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The Effect of Ostomate-to-Ostomate Support on Psychosocial Adaptation to Stoma

Submitted in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice
at Eastern Kentucky University

By

Marjorie C. Summers

Lancaster, KY

2018

Abstract

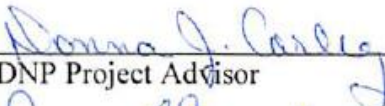
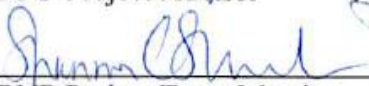


Approximately one million people in North America are living with an ostomy, and an additional 100,000 will undergo ostomy surgery annually. Persons living with ostomies, often referred to as ostomates, require specialized care and management to sustain physical health and quality of life. Fecal diversion ostomates, when compared to the general population, are more likely to experience psychological disturbance and higher levels of depression. These ostomates have reported increased loneliness, lowered self-esteem, decreased or absent libido, irritability, suicidal ideation, poor self-image, and symptoms of generalized anxiety disorder and social phobia. Being an ostomate has been associated with a reduction in health-related quality of life, increased social isolation, and disruption to work and travel patterns. The aim of this project was to translate existing evidence on psychosocial support groups to the ostomy patient population and explore the effect of ostomate-to-ostomate support on stomal adaptation. Ten ostomy participants provided demographic data and completed a 34-item ostomy adjustment scale, pre- and post-intervention, to measure acceptance of the stoma 90 days postoperatively. A paired sample *t*-test evaluated the influence of the ostomy support group on the participants' ostomy adjustment scores. Participants' mean ostomy adjustment score increased significantly from pre-intervention (125.6 ± 27.27) to post-intervention (176.2 ± 15.44), $t(9) = -9.59$, $p = .000$. The project findings suggest that use of the ostomy support group model improves psychosocial adaptation to stoma.

Keywords: ostomy, stoma, adaptation, support group

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By

Marjorie C. Summers

 DNP Project Advisor	<u>3/20/18</u> Date
 DNP Project Team Member	<u>3/20/2018</u> Date
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The Effect of Ostomate-to-Ostomate Support on Psychosocial Adaptation to Stoma

Background and Significance

Problem Identification

Approximately one million people in North America are living with an ostomy, and an additional 100,000 will undergo ostomy surgery annually (Mitchell et al., 2007). Recalla et al. (2013) define an ostomy as any surgical procedure resulting in the external diversion of feces or urine through a stoma. Persons living with ostomies, often referred to as ostomates, require specialized care and management to sustain physical health and quality of life. Up to 70% of ostomates will experience stomal or peristomal complications (Salvaladena, 2008). Wick et al. (2010) describe that readmission after colorectal surgery occurs frequently and is associated with a cost of approximately \$9000 per readmission. Ongoing stoma and ostomy appliance sizing, the treatment of peristomal skin care concerns, ostomy supply access, financial assistance, dietary modification education, and emotional support are a few of the health management issues that require attention following ostomy creation (Recalla et al., 2013).

Context of the Problem

Fecal diversion ostomates (ileostomy or colostomy), when compared to the general population, are more likely to experience psychological disturbance and higher levels of depression (Mahjoubi, Mohammadsadeghi, Mohammadiour, Mirzaei, & Moini, 2009; Cotrim & Pereira, 2008). These ostomates have reported increased loneliness, lowered self-esteem, decreased or absent libido, irritability, suicidal ideation, poor self-image, and symptoms of generalized anxiety disorder and social phobia (Kiliç, Taycan, Belli, & Özmen, 2007; Follick, Smith, & Turk, 1984; Wade, 1990). Being an ostomate has been associated with a reduction in

health-related quality of life, increased social isolation, and disruption to work and travel patterns (Krouse et al., 2007).

Scope of the Problem

There is currently only one UOAA-affiliated ostomy support group in the central Kentucky region located in Lexington, Kentucky. This ostomy support group meets once monthly and may not meet the needs of patients living outside the central Kentucky region. The implementation of this ostomate support group sought to address the lack of postoperative ostomate support within the project site. Providing ostomy education at the point of care, versus waiting to attend a monthly group meeting, increased early access to postoperative ostomy education.

