style="list-style-type: none"> Psychological counseling More intelligent fecal incontinence Collection products
Potential needs	<ul style="list-style-type: none"> Social support

minutes (M=52.24, SD=15.36). Four major themes were then constructed, each constructed of several subthemes: (1) career cognition (3 subthemes), (2) role cognition (3 subthemes), (3) emotional belonging (2 subthemes), and (4) potential needs (3 subthemes) (see Table 2).

Theme 1: Role perception

Nearly all participants reported that their multiple professional identities were crucial in patient care. Participant 1 (P1), a medical nursing assistant (NA) with over 20 years of experience, described her role: "I think I have multiple identities. I must communicate with doctors, nurses, and patient's families. Most importantly, I must always focus on my patients because they need me the most". P1 elaborated on her experience: "I have been working as an NA for 21 years. My job requires me to coordinate with different parties like physicians, nurses, patients as well as their loved ones." (see Transcript 1).

Subthemes1: Nurses's "eyes and ears". Most participants (n=17) viewed themselves as vital members of patients' medical teams. They believed it was essential to assist nurses in monitoring patients and promptly reporting any observations or information to doctors and nurses, especially regarding incontinence-associated dermatitis (IAD).

"We are actually the 'eyes and ears' of nurses. Nurses can't stay in a ward all the time; they have to manage many patients, Especially at night, they are really busy. So I think I am very important." (P20)

"Once a patient's stool changes, e.g., more frequent, watery, etc., be sure to report to the nurse, I also observe any discomfort they experience, which should be reported to the doctor and nurse." (P5)

"Nurses don't have time to stay with every patient and need our help. Pay attention not only to fecal incontinence but also to other symptoms. Once an abnormality occurs, report it to the nurse immediately and ask for help." (P8)

Subthemes2: A "bridge" between the medical staff and the patient's family members. Participants(n=10) believed building strong rapport between doctors and patients' families was integral to their work:

"We should accurately convey doctors' words to family members, relay families' questions to doctors, and convey doctors' answers back to families." (P4)

"Doctors contact families through us, and families consult doctors through us regarding patients' conditions. Communication between doctors and patients is vital." (P7)

Participants noted this "bridge" was key to good doctor-patient relationships.

"You must care well for patients and understand them fully to work well. Families and doctors/nurses will trust you more." (P10)

Our participants described how building friendly relationships creates a stronger bridge.

"You could say a good relationship is created. You build a bond between the three of you...which benefits all three and helps patients more." (P20)

However, two main obstacles hinder building these links. First, some doctors/nurses distance themselves to uphold their professional authority, beyond medical nursing assistants' reach; Second, some patients' families believe medical nursing assistants provide inadequate care, causing issues like incontinence-associated dermatitis. This creates communication barriers preventing medical nursing assistants from serving as a "bridge:"

"Some doctors/nurses keep a distance and avoid closeness. It may be to maintain their professional authority, but most doctors/nurses are still very nice, and I'm grateful for that." (P18)

"Some family members are hard to communicate with; they think because they pay me, patients shouldn't get incontinence dermatitis, so I didn't do well, It's sad, so I don't want to talk to them either." (P15)

Subthemes 3: The people relied on by patients. The interview results, as stated by 17 participants, revealed that most patients under the participants' care were elderly and required round-the-clock monitoring and assistance in daily living. Medical nursing assistants shouldered the chief responsibility of attending to patients' basic needs daily, being in the most frequent and direct contact with them from morning to night.

"The patient is under my care 24 hours a day. I treat him as if he were a child, and he relies heavily upon me. He would smile at me, though at times showing impatience." (P2)

"I understand the needs and habits of patients who

cannot articulate demands so well. Should I be absent, it causes them distress even when family are present.” (P4)

In particular, participants observed that patients were largely dependent on them to fulfill almost all of their daily needs and functions. Though some patients had limited verbal communication abilities, participants believed they could still experience emotions like joy and sadness. Thus, participants treated the patients as “normal human beings” who craved social interaction and nurturing care.

