

Exploration of user satisfaction in using the newly redesigned MoliCare Premium Men Pad: in-home use study

Niuosha Sanaeifar, Tamara Buch, Moritz Debler, Rüdiger Kesselmeier, Sara Canales and Michael Meer

ABSTRACT

Background: Men frequently underestimate the significance of urinary incontinence and fail to disclose their condition owing to embarrassment and the associated social stigma. Therefore, successful incontinence management with absorbent products helps individuals cope with the emotional and social challenges arising from incontinence, including visible urine leakage, frequent urination, unpleasant odours, and isolation. **Aim:** To assess the most essential performance features of the newly developed MoliCare Premium Men Pad. **Methods:** Computer-assisted personal interviews were conducted to obtain the opinions and satisfaction levels of 69 male users with incontinence in Germany regarding different performance characteristics of the newly designed MoliCare Premium Men Pad after using the product. **Findings:** All performance characteristics of the new MoliCare Premium Men Pad design received positive ratings from all interviewees. Notably, 90% of participants were 'highly satisfied' and 'satisfied' with the new MoliCare design. **Conclusions:** The new MoliCare SkinGuard absorbent core technology, anti-leakage guards, and well-engineered product design provide protection, discretion, and comfort to individuals with incontinence. The newly developed MoliCare Premium Men Pad is specifically tailored to meet the primary needs of male pad users and help them maintain a normal lifestyle.

Key words: Incontinence ■ Absorbent incontinence product
■ MoliCare Premium Med Pad ■ Performance characteristic

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Urinary incontinence, the complaint of any involuntary leakage of urine, affects both males and females of all ages and cultural and socioeconomic statuses (Higa et al, 2013; Burden and Abrams, 2016). Young adult men are less often affected by urinary incontinence compared with young adult women; however, this gap narrows with age, especially in advanced age groups. Furthermore, epidemiological data on urinary incontinence reveal that its prevalence in women is almost twice that in men (Moore and Gray, 2004; Esparza et al, 2018).

Recent studies have indicated that males with urinary incontinence are becoming more prevalent than previously thought; therefore, management of the condition has become crucial for urologists (Moore and Lucas, 2010). Evidence suggests that fear, rage, shame, and sleep disorders arising from urinary incontinence negatively impact on quality of life, and men may perceive more issues dealing with urinary incontinence than women do (Higa et al, 2013). In addition to increasing age, urinary incontinence can develop owing to neurological diseases, detrusor overactivity, loss of mobility and dexterity, and cognitive changes (Moore and Gray, 2004). Men undergoing prostate surgery for cancer or benign prostatic hyperplasia are also at a higher risk of developing urinary incontinence (Moore and Gray, 2004; Toia et al, 2019).

Urinary incontinence is associated with a deteriorating quality of life because it restricts social interactions in men. Anxiety arising from urine leakage impedes family and social contact and affects emotional and psychological wellbeing (Sandhu, 2010; Park et al, 2015). Urinary incontinence is often underreported, and patients are reluctant to seek help owing to embarrassment, denial, or insufficient information (Miller and Miller, 2011). Therefore, only a few affected individuals seek assistance and medical treatment for urinary leakage because incontinence is regarded as an inevitable consequence of ageing or prostate disease.

Patients tend to downplay the symptoms that arise if the amount of urine involved does not compromise their activities of daily life, both at home and in the workplace, and they perceive urinary incontinence to be a trivial problem (Horrocks et al, 2004; Harris et al, 2007; Bilgiç et al, 2017). According to previous studies, there is a sex difference in help-seeking behaviour regarding urinary incontinence; that is, more women seek medical care for

incontinence than men. Men with incontinence may consider this to be a threat to their manhood, leading to more embarrassment (Bilgiç et al, 2017).

Absorbent products designed to absorb and contain urine or stool are the most typically used products for the daily management of incontinence. Successful incontinence management with these products can enhance the individual's quality of life, even if the underlying problem is not treated (De Marinis et al, 2018; Fader et al, 2020). Absorbent products can help alleviate clinical complications arising from incontinence, such as skin breakdown, irritation, and wound development in the perineal area. Individuals can also use absorbent products to provide additional protection while benefiting from treatment options for incontinence, such as behavioural interventions, pharmacological therapies, or surgeries (De Marinis et al, 2018).