Consequences of the Problem

Development of the ostomate support group could potentially lead to a decreased readmission rate from patients who lacked appropriate stomal education and support. Implementing this project could not only create a potential for decreased readmissions, but also provide a great aftercare service to our ostomy clients. The support group framework could potentially lend itself externally to other service lines with chronic disease states such as heart failure, chronic obstructive pulmonary disease, autoimmune disorders, and patients who have received organ transplants.

Evidence-Based Intervention and Project Purpose

The evidence-based practice (EBP) intervention was a support group for fecal diversion ostomates sponsored by the project site. The support group was a new venture for the healthcare facility and would only be the second support group of its kind in central Kentucky. The project site performs eight or more colorectal procedures per day with 80% of these patients having a

temporary or permanent fecal diversion ostomy as a result (S. Beck, personal communication, November 2, 2016).

Addressing psychosocial needs of ostomates involves identifying and monitoring those having adjustment difficulties (Simmons, Smith, & Maekawa, 2009). The purpose of the project was to assist the ostomate with integrating the stoma into his or her current lifestyle and improving psychosocial adaptation to stoma. The support group intervention involved a 30-minute educational session with the ostomate, his/her significant other, spouse, family member, and/or caregiver during the two-week post-operative wellness check.

Theoretical Framework

The Roy Adaptation Model (RAM) (1970) provided the conceptual framework for the ostomy support group. For over four decades, the RAM assisted caregivers to understand and direct nursing practice in the care of individual patients. The RAM steered this DNP project to create an intervention for the fecal ostomate patient population. Roy (2009) defined adaptation as a process in which people use conscious awareness and choice to create integration. An ostomate's level of adaptation will affect his or her ability to respond positively or negatively to situations. A new ostomate will experience change in bodily function and, depending on his or her level of adaptation, will respond to this change in either a positive or a negative way (Roy, 2009).

Application of the RAM to the support group intervention took place in the assessment of adaptation coping mechanisms present in the ostomate. Roy's model focuses on two interrelated subsystems. The primary, functional, or control processes subsystem consists of the regulator and the cognator, which assess the ostomate's level of coping. The secondary, effector subsystem consists of four adaptive modes: (1) physiological needs, (2) self-concept, (3) role function, and

(4) interdependence (Andrews & Roy, 1986). This secondary subsystem allowed the project leader to measure outcomes related to ostomy adaptation. Figure 1 depicts how the two subsystems interrelate to produce adaptive and ineffective responses in the individual (Roy, 1984).

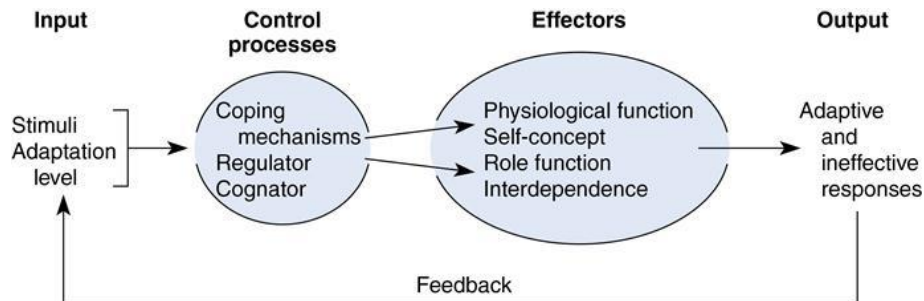


Figure 1. Person as an adaptive system (Roy, 1984).

Review of Literature

Nichols (2011) describes that how an ostomate thinks, feels, and relates to others can affect his/her overall wellbeing. Social support acts as a buffering mechanism to those in crisis where the absence of social support results in an inability to form effective coping and adapting behaviors necessary to reestablish norms (Vaux, 1988; Berg & Cassells, 1992). The evidence in the literature reveals analyses on the emotional, spiritual, and physical needs of the patient following ostomy surgery and provide supporting evidence for follow-up care within the structure of an ostomy support group or network.