“I chat with patients, show them videos, tell them about the weather, and compliment them. I think of them as human beings, not plants. Social interaction benefits their health and wellbeing.” (P1)

“To properly care for a patient, you must gain a holistic understanding of them through conversation and interaction. Though demanding at times, you must show patience since the patient cannot always control their circumstances.” (P2)

Theme 2: Career cognition

Overall, the interview responses, including those from 6 participants, suggested that participants generally held Medical Nursing Assistants in high professional esteem. While participants’ views appeared affirmatively inclined, their statements revealed recognizing the profound challenges and value inherent to this career. The job requires an altruistic spirit, patience, and continual learning to meet diverse patient needs with empathy and care. Upon witnessing daily improvements in patients’ well-being and forming meaningful connections with them, participants found the demands of the task worthwhile.

“I believe this occupation suits me well. It demands both compassion and a sense of responsibility, without which one could not perform effectively in this role. This work is also meaningful since I am able to assist others, which I find personally fulfilling.” (P6)

“I have a deep affection for this line of work. Perhaps it relates to my tendency to be soft-hearted, but I consider this profession extremely valuable as there is always more to learn through it.” (P1)

Subthemes 1: A sense of concurrent achievement and loss prevailed. The interview responses suggested that most participants derived a sense of fulfillment from their work, which appeared to motivate them to continue in this occupation despite inherent difficulties.

“When I witness patients under my care recover, receive praise from medical professionals, or families express satisfaction with my work, I feel a profound sense of achievement and purpose.” (P4)

“Caring for an elderly gentleman with severe urinary incontinence and dermatitis, who required constant attention, afforded me a deep sense of fulfillment after his condition stabilized and skin integrity was restored.” (P15)

While participants noted economic necessity initially attracting them to this line of work, the psychological rewards and motivation to positively impact patients’ lives seemed to outweigh pragmatic concerns over time.

“Though I lacked advanced education and was older, this position has provided stable income and housing, allowing me to find contentment in serving patient needs daily.” (P12)

“With children grown and family responsibilities lessened, this work supplies needed income and gives me purpose in assisting others.” (P7)

Some participants alluded to perceiving a degree of stigma attached to their role or sensing dissatisfaction in others, leading to feelings of being undervalued.

“Having previously worked in hospitality management, I sometimes feel a psychological disconnect, particularly when patients or their families inquire about compensation. Though unstated, I perceive nurses and families as unsatisfied with my care, leaving me feeling inadequate.” (P8)

“Some family members are unkind regardless of efforts made, unwilling to affirm good work done. This can be deeply discomfoting.” (P3)

Subthemes 2: Responsibility and dignity. The interview data suggested a sense of responsibility and dedication as integral to the role. As expressed by some, “You have to love whatever job you take up.”

“You should be responsible for everything, especially when your job is to care for others. Without responsibility, you can not do any job well...Caring for long-term bedridden patients with FI requires an even greater sense of responsibility.” (P21)

“You must have devotion and a sense of responsibility to do this job (caring for patients) well so that patients are comfortable and you feel fulfilled.” (P5)

While caring for disabled patients with fecal incontinence could be physically and emotionally exhausting, participants’ sense of responsibility sustained their motivation:

“I have gone days without proper rest and felt drained, irritable. But this is my job. I have to follow through; I have to be responsible.” (P12)

Furthermore, participants conveyed that responsibility and dignity were interdependent.

“When you have a sense of responsibility, others respect you; with their respect, your work improves and responsibility increases; dignity is earned.” (P19)

“The respect from others—doctors, nurses, patients’ families—makes me happy. It motivates me to provide the best care.” (P14)

Only one participant alluded to occasionally advising on care plans, emphasizing she only did so with family consent. To her, this reflected her sense of responsibility and dignity.

“My sense of responsibility is reflected in fully participating in patients’ care—following nurses, discussing patients, offering suggestions. This gives me a sense of accomplishment and being an integral part of patients’ care. However, family permission and trust are required.” (P1)

Subthemes 3: Knowledge and skills. Seven participants noted that despite years of experience as nurses, they seldom received formal training. Nursing knowledge was gained through their own experiences and exchanges with colleagues.