Notably, various incontinence products are available to meet the needs of users and their lifestyles (Sanaeifar et al, 2023a). However, only a few have undergone postmarketing investigations by consumers or clinicians. Users choose products based on trial and error, according to their budgetary limitations and availability in stores. Similarly, clinicians have insufficient information on product-performance characteristics required to provide proper recommendations (Newman et al, 2004). There is no single best absorbent product that is appropriate and effective for all consumers. Furthermore, the urine-holding capacity, quality, and materials used in these products are not standardised and vary widely. Therefore, the identification and selection of appropriate products are crucial for each individual (Sacco et al, 2018; Sanaeifar et al, 2023b).

A good absorbent product must fulfil the main needs of male pad users: protection, discretion, and comfort. An appropriate and effective absorbent product provides reliable protection by completely absorbing urine at the highest possible flow rate and containing urine without leakage to ensure that individuals with incontinence feel secure. This results in a dry skin microenvironment, which minimises skin complications. Product discreetness is also an important factor for users. The discretion goes beyond the visibility of the pads when worn. Users are sensitive to any urine odour because this can also draw attention to the fact that they are wearing the products, which affects how others perceive them. Therefore, effective odour control is one of the most essential features of these products. Regardless of how long the product is worn, users should feel comfortable, confident, and free from odours. A high-quality product should keep the skin dry during use and be soft against the skin to enhance overall comfort (Buckley, 2019; Sayabalian et al, 2019).

The authors aimed to investigate the perception of male users with incontinence using the newly introduced MoliCare Premium Men Pad and evaluate the critical performance characteristics of the newly developed product.

MoliCare Premium Men Pad

MoliCare Premium pads for men offer secure protection against drops and dribbles during urine leakage. These products are available in different shapes, sizes, and absorbency levels (2, 3, 4, and 5 drops) to meet the user's needs (Figure 1). They are also suitable for light-to-moderate urinary incontinence and

bladder weakness in active patients. The MoliCare Premium Men Pad '2 drops' has an absorbent pouch design that allows the penis to sit in the well of the pouch and contains urine drips and slight leakages. MoliCare Premium Men Pad with higher absorbency levels, designed in a masculine V-shape, differ in length and amount of cellulose and super-absorbent polymer (SAP), which locks in the urine. Notably, all products have a discreet design and can be easily fastened to regular underwear using an adhesive strip on the backside.

The technology, design, and materials of the newly developed MoliCare Premium Men Pad (4 drops) accommodate user preferences. In the new MoliCare SkinGuard absorbent core technology, a curled fibre, a specially processed type of cellulose fibre modified in an acidic citric environment, is replaced by a nonwoven acquisition distribution layer (ADL). ADL, placed beneath the top sheet, facilitates moisture absorption and distribution to the inner core of the continence pad and prevents moisture from returning to the top sheet under external pressure. ADL is crucial in providing comfort and dryness and minimising rewetting. The new design was modified with monosodium citrate, creating an acidic pH surface that adapts to the physiology of the skin's epidermal barrier, which helps to maintain healthy skin. Another critical design feature is the inclusion of a channel-shaped cavity at the most probable urine entry point. This further accelerates urine absorption through the quick and even distribution of liquids throughout the pad.

The anatomically shaped MoliCare Premium Men Pad is specially tailored for the male anatomy, and the proper width and length of the product provide comfort and discretion. The anti-leak guards that fit into the crotch area provide a comfortable and efficient barrier against urine leakage and offer reliable protection. This feature provides a comfortable and secure fit against the body.

Methods

Study design

A proto-monadic in-home use test was conducted to assess and compare the newly developed MoliCare Premium Men Pad with its previous design and another absorbent pad product available in the market. However, the current study aimed to investigate the critical performance characteristics of the new MoliCare design based on the feedback of participants with incontinence, with no comparison with other similar products. Therefore, only relevant results are discussed here.

Computer assisted personal interviews were conducted, face-to-face, with men who used the newly redesigned MoliCare Premium Men Pad for light-to-moderate incontinence to survey their experiences and views on its various critical characteristics. The interview participants were 69 men aged 45 years and over who lived in private households. Participants with severe or chronic incontinence, defined as more than 100 ml of urine loss within 4 hours, were excluded. The study was conducted in Germany during 6–21 December 2023. Notably, all the interviewees used the same product category with the same level of absorbency. The test product was provided free of charge to each participant for evaluation. The test and interviews were conducted by an external agency.