Knowles et al. (2014) performed a descriptive, cross-sectional questionnaire-based study with the purpose of employing the Common Sense Model (CSM) of illness perceptions to examine the relative contribution of illness perceptions, stoma self-efficacy, and coping strategies in explaining anxiety and depression symptoms in patients with a fecal ostomy.

Participants originated from online links to the Crohn's and Colitis Australia website, stoma associations, Internet health forums, and ostomy support groups on Facebook. One

hundred and fifty patients (54 males and 96 females) with fecal stomas completed an online survey consisting of several instruments to measure study outcomes. These instruments included the Ware (1976) Health Perceptions Questionnaire, the Broadbent, Petrie, Main, and Weinman (2006) Brief Illness Perceptions Questionnaire, the Carver, Scheier, and Weintraub (1989) Brief Coping Questionnaire, the Bekkers, van Knippenberg, van den Borne, and van Berge-Henegouwen (1996) Stoma Self-Efficacy Scale, and the Zigmond and Snaith (1983) Hospital Anxiety and Depression Scale.

The Health Perceptions Questionnaire is a 10-item that assesses health status with responses based on a 4-point Likert scale with higher scores indicating poorer perceived health status. The Brief Illness Perceptions Questionnaire is an 8-item scale that measures cognitive and emotional representations of illness with responses based on an 11-point Likert scale with higher scores indicating a more threatening view of illness. The Brief Coping Questionnaire is a 28-item scale that assesses the different ways people respond to stress with responses based on a 4-point Likert scale with higher scores indicating better response to stress. The Stoma Self-Efficacy Scale consists of 22 items that measure individual perceptions relating to their ability to manage their stoma based on a 5-point Likert scale with higher scores indicating greater levels of confidence in stoma care. The Hospital Anxiety and Depression Scale is a 14-item tool that assesses level of depression and anxiety experienced over the last week based on a 4-point Likert scale with higher scores indicating a higher level of depression and anxiety.

Correlational analyses compared the relationship between study variables. Pearson's correlation revealed that time since the ostomy surgery had a statistically significant, negative correlation with health status ($p = < .05$), illness perceptions ($p = < .001$), adaptive problem and emotion-focused coping ($p = < .01$), maladaptive coping ($p = < .001$), and anxiety and depression

($p = < .001$). Bivariate analyses revealed health status had significant, positive correlations with illness perceptions, adaptive problem-focused coping, maladaptive coping, anxiety and depression, and a significant inverse correlation with stoma self-efficacy. The researchers concluded that poorer health was associated with a more negative perception of illness. The Knowles et al. (2014) article demonstrates that patients with a better perception of health were also more likely to cope with his/her stoma. Although the support group program will not be assessing the subject's perception of health, the ostomate-to-ostomate support provided by the program could negate unhelpful illness perceptions.

Grant, McCorkle, Hornbrook, Wendel, and Krouse (2013) conducted descriptive, mixed-method, questionnaire-based research to study the development of an ostomy self-management program. The purpose of the study was to develop a chronic care self-management program that sought to provide (1) evidence on published quality-of-life changes for cancer patients with ostomies, (2) educational suggestions from patients with ostomies, and (3) examination of the usual care of new ostomates to illustrate areas for continued educational emphases and areas needed for education and support.

The participants included 1,513 colorectal cancer survivors in the peri-operative periods and post-operatively with an unlimited time since surgery. The network employed peer ostomates (both males and females) along with two experienced wound ostomy continence (WOC) nurses. Assignments of peer ostomates to participating ostomates was by gender. The focus of the program was teaching patients to be problem-solvers, rather than just giving them a solution. A mailed survey to the participants measured health-related quality of life that included physical, psychological, social, and spiritual well-being. Descriptive statistics demonstrated that the participants experienced: (1) continuing physical needs related to the ostomy, (2)

psychological needs were dependent upon the ostomates ability to adapt, (3) social interaction as an important factor, and (3) spiritual well-being as the most challenging for the ostomate. This study provides evidence that social interaction from a peer ostomate can assist in addressing the physical, psychological, social, and spiritual needs of the ostomate.