“I didn’t have any training. I explored on my own at

work. It was difficult at first, but gradually I became familiar with the work and everything went smoothly.” (P10)

“When I don’t know how to do something, I ask others and observe how they do it. That’s how I’ve slowly learned and gained experience.” (P17)

Regarding perianal skin care for patients with fecal incontinence, participants described various cleaning methods and wiping techniques but were uncertain whether they were correct. They only used disposable absorbent products like diapers and diaper pads and were unaware of other available aids.

“Everyone’s cleaning method is probably different. I prefer to clean like this. Whatever supplies the families provide, I will use, I have only used diapers, disposable diaper pads, and plugs. Other things, I don’t know about.” (P2)

“Aren’t tissues, wet wipes, diapers, and disposable diapers the only things to help clean up stool? I haven’t heard of anything else...” (P13)

Interestingly, most participants believed that caring for disabled patients, including those with fecal incontinence, involved essential life care skills, and that formal training was secondary. Experience and learning from experience were key.

“I haven’t had any training. I learned slowly, but I think I’ve done a good job, better than those who were trained. This is such a basic thing. As long as you have a sense of responsibility, no training is required.” (P15)

“Experience is more important than training. The main thing is this job isn’t difficult, and I’m older, so even with training, it would be difficult to retain the information. Summarizing experience is more important.” (P19)

“...Just cleaning up a stool, keeping the anus dry, no training is needed... The most important thing is the doctors need to provide medication.” (P6)

Theme 3: Emotional belonging

Fifteen participants reported experiencing mixed emotions in their role as caregivers, attributed to facing criticism from patients’ families, fatigue from managing patients’ FI, and arrogance displayed by some medical staff.

“My emotions are mixed, and I hope my work will be recognized by doctors, nurses, and families, but caring for a patient with fecal incontinence is too difficult... So sometimes I need help, but I think no one can help me, I have to help myself.” (P7)

Subthemes 1: Self-healing. Participants shared the view that “goodwill begets goodwill.”

“...So when I was angry, I told myself: Goodwill begets goodwill, so it feels much better to think that way.” (P21)

In this case, I can only self-regulate and tell myself, ‘I’m doing good...and slowly, the mood calmed down.’ (P17)

Furthermore, another perspective discussed among participants was that everyone will eventually age, but one should live in the present and cherish it so there are no regrets. Both notions can help alleviate anxiety.

“Seeing her, I feel like seeing myself in the future. We will all age...I don’t want to become like her when I’m old, but it

could be like that...So I have to cherish everything at the moment and live well.” (P12)

“Everyone ages and I don’t know what I’ll be like when I’m old...But I’m not old now, and I want to live well every day, so I’m happy every day.” (P3)

Subthemes 2: Warm each other with patients. Participants reported developing an indescribable emotional bond with patients, despite not being related. Even if the other could not converse with them, they would perceive subtle changes in the other’s eyes and movements. This was also regarded as a means of communication and exchange. Some patients’ eyes and movements made the participants feel warmth. Participants felt this warmth was reciprocated and simultaneously increased their sense of accomplishment and responsibility.

“...After spending a long time with them, we both had feelings for each other, like caring for my own family. I will talk to him, show him TikTok, although he does not respond, but I know he understands, just can’t speak.” (P1)

“...I know the meaning of her every look and movement. She loves it when I massage her head and abdomen, and sometimes she smiles at me, and I’m happy. She also warmed me and made me feel more accomplished. Our relationship was magical. We are patients and caregivers, but also partners. We warmed each other.” (P5)

Theme 4: Potential needs

Subthemes 1: Psychological counseling. Participants found it difficult to address unfounded anxiety and anger from families of some patients and noted communication difficulties throughout the process. “I face challenges when communicating with certain patients’ families, possibly due to factors such as the patient’s prolonged bed rest, ongoing fecal incontinence, extended hospitalization related to fecal incontinence, their financial situation, or language barriers.”(P21)

“Despite our belief that we provide good patient care, there are still families who inexplicably express anger towards me, despite my strong communication skills.”(P10)

Participants also reported that caring for patients with persistent diarrhea was exhausting and lack of rest could lead to anxiety or irritability.