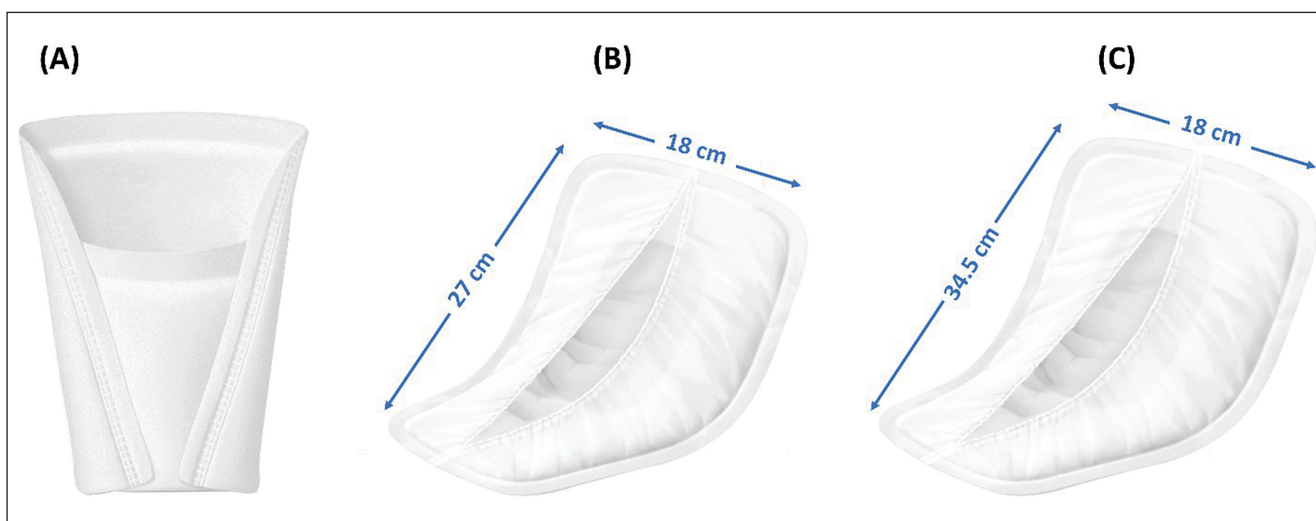


Figure 1. MoliCare Premium Men Pad pouch design for different absorbency: 2 drops (A), 3 and 4 drops, differing in the amount of cellulose and super-absorbent polymer (B), and 5 drops (C)

Ethical considerations

The study complied fully with ethical, governance, and data protection requirements.

Survey design for the interview

Demographic data and information on the degree of incontinence, duration, type, and number of products used were obtained from each participant. The survey comprised various questions associated with crucial aspects of product performance, including overall satisfaction. The respondents were initially asked to rate each performance feature of an absorbent incontinence product in order of importance. Subsequently, participants were asked about their level of satisfaction with the test products. The respondents were also asked about their level of agreement with different product performance characteristics.

Questions were answered using a 5-point scale: essential/extremely satisfied/agree completely (1), very important/very satisfied/agree (2), important/satisfied/neither agree nor disagree

(3), less important/less satisfied/disagree (4), and not important/dissatisfied/disagree completely (5). For simplicity, the results are explained below using a 3-point scale. Therefore, the ratings were combined into three categories: ‘highly important’/‘highly satisfied’/‘agree’ (sum of ratings 1 and 2), ‘important’/‘satisfied’/‘neutral’ (rating of 3), and ‘unimportant’/‘dissatisfied’/‘disagree’ (sum of ratings 4 and 5).

Data analysis

All descriptive statistical analyses were performed using SPSS v24.0 (IBM Corp, Armonk, NY, USA).