Richbourg, Thorpe, and Rapp (2007) conducted a descriptive study with the purpose of identifying difficulties related to stoma that ostomates experience after discharge from the hospital, who they sought help from, and if the advice was perceived as helpful. A 34-item survey, designed by Richbourg, solicited information on surgery type and timing, pre-operative stomal education and marking, independence with self-care, pouch wear time, satisfaction with pouching products, financial impact, and participation in an ostomy support group meeting.

The mailed survey, to 140 participants, had a return rate of thirty-one percent with 34 surveys deemed usable for statistical analysis. Study results found the majority of ostomates experienced difficulty with peristomal skin irritation (76%), pouch leakage (62%), odor (59%), depression or anxiety (53%), and reduced social interactions (54%). Twenty percent of the respondents who experienced difficulties after surgery did not seek help. The vast majority of study participants chose not to attend ostomy support group meetings (86%). The study provides evidence that the framework of the support group project may be desirable to the new ostomate versus attending a classroom-style support group.

Scardillo, Dunn, and Piscotty (2016) conducted a descriptive, correlational study with the purpose of describing the relationship between resilience and adjustment in adults with permanent stomas. In addition, to determine if participants who report higher levels of resilience also report higher levels of adjustment to a permanent ostomy. The authors chose the Roy Adaptation Model (2009) as the conceptual framework. Ninety-eight mailed surveys went to

permanent ostomates from three regional ostomy support groups using the Simmons, Smith, and Maekawa (2009) OAI-23 and the Wagnild and Young (1993) Resilience Scale instruments with 48 surveys returned for analysis. The OAI-23 is a 23-item scale that assesses psychosocial adjustment to an ostomy with responses based on a 5-point Likert scale. Higher OAI-23 scores indicate higher levels of adjustment. The Resilience scale is a 25-item tool that measures degrees of resilience with responses based on a 7-point Likert scale. Higher scores indicate higher resilience.

The study results demonstrated that participants with higher levels of ostomy adjustment had higher levels of resilience than respondents who reported lower levels of ostomy adjustment ($r = 0.65, p = \leq .01$). A study limitation noted by the authors was that participants were ostomy support group members indicating engagement in activities that promote adaptation. This study provides evidence that participation in a support group could improve positive adjustment to stoma.

Frohlich and Zmyslinski-Seelig (2012) conducted a comparison study with the purpose of exploring the types of social support messages YouTube users posted on inflammatory bowel disease (IBD)-related videos and ostomy-related videos. The study further analyzed differences in social support messages posted on lay-created videos versus professionally created videos. A total of 5,960 posts with view counts higher than 1,000 were examined using Ginossar's (2008) Internet message coding scheme.

The participant comments separated into four categories: (1) professional IBD, (2) lay IBD, (3) professional ostomy, and (4) lay ostomy. Two conclusions came from the study results: (1) social support message frequency varies both by disease/condition, and (2) social support message frequency varies by video creator. The researchers found that users were more

comfortable commenting on lay videos because they were interacting with a person with firsthand experience. Conversely, users were less likely to post responses to a physician-created video because they feel physicians do not understand what it is like to live with the condition. One-way chi-squared testing was performed on the study hypotheses with statistical significance found for each question (question 1: $\chi^2 (10, n = 5,960) = 197.83, p < .001, V = .182$; question 2: $\chi^2 (10, n = 3,314) = 108.81, p < .001, V = .181$; question 3: $\chi^2 (10, n = 2,646) = 44.27, p < .001, V = .129$). The study evidence demonstrates how support from a peer ostomate support network can positively affect stomal adaptation.

Indrebø, Natvig, and Andersen (2016) performed a cross-sectional study with the purpose of determining if ostomy-specific adjustment does or does not predict health-related quality of life (QoL) and/or overall QoL. Several instruments assessed QoL related to health conditions. These instruments included the Olbrisch (1983) Ostomy Adjustment Scale (OAS), the McHorney, Ware, and Raczek (1993) Short Form-36 (SF-36), and the Flanagan (1982) Quality of Life Scale (QOLS). The OAS is a 34-item scale that measures adjustment to ostomy with responses based on a 6-point Likert scale. Total score ranges from 34 to 204 with higher scores indicating higher levels of adjustment. The SF-36 is a 36-item scale that measures the symptoms and functions most affected by disease and treatment. Higher scores are associated with better health-related QoL. The QOLS is a 16-item scale that facilitates assessment of an individual's overall satisfaction with life, such as material comfort, independence, recreation, and relationships with others. Higher scores are associated with a better QoL.