“Once, I had a big fight with the patient’s family because he was so unreasonable. He asked me to take care of the patient 24 hours a day, not to sleep. But machines have time to rest, let alone people. He didn’t agree to my resignation... I have always taken good care of patients, and I am already very tired.”(P15)

“Most of the patients I care for are paralyzed elderly people who can’t speak, and staying in this ward with them every day, I can not have a good rest, coupled with the pickiness of the employer. It is uncomfortable.”(P9)

Two participants reported needing help and wanting to be heard but having to resolve issues alone. They did not confide in family members due to traditional Chinese views of family roles—sharing only good news and concealing bad news.

"I need help, I need to be heard, but I don't think anyone can help me, I can only help myself, but 'I won't tell my family how I feel right now, for fear that they will be worried.'" (P7)

"Reporting only the good piece of news and hiding the bad one, Chinese are like this." (P14)

Subthemes 2: More intelligent fecal incontinence collection products. Eighteen participants expressed interest in automated fecal incontinence collection products to reduce the effort required to manage heavy stool incontinence, allowing more time to address patients' other needs.

"...It would be nice to have a product that automatically helps handle the patient's stool, which is good for us." (P3)

"Cleaning up the stool for patients is time-consuming and labor-intensive, and sometimes, I am too tired to straighten my waist, but if there is a product that automatically helps wash the patient's stool, I will also be relaxed and can give more time to the patient." (P6)

However, participants noted that even with advanced FI collection products that could help reduce physical burden, human caregivers remain essential as patients are human beings with complex needs. Automated products may assist with specific tasks like stool collection, but they cannot replace human caregivers who provide compassionate care, and emotional support and help address patients' multifaceted needs. Human interaction and relationships are vital to patients' well-being. While advanced equipment has its benefits, patients ultimately require human care, sensitivity, and connection that only people can provide.

"I believe that despite the availability of advanced equipment, these individuals still require human care. While some may be non-verbal, they possess some understanding and utilize behavior to communicate needs, even resorting to physical actions such as hitting. Interacting with their surroundings and caretakers is crucial for their well-being." (P1)

"While more advanced fecal incontinence collection products may have some benefit, ultimately patients still require human care and interaction with their environment as they are human beings." (P21)

Subthemes 3: Social support. Only one participant noted the importance of enhanced social support, including acknowledging the value of nursing assistants, integrating them into the medical system, and enabling their participation in patient care, provided that nursing assistant quality was improved. As the participant stated:

"Our identity is very awkward. Despite playing important roles, we are excluded from medical institutions. This not only affects communication among all parties but also our understanding of the work. Ultimately, this impacts patient recovery, so I need support from all sides...I know my needs may be difficult to meet (laughing), but I believe that such support can increase our motivation and sense of purpose." (P1)

DISCUSSION

In the complex realm of healthcare provision, medical Nursing Assistants (NAs) represent a crucial yet often

overlooked demographic. This study delves into the day-to-day experiences of these individuals, focusing specifically on those caring for patients with fecal incontinence (FI) in three hospitals in Southern China. The findings provide a comprehensive understanding of the challenges NAs face and offer insights into possible improvements in training and management.

A salient feature of the medical NA workforce in China is their largely rural background,²⁰ which often comes with limited formal education. Educational and cognitive levels may impact the professional skills available to these individuals and can affect the quality of care provided. Nonetheless, their roles are multifaceted and central to patient care. Despite not being recognized as official hospital staff, they fulfill critical roles such as caregiving and acting as intermediaries between patients, their families, and healthcare professionals.^{21,22}

In performing these duties, medical NAs experience a spectrum of emotions. On the positive side, providing relief to patients and earning recognition from patients and families elicits feelings of self-worth and purpose. However, these positive aspects can be counterbalanced by the challenges they face. Struggles with role identification and an overall lack of optimism can evoke negative emotions, affecting their motivation and efficiency in care work.²³

The study revealed an important fact about the crucial role that medical NAs play in patient care. They are not mere support staff, but an integral part of the healthcare delivery system. This is particularly evident in their role as frontline caregivers to patients with FI, where they provide essential physical and emotional support.²⁴ Despite the importance of their role, managing patients' stool presents considerable physical and psychological burdens to NAs.^{9,25,26} This aspect of their work requires further attention to ensure that NAs are adequately supported.