Findings

Figure 2 shows the ratings for importance of product characteristics given by respondents. Absorption speed was the most essential feature, rated as highly important by 99% of the users, followed by leakage protection and odour containment (97%). Notably, 96% of users found absorption of sudden gushes of urine and

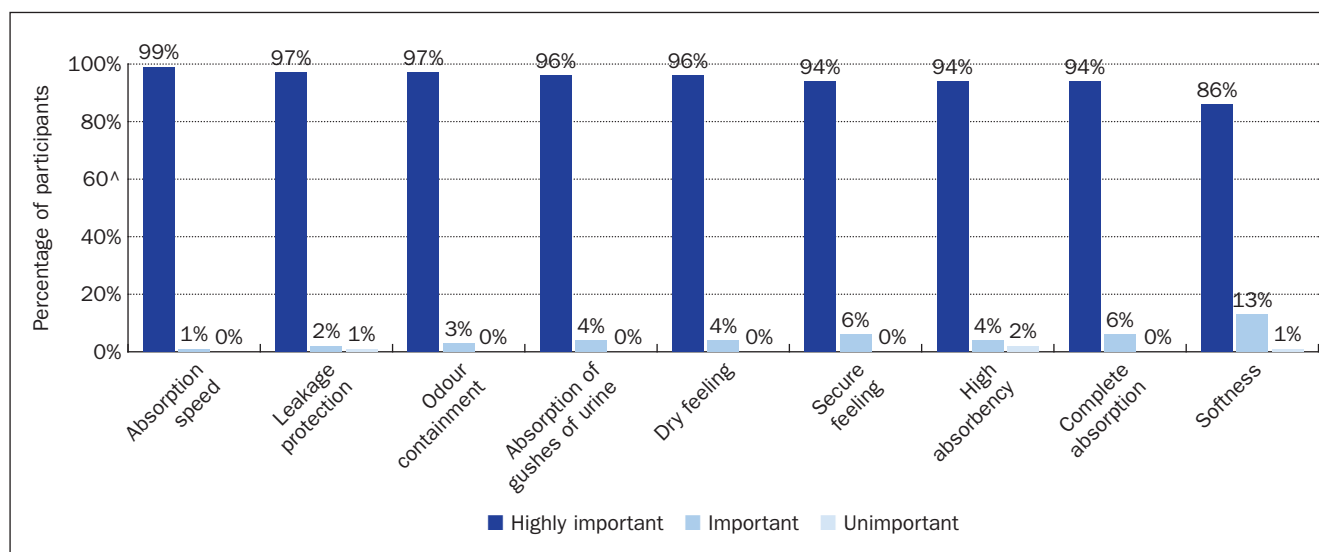


Figure 2. Users' ratings of the critical product performance aspects based on level of importance (n=69)

Table 1. Evaluation of the critical performance features of the newly redesigned MoliCare Premium Men Pad (n=69)

Characteristics	Satisfaction level	New MoliCare design (%)
Absorption speed	Agree	97
	Neutral	2
	Disagree	1
Leakage protection	Agree	96
	Neutral	4
	Disagree	0
Odour containment	Agree	96
	Neutral	4
	Disagree	0
Absorption of gushes of urine	Agree	96
	Neutral	4
	Disagree	0
Dry feeling	Agree	94
	Neutral	4
	Disagree	2
Secure feeling	Agree	90
	Neutral	3
	Disagree	7
High absorbency	Agree	94
	Neutral	3
	Disagree	3
Complete absorption	Agree	96
	Neutral	4
	Disagree	0
Softness	Agree	93
	Neutral	3
	Disagree	4
Overall satisfaction	Highly satisfied	62
	Satisfied	28
	Dissatisfied	10

a dry feeling to be ‘highly important’ features. The three next ‘highly important’ characteristics, rated by 94% of users, were secure feeling, high absorbency, and complete urine absorption. Furthermore, 86% of the respondents considered softness to be a ‘highly important’ feature.

Table 1 presents the users’ evaluation of critical product performance features and their overall satisfaction with the newly developed MoliCare Premium Men Pad.

Overall, 97% of the users ‘agreed’ that the product absorbed urine quickly, and only 1% ‘disagreed’ with this feature. Furthermore, 96% of the participants ‘agreed’ that the product provided reliable leakage protection, prevented odour development, completely absorbed urine, and absorbed sudden gushes of urine. Notably, 94% of participants ‘agreed’ that the new MoliCare Premium Men Pad provided a dry feeling and high absorbency; however, less than 3% ‘disagreed’ with these characteristics. In addition, 90% of the users ‘agreed’ that the

product made them feel secure, 93% found the product to be soft and pleasant to wear, and 90% of participants were ‘highly satisfied’ and ‘satisfied’ with the new MoliCare design.