One hundred and fifty eight subjects, aged 18 years and older with a fecal ostomy, completed the OAS, SF-36, and QOLS questionnaires. The average OAS score was 150.2 (SD \pm 30.1). In the linear least square ordinary regression analysis, the OAS significantly predicted the

summary SF-36 and QOLS scores ($p = <.001$), which were an important predictor of health-related quality of life. This study provides evidence that the use of the OAS tool may prove useful as an evaluation measure for the support group project.

Piwonka and Merino (1999) conducted a cross-sectional study with the purpose of identifying factors that contribute to the post-operative adjustment of patients who had undergone permanent colostomy surgery. Sixty patients, aged 27 to 89 years who underwent colostomy surgery from four months to 19 years before data collection, completed the OAS. Study results demonstrated that successful adaptation to a colostomy is most likely to occur if the patient receives adequate instruction in self-care and has the appropriate psychological support to integrate the new physical changes into a healthy body image. Although the study did not provide the full body of evidence or OAS statistical data, the research does provide evidence that ostomate psychological support improves the patient's perception of self.

Karabulut, Dinç, and Karadag (2014) conducted a quantitative study to analyze the effects of planned group interactions on the social adaptation of individuals with an intestinal stoma. Participants, with an ileostomy or a colostomy, originated from the Gazi University Health Research and Implementation Centre Stoma therapy unit in Ankara, Turkey. Fifty participants were assigned to experimental ($n = 23$) and control ($n = 27$) groups based on willingness to participate in group meetings. Experimental participants attended a 90-minute group activity once a week for six weeks.

The Simmons, Smith, and Maekawa (2009) OAI-23 and the Derogatis and Lopez (1983) Psychosocial Adjustment to Illness Scale-Self-Report Scale (PAIS-SR) were collected at three intervals: (1) prior to the first group meeting, (2) after the six-week sessions ended, and (3) one month after the group sessions had concluded. Friedman's and Kruskal-Wallis analytical

methods revealed the impacts of the planned group interaction method on participants' scores for psychosocial adjustment to illness and adjustment to stomas. The PAIS-SR is a 46-item scale that assesses patients' psychosocial adjustment to illness with responses based on a 3-point Likert scale. Low scores (≤ 35) indicate positive psychosocial adjustment to illness.

The study authors found that a structured support group showed a statistically significance change in the experimental participants' OAI-23 scores from week one to week ten ($p = < 0.05$). However, no significant change was evident in the control group's average OAI-23 scores. Lower PAIS-SR scores appeared to have a causal relationship to higher adjustment levels. The experimental group's average PAIS-SR scores decreased gradually from week one to week ten representing a statistically significant change ($p = < 0.05$). Although the control group's average PAIS-SR scores also decreased over time, the change was not statistically significant ($p = > 0.05$). Results of this study provide evidence that group interaction facilitated psychosocial adjustment in the ostomate.

Salomé, De Almeida, and Silveira (2014) conducted a clinical, primary, descriptive, analytical, prospective study with the purpose of investigating the quality of life and self-esteem in patients with a fecal stoma. A convenience sample of 70 patients originated from the Ostomized People's Pole of Pouso Alegre in Pouso Alegre, Brazil. The study authors administered the Rosenberg (1965) Self-Esteem Scale (RSE) and the Flanagan (1982) Quality of Life Scale (FQLS). The RSE is a 10-item scale that assesses self-esteem with responses based on a 4-point Likert scale. Total scores range from zero to 30 with zero being the best value for self-esteem. FQLS is a 15-item scale that conceptualizes QoL based on the five dimensions of physical and material well-being, relationship with others, social, community, and civic

activities, personal development and fulfillment, and recreation using a 7-point Likert scale.

Higher FQLS scores indicate a higher the quality of life.