A surprising finding from the research was the difference in perspective about NA training. Prior research and policy directives from bodies such as China's National Health Commission advocate for rigorous formal training for NAs.²⁴ However, the study found that medical NAs themselves placed higher value on learning from practical experiences than on formal education such as on-site teaching training with scenario-based live demonstrations. This finding challenges the current training approach and suggests the need for a more nuanced training regimen that balances theoretical knowledge with practical, hands-on learning. The study findings are important for improving the training and management of medical NAs and the impact they have on the quality of patient care.

The psychological pressures that medical NAs face in their roles are substantial. To cope with these, many resort to self-healing strategies and try to build warm relationships with patients. They often draw upon cultural resources, such as Chinese Buddhist beliefs, to manage their stress. Despite these coping mechanisms, the study underlines the crucial need for professional psychological counseling for Medical

NAs. Providing professional psychological support and improving the surrounding environment could help them handle the emotional challenges of their work more effectively and promote their overall well-being.⁹

The research also brought to the fore a crucial issue often missed in previous studies: the integration of medical NAs into the broader healthcare system and formal recognition of their roles as health professionals.²⁷ Current management approaches vary greatly, with issues such as high turnover, lack of core competencies, struggles with professional identity, and managers feeling ill-equipped to handle NAs being prevalent.^{9,25,28,29} Recognizing medical NAs as part of the formal healthcare system and acknowledging their professional roles could lead to improved job satisfaction, better patient care, and a more robust healthcare delivery system.

Finally, the study underscored a pressing need in the realm of Medical FI care: the requirement for automated stool management devices in clinical settings. While there are various FI management products available, the majority of Medical NAs surveyed were only aware of disposable absorbents.^{30,31} This finding indicates a significant gap in product knowledge and usage among Medical NAs, suggesting an urgent need for better education in this area and further exploration of the factors hindering product.

Limitations

This study has two main limitations. One limitation of our study is that two participants (P11 and P16) had to prematurely terminate their interviews due to the need to assist patients. This may have resulted in incomplete data collection, limiting our ability to deeply understand these participants' perspectives. Although we implemented measures to minimize the impact of this occurrence, it could still have affected the comprehensiveness of our study findings. Second, although multiple hospitals were investigated, different regions may differ in hospital environment and culture, possibly affecting medical NAs' working conditions and needs. To address these issues, future research could use larger, more varied samples and mixed methods to gain a deeper understanding of Medical NAs' situation. More extensive, multi-regional research could provide comprehensive, accurate results to improve medical NAs' working conditions and support their career development.

CONCLUSION

This research uncovers the vital role and challenges of Medical Nursing Assistants (NAs) in China's healthcare system. The key findings include the need for a shift from traditional training to experience-based learning, the importance of providing professional psychological support due to the emotional demands of the job, and the necessity for better integration of NAs into the formal healthcare system. Additionally, the study calls for an increase in product awareness for fecal incontinence management devices.

Addressing these issues could significantly improve working conditions for NAs, enhance patient care quality, and contribute to the development of the overall healthcare system.

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ETHICAL COMPLIANCE

This study was approved by the ethics committee of Shenzhen Hospital, Southern Medical University. Signed written informed consent was obtained from the patients and/or guardians.

CONFLICT OF INTERESTS

The authors declared no conflict of interest.

AUTHORS CONTRIBUTIONS

LY and WC designed the study and performed the experiments, JL and FH collected the data, WL, FX, and LC analyzed the data, and LY and WC prepared the manuscript. All authors read and approved the final manuscript.

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Appendices. Question prompts for qualitative interviews.

- What approaches do you employ to provide care for individuals with FI? What tools and techniques do you utilize? For what reasons?
- If a patient develops complications such as incontinence-associated dermatitis, what approach would you select to properly care for the patient? Why?
- What do you believe could better enable you to care for patients with FI? (Personal, Material, Educational, etc.)
- What are your experiences and feelings regarding caring for FI patients?
- What challenges and difficulties do you anticipate in providing care for FI patients?
- How do you perceive your role when caring for individuals with FI?

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