Clinical research

COVID-19: impact on ostomy and continence care

ABSTRACT

Introduction The COVID-19 pandemic has changed our world. It has impacted all healthcare professionals (HCPs), organisations and the people they serve in multiple ways. This includes the specialty area of nursing in ostomy and continence care. During this time, it is important to know what can be done to support clinicians and patients (end users) through understanding what they are experiencing and how they are adapting to this pandemic.

Objective To gather research which describes the impact COVID-19 has had on clinicians and people with an ostomy or intermittent catheterisation requirements.

Methods The research was conducted virtually to keep patients, clinicians and researchers safe but enable important learnings. Research modalities utilised were surveys and an observational study.

Results This COVID-19 research shows that 57% of ostomy end users in the US and UK report peristomal skin issues in the past month. What has caused more concern is that 84% of ostomy end users report NOT contacting a HCP about their skin issues. In continence care, 49% of intermittent catheter (IC) users are more concerned about urinary tract infections (UTIs).

Despite these challenges, many ostomy end users (52%) and IC end users (37%) report not knowing if telehealth is an option for their care. Instead, this research shows that end users are accessing more information online – ostomy end users increased their online usage by 34% and IC end users by 50%. Both groups report the information they are seeking the most are tips for troubleshooting issues and information about the availability of their ostomy and continence products. This matches the ostomy nurse survey results that indicate clinicians are seeking information on ostomy education and product availability.

Conclusion Early research suggests that ostomy and continence care patients alike are being negatively impacted by the COVID-19 pandemic. As this is only the beginning of the global pandemic, much more research is needed.

Keywords ostomy, peristomal skin, intermittent catheter, bladder care, continence care, COVID-19, discharge program, Secure Start services, virtual, Hollister

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INTRODUCTION

On 19 March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. The WHO¹ defines a pandemic as a global spread of a new disease. The Centers for Disease Control and Prevention (CDC)² says the term pandemic refers

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to when viruses "are able to infect people easily and spread from person to person in an efficient and sustained way in multiple areas. Because the virus is new to humans, very few people will have immunity against the pandemic virus, and a vaccine might not be widely available".

No one was prepared for such a change in such a short timeframe. As a clinician, one cannot help but wonder how the current COVID-19 crisis has affected, and will continue to affect, the specialty area of nursing in ostomy and continence care. The COVID-19 pandemic that is sweeping across the globe has impacted all healthcare professionals (HCPs), organisations and the people they serve in multiple ways.

You may now lack the resources needed to confidently conduct your practice, and there may be a new expectation to learn as you go. Changing direction, adapting and considering alternative strategies will continue to demonstrate your dedication to the care you provide.

Table 1. COVID-19 research methods

Research design*	Date	Population	Total number of participants (response rate)**	Country
Survey ³	May 2020	Ostomy end users	324 (49%)	USA, UK
Survey⁴	May 2020	Ostomy nurses	125 (~13%)	CA, USA, UK
Ostomy patient registry ⁵	January – June 2020	Ostomy end users	70***	USA
Survey ⁶	July 2020	Ostomy end users	319 (43%)	USA, UK
Survey ⁷	July 2020	IC end users	57 (24%)	USA

* Hollister Incorporated internal data on file

**Due to missing data, the number of responses to specific questions varies

***Response rate not applicable as this is a longitudinal study not a cross-sectional survey

The ostomy and continence community is also very understandably concerned how the COVID-19 outbreak is affecting their daily lives, their access to healthcare and support networks and, very importantly, to their access to ostomy and continence care supplies.

During this time of crisis, it is important to know what can be done to support the profession of ostomy and continence nursing and the people they serve by clearly understanding what clinicians and their patients are experiencing and how they are adapting to this pandemic.

METHODS

Several research modalities were utilised to gather information on how COVID-19 has impacted ostomy patients, intermittent catheter (IC) patients and clinicians; Table 1 outlines a description of the research methods and populations of interest. All of the research was conducted virtually to keep patients (end users), clinicians (nurses) and researchers safe but enable important learnings.