Descriptive statistics revealed that RSE scores ranged from 1.4 to 15.7 and FQLS scores ranged from 1.4 to 41.4. Mean RSE score was 10.81 ($p = .0001$) and the mean FQLS was 26.16 ($p = .0001$) demonstrating that these ostomized patients had negative feelings related to self-esteem and showed a decreased quality of life. Although this study does not provide a linkage to the effectiveness of an ostomy support group, the provided evidence will assist the researcher in ensuring the ostomy support group addresses the ostomate's feelings of self-esteem and quality of life through peer ostomate interaction.

De la Quintana Jiménez et al. (2010) conducted a prospective, longitudinal study with the purpose of evaluating the effects of an intensive follow-up program for patients with a stoma. Ostomy nurses selected 336 participants from 70 Spanish general hospital outpatient clinics. To participate in the study, the participants had to be > 18 years-of-age, ambulatory, able to communicate verbally and in writing, and have a new permanent fecal diversion or urinary diversion ostomy for at least three months. Hospitalized patients were excluded.

Participants received either standard clinical follow-up ($n = 187$) or an intensive follow-up telephone call ($n = 149$). The Marquis, Marrel, and Jambon (2003) Stoma Quality of Life Index (SQLI) was administered at the initial visit or phone call and again at the final visit or phone call. SQLI is a 34-item questionnaire scored on a six-point Likert scale ranging from 0-100 with higher scores indicating increased perception of quality of life.

Data analysis included the use of frequency distributions, chi-square or Fisher tests, Student's t -test, paired Student's t -test, and nonparametric tests (Wilcoxon two-sample test or Kruskal-Wallis, paired or non-paired). At enrollment, the average SQLI was 58.5 (SD \pm 17.7).

After three months, the combined data from both groups showed a statistically significant 14-point increase in the overall SQLI score ($SD \pm 17.8$; $p = < 0.0001$; Wilcoxon paired test) except in the subscales improvement of medical care received and medical experience. The greatest change (+22.5, $SD \pm 27.4$) originated in the subscale of stoma self-efficacy for the intervention group from enrollment to three months post-intervention. Although the authors do not reference support group participation, study results confirm that personal support received pre- and post-surgery enhances the ostomate's stoma self-efficacy. This study provides evidence that stomal education could reduce stomal complications and the potential for readmission.

Agency Description

Setting

A 954-bed, general medical and surgical facility located in Lexington, KY was the site for the project. The healthcare facility consists of four separate hospitals and over 80 specialized clinics and more than 140 outreach programs (UKHC, 2016). The support group session will take place in the colorectal surgery clinic located in Lexington, KY.

Target Population

The study population included colorectal participants (≥ 18 years of age) who have had a fecal diversion ostomy (ileostomy or colostomy) procedure performed within the previous two weeks. The project site colorectal surgeon, who has a treatment relationship with the participant, approached each identified participant regarding recruitment and participation in the IRB-approved ostomy support group project. The project leader (PL) made initial confidential contact and obtained permission from the potential participant through informed consent during the two-week post-operative colorectal clinic visit.

Congruence of DNP Project to Organization

The foundation of the facility strategic plan is patient-centered care, with a primary focus on patient experience, strategic cultural alignment, and growth in complex care. The digestive health program is one of nine service lines selected for focus, as it is one of the largest providers of this service in the state of Kentucky. This program has seen significant growth over the last 12 years, highlighting the importance of this service line to the state (UKHC, 2015). The number of colorectal patients seen by the facility supports the need for an after-care program, such as the ostomy support group, and aligns with the facility's digestive health strategic plan.

Description of Stakeholders

Stakeholders include the colorectal patient population and their significant others, family members, and/or caregivers, the project site, the colorectal surgery group (physicians and nurses), nurses who care for ostomy patients postoperatively, and the WOC nurse division.

Statement of Mutual Agreement with Agency

The PL engaged the project site in a mutual agreement to complete the ostomy support group intervention. The PL provided the agency representative with a brief description of the project and guideline for completion. The PL provided updates to the agency throughout the project timeline. See Appendix A.

Project Design

The design of this evidence-based project involved the development and implementation a peer ostomate-to-ostomate support group. The colorectal surgeon's practice provided a convenience sample of 10 fecal diversion (ileostomy and colostomy) participants, aged 18 to 101 years. Excluded participants included non-English speaking patients (no access to Language

Services by the PL) and participants with impaired consent capacity (potential inability to participate in the survey).

Project Methods

Description of EBP Intervention

The support group intervention was the provision of ostomate-to-ostomate support during a 30-minute educational session with the participation, his/her significant other, spouse, family member, and/or caregiver during the two-week post-operative wellness check. Participants chose his/her preference for having a group or individual session. The session took place in a private meeting room, within the colorectal clinic, where the PL shared ostomy education. Education included the Krames (2014a) Living with an Ileostomy or the Krames (2014b) Living with a Colostomy brochure, and the ostomy tips from ostomy patients educational brochure (developed in collaboration with the project site patient education department). The ostomy tips from ostomy patients brochure contained topics on nutrition, fluid intake and medications, ordering ostomy supplies, appliance change and pouch emptying tips and tricks, dealing with pouch gas, what to wear with an ostomy, and ostomy website resource links.

Participants were also able to view samples, from various ostomy supply manufacturers, of one-piece and two-piece pouching systems, barrier products, ostomy belts, and other ostomy accessories. The PL allowed time, during this 30-minute individual/group session, to address questions and/or concerns. See Appendix A for the ostomy tips from ostomy patients brochure.

Procedure

IRB approval

The PL obtained Expedited Institutional Review Board (IRB) approval from the project site. The project leader also obtained an IRB Authorization Agreement (IAA) from Eastern

Kentucky University (EKU). The EKU IAA will recognize the project site as the project leader's IRB of record. See Appendix B for the UKHC IRB approval letter and Appendix C for the EKU IAA.

Measures and instruments

The Olbrisch (1983) OAS was administered prior to and three months after implementation of the support group. The OAS is a 34-item scale that assesses psychological adjustment to an ostomy with responses based on a 6-point Likert scale (1 = totally disagree and 6 = totally agree); the total score ranges from 34 to 204 with higher scores indicating better levels of adjustment. Seventeen items (items 3, 6, 9, 10, 11, 13, 14, 16, 17, 19, 20, 23, 24, 26, 27, 30, and 31) are negative statements that are evaluated reversely. The OAS is a valid and highly reliable (Cronbach's alpha coefficient = 0.87; test-retest correlation coefficient = 0.72) self-report measure of psychological adjustment in adults living with an ostomy (Olbrisch, 1983). Burkhardt (1990) performed a validity and reliability study of the scale and found the OAS to have positive psychometric properties making it useful for further research and practice (Cronbach's alpha coefficient = 0.90). Indrebø, Andersen, and Natvig (2014) performed validity and reliability testing of the OAS and found the tool to be highly valid and reliable (Cronbach's alpha coefficient = 0.93; test-retest correlation coefficient = 0.69). The PL contacted Dr. Mary Ellen Olbrisch, corresponding author, via email on April 24, 2017 for permission to use the tool. Permission arrived on April 25, 2017 with no associated cost or training required to use the tool. See Appendix D for OAS tool permission.

Demographic variable data, collected upon program enrollment, included age, gender, marital status, race, highest education completed, annual income, and household size. Stoma-specific demographic variable data, also collected upon program enrollment, included stoma

nature (temporary or permanent), stoma type (ileostomy or colostomy), reason for stoma, health condition affecting stoma care, who performs stoma care (self or other), and stoma care knowledge perception. The administration of the OAS too occurred immediately after collection of demographic information. See Appendix E for the OAS tool.

During participant enrollment, the PL used an electronic Microsoft Excel numbered list, ranging from 100 to 130, with each participant assigned a sequential number. The encrypted, numbered list also contained the participant's name and telephone number for the post-intervention phone interview. No identifying participant information was included on the data collection tool.