Discussion

Urinary incontinence is an increasingly prevalent condition that leads to notable health issues, reduced quality of life, and economic burden and may contribute to a higher risk of mortality (Esparza et al, 2018). Patients with urinary incontinence may restrict their activities, lose their independence, experience depression owing to a perceived loss of self-esteem or control, and face medical and economic challenges owing to their condition (Miller and Miller, 2011).

The study and management of urinary incontinence have shown significant sex bias towards women. Considerable advancements in women’s health have led to the establishment of comprehensive instructions that address various health issues, including bladder control; however, similar progress in men’s health is limited (Moore and Gray, 2004). Men with incontinence visiting urologists often require absorbent products to manage leakage, either temporarily while awaiting treatment or in the long term if therapy is ineffective (Fader et al, 2020). Incontinence absorbent products effectively prevent noticeable odours and visible leakage, such as the soiling of clothing (De Marinis et al, 2018). There are many male-specific products for light incontinence; however, selecting the right product is challenging because of the lack of published evidence on the effectiveness of different designs and products (Fader et al, 2006).

Therefore, the authors assessed the newly redesigned MoliCare Premium Men Pad through the results of surveys of male users with urinary incontinence on their satisfaction with different performance aspects of the MoliCare absorbent product. This product was designed to address the main requirements of male pad users: protection, discretion, and comfort.

Absorbent incontinence products are mainly used to collect and contain urine and faeces. The engineering and design challenges associated with these products consider urine flow rates, volumes, and methods of acquisition and containment (Buckley, 2019). In the MoliCare Premium Men Pad, additional features are incorporated to reduce the likelihood of leakage and enhance the user’s comfort. The new MoliCare SkinGuard absorbent core technology, with the strategic placement of appropriate and sufficient absorbent materials, wicks moisture rapidly and completely into the product, keeping the skin dry and allowing the product to absorb multiple voids or episodes of incontinence. The anti-leak guards fit snugly into the crotch area, creating an effective and extra barrier against urine leakage. This feature ensures reliable protection and contributes to a more secure and comfortable fit against the body. The construction of the anti-leak guards was accurately inspected to ensure they function effectively while maintaining comfort.

An increase in skin pH to an alkaline level can compromise the skin barrier function and weaken the acidic mantle, making the skin more susceptible to irritants such as urine and faeces. Therefore, it is essential to maintain skin pH at an optimal level to protect the skin from the irritating effects of urine. The modification of the MoliCare Premium Men Pad creates

an acidic pH surface when wet, which helps to reduce skin irritation and maintain healthy skin.

The new MoliCare Premium Men Pad design enables easy application using an adhesive, and once applied, the pad remains securely in place during regular activities owing to its well-fitting design. Moreover, the newly developed MoliCare remains discreet under clothing because of its appropriate size and shape, which helps maintain dignity and normalise incontinence.

Conclusion

Extremely high satisfaction levels were recorded for each critical performance aspect of the new MoliCare Premium Men Pad design. The new MoliCare SkinGuard absorbent core technology and well-engineered product design provide protection, discretion, and comfort to satisfy the primary needs of male pad users. The newly developed MoliCare Premium Men Pad, with an innovative and improved core design and additional features, fulfils patients' expectations and ensures that their quality of life remains uncompromised. The new product design aims to normalise the patient's condition, restore their dignity and wellbeing, and enable them to lead a more active lifestyle. **BJN**

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KEY POINTS

- The new MoliCare SkinGuard absorbent core technology is designed to accelerate moisture absorption, promote dryness, minimise rewetting, and prevent leakage
- Anti-leak guards that fit into the crotch area provide a comfortable and efficient barrier against urine leakage and offer reliable protection
- The acidic pH on the surface of the MoliCare Premium Men Pad helps maintain healthy skin and prevents skin irritation
- The anatomically shaped MoliCare Premium Men Pad is specially tailored for the male anatomy, and the proper width and length of the product provide comfort and discretion

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CPD reflective questions

- What are the important factors that affect the effectiveness and acceptability of absorbent incontinence products?
- How might the needs of male absorbent pad users differ from female absorbent pad users?
- How can this study help users select the most appropriate absorbent incontinence product?