The research described is quantitative surveys and a patient registry. The end user surveys were all conducted online and included 12 to 19 closed ended questions. The clinician survey was conducted online and included eight closed ended questions and one open ended question. Survey research is a useful research method that has clear benefits in helping to describe and explore variables of interest⁸. Patient registries, if properly designed, can provide a real-world assessment of patient outcomes, clinical practice and product safety⁹. The ostomy patient registry was undertaken to assess the longitudinal impact of ostomy product use on stoma-related cost of care, resource utilisation, quality of life (QoL), peristomal skin health, overall product satisfaction and other factors⁵. As such, the study contains a variety of questions and product users. Only two categories were assessed for the impact of COVID on responses – the reason for barrier change and barrier wear time. This study is currently enrolling in the US and is expanding into UK and Canada. The abbreviated list of areas researched within the above methods are described in Table 2.

RESULTS

The shift to virtual care

During COVID-19, many people are not seeking medical attention by going to a doctor's office, attending an outpatient clinic or seeking emergency care at the hospital in fear of contracting COVID-19. These fears or social distancing recommendations may prevent people with ostomy or continence challenges from seeking assistance when they are

	Digital support e.g. type, usage, etc	Skin / bladder care & complications	HCP support / practice e.g. in person, telehealth, comfort, etc	Industry support e.g. patient programs, additional needs, etc	Resource utilisation e.g. product access, frequency, barrier wear time, etc
Ostomy end user survey ³	1	Skin	1	1	
Ostomy nurse survey ⁴	✓	Skin	1	1	
Ostomy patient registry ⁵					1
Ostomy end user survey ⁶	1	Skin	1	1	1
IC end user survey ⁷	1	Bladder	1	1	1

Table 2. COVID-19 research areas



having peristomal skin complications or urinary tract infections (UTIs). In one survey⁷ with IC end users in the US, 44% of the 57 respondents felt that their bladder care had been neglected due to a healthcare shift to focus on COVID-19. In an UK and US ostomy survey⁶ about 20% of 319 respondents felt the same about their ostomy care. In addition, the number of people having an in-person visit with a nurse (i.e. at an outpatient clinic) in the year prior to COVID-19 versus since COVID-19 dropped from 86% to 43% with IC end users⁷ and 31% to 5% with ostomy end users³. Ostomy and continence care nurses must therefore consider alternative ways of providing care to their patients during this time of crisis.

Telemedicine has emerged as a life-saver for the COVID-19 crisis, enabling patients to obtain care virtually. In a study at a



Figure 2. Peristomal skin complication occurrence and types of issues during COVID-19

Note: Ostomy end users were allowed to choose multiple types of skin issues

large healthcare system in the US, which was an epicentre for COVID-19, video-enabled telemedicine in urgent care increased from 102.4 visits per day to 801.6 visits per day. This was a 683% increase in virtual care experiences¹⁰.

There are many benefits to virtual visits, including limiting person-to-person transmission of the virus, increased availability in a clinicians' schedule to see more patients, providing care in patients' homes and reduced travel costs for the patient. In a project at the University of Alabama, determining the feasibility of virtual postoperative visits, 90% of the patients "felt these visits helped with ostomy management"¹¹. However, as Figure 1 shows, many ostomy end users (52%)⁶ and IC end users (37%)⁷ report not knowing if telehealth is an option for their care.

Ostomy management challenges

During COVID-19, research shows that 57% of end users in the US and UK continue to report peristomal skin issues in the past month (Figure 2)^{3,6}. This high rate is congruent with pre-pandemic research^{12,13}. What has caused more concern during this time is that 84% of ostomy end users report NOT contacting a HCP about their skin health problems, with 71% citing they did not feel the skin issues were serious enough (Figure 3)³. Furthermore, over one third of ostomy end users did not contact their HCP because they felt skin health issues were 'normal' for them.³ Unfortunately, even a mild to moderate peristomal skin complication may affect the QoL of a person with an ostomy¹⁴.

From a cost perspective, the main treatments utilised by ostomy end users in the recent survey to treat their peristomal skin were changing the barrier more frequently and using more accessories⁶. However, the ostomy patient registry data, which reflects real world experiences and includes data from 3 months prior to the declaration of the COVID-19 pandemic through to June 2020, suggests that barrier changing reasons and wear time have remained stable for the 70 ostomy participants to date⁵.



Figure 3. Reasons ostomy end users did not seek HCP support for their peristomal skin complications during COVID-19

Understanding the impact of peristomal skin complications will help clinicians adjust their practice to prevent and manage these skin complications quickly to help reduce the cost and QoL impact. these end users encountered product access issues, including needing more catheters per day and glove shortages during COVID-19⁷.

Bladder management challenges

In a July 2020 survey⁷ of 57 IC users, 49% of them were more concerned about experiencing a UTI. In addition, about 20% of

Through highs and lows, people living with an ostomy or continence issues have benefited from in-person peer support. Unfortunately, there are times – such as during a pandemic –



Digital support

Figure 4. Types of internet resources utilised by ostomy and IC users for ostomy/bladder management information or support during COVID-19

Note: A total of 166 out of 378 (44%) end users did not utilise any of the resources listed above. The percentages in the graph are based on the remaining 212 end users (159 ostomy and 53 IC).

when meeting face-to-face isn't possible and people need to turn to online support. One of the recent COVID-19 surveys shows that end users are accessing more information online – ostomy end users increased their online usage by 34%⁶ and IC end users by 50%⁷. Both types of end users report the information they are seeking the most during COVID-19 are tips for troubleshooting issues and information about the availability of their ostomy and continence products^{3,7}. This matches the ostomy nurse survey results that indicate clinicians are seeking information on ostomy education and product availability during COVID.⁴ End users seek this information mainly from general medical or disease websites, manufacturing company websites, ostomy association websites and supplier websites (Figure 4)^{3,7}.

Patient program support

Fortunately, in addition to COVID-19 support through virtual clinical care (e.g. telehealth), there are other virtual services available to help ostomy patients. Patient programs or support programs, such as Hollister Secure Start[™] services, provide much needed support to people living with ostomy and continence care issues. These services have been uninterrupted through the pandemic and patients are utilising the service more than ever. Although COVID-19 has made social distancing a way of life, patient programs are more committed than ever to shorten the distance between the patient and educational resources and product information they need.

Websites also provide a helping hand for people living with an ostomy and continence issues during COVID-19. As many patients are accessing information online, having the right information available online is critically important – websites that focus on the information needed during this time to help achieve positive outcomes for patients. For example, many manufacturing company websites (such as the Hollister COVID-19 HUB) have specific information focusing on the needs of the HCP and end users during the COVID-19 pandemic.

CONCLUSION

In conclusion, early COVID-19 research suggests that ostomy and continence care patients alike are being negatively impacted by the pandemic. For ostomy patients, peristomal skin issues remain prevalent. In continence care, UTIs are a significant concern of IC users. For both patient populations, telehealth usage is low. This is an opportunity for clinicians to pivot their practice and include virtual support as an option for their patients. Both clinicians and end users display high engagement in research which helps identify what support and services they need during this pandemic. As this is only the beginning of the global pandemic, much more research is needed, including the effectiveness and satisfaction of online support or telehealth for these populations. The authors encourage readers to conduct their own research and share with the broader community. COVID-19 has challenged each and every one of us uniquely but, together, we can make a difference.

ETHICS

Research was conducted through anonymous surveys and an ethics approved clinical study. The end user and clinician surveys were not in scope for ethics reviews. All research included participant consents.

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CONFLICT OF INTEREST

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