Implementation

The Iowa Model of Evidence-Based Practice to Promote Quality Care assists nurses and other healthcare providers to translate research findings into clinical practice. The model consists of five steps: (1) recognizing "triggers" through identification of a clinical problem, (2) clinical application of clinically relevant practice questions, (3) organizational priorities, (4) forming a team, and (5) piloting a practice change (Titler et al., 1994). The application of the IOWA model to the support group program began with the identification/recognition of the gap that existed in ostomate aftercare within the project site community. The second step was applying the clinical question of whether participation in an ostomy support group improves adaptation to ostomy. The third step was the acknowledgement that the support group aligned with the facility's strategic plan and has the support of the colorectal surgery and WOC nurse divisions. The fourth step was the formation of the support group team to include the project leader, a WOC nurse, and the colorectal surgeons. The last step was piloting the support group program with a small group of participants from the project site colorectal surgeon's practice.

The project site colorectal surgeon, who has a treatment relationship with the participant, approached each identified participant regarding recruitment and participation in the project. The PL made initial confidential contact. The PL, through informed consent, obtained permission from the potential participant during the two-week post-operative colorectal clinic visit. Potential participants received information about the project using the principles of Teach-back, allowing them to make an informed and voluntary decision about whether to participate. The PL provided the participant ample time to read the consent and to ask questions.

Support group implementation began at participant enrollment with a timeline of 30 days to obtain 10 fecal diversion ostomy participants ≥ 18 years of age. After 90 days post-intervention, the PL re-administered the OAS tool via telephone. The PL allowed three weeks for statistical analysis of the data.

Results

The 10 project participants were adults who ranged in age from 19-55 years-old. All project participants were English speaking, were able to read and write, and had no cognitive limitations. The PL entered data into the Statistical Package for Social Science (SPSS®) Version 24.0 (IBM Corporation, 2016). Statistical significance was set at 0.05 (Polit, 2010). Data analysis included summarization of descriptive statistics, paired *t* test on mean pre- and post-intervention scores for OAS, and One-way Analysis of Variance (ANOVA) to compare the variables educational status and stoma reason with post-intervention OAS score.

As demonstrated in Table 1, 60% of the participants were female and 90% were married. The majority (90%) of the participants were Caucasian and six participants had some college or a college degree. The majority (70%) had a temporary ostomy; of those 90% had an ileostomy. Half of the participants presented with inflammatory bowel disease as the reason for stoma with

four participants suffering with colonic inertia and chronic constipation. Table 2 shows the mean annual income of the participants was \$95,300.00 with an average household size of 2.6 members.

Table 1

Frequency of Sociodemographic and Stoma-Specific Characteristics

Variable	<i>n</i>	%
Gender		
Male	4	40.0
Female	6	60.0
Marital Status		
Single	0	0.0
Living with Partner	1	10.0
Married	9	90.0
Separated	0	0.0
Divorced	0	0.0
Widowed	0	0.0
Race		
Caucasian	9	90.0
African American	0	0.0
Asian	0	0.0
Hispanic	1	10.0
Other	0	0.0
Educational Status		
Less than High School	0	0.0
High School/Equivalency	4	40.0
Some College/Vocational Educ.	3	30.0
College Degree	1	10.0
Graduate Degree	2	20.0

Table 1 Continued

Variable	<i>n</i>	%
Stoma Nature		
Temporary	7	70.0
Permanent	3	30.0
Stoma Type		
Ileostomy	9	90.0
Colostomy	1	10.0
Stoma Reason		
Cancer	0	0.0
Injury	0	0.0
Inflammatory Bowel Disease	5	50.0
Familial Adenomatous Polyposis	1	10.0
Other	4	40.0

Table 2

Sociodemographic Characteristics of Participants

Variable	<i>n</i>	Mean	SD	Minimum	Maximum
Age	10	39.20	13.80	19	55
Annual Income	10	\$95,300.00	\$56,277.19	\$32,000	\$175,000
Household Size	439	2.60	.699	2	4

A paired sample *t*-test evaluated the influence of the ostomy support group on the participants' OAS scores (Table 3). Participants' mean OAS score increased significantly from pre-intervention (125.6 ± 27.27) to post-intervention (176.2 ± 15.44), $t(9) = -9.59$, $p = .000$. The mean increase in OAS score was 50.6 with a 95% CI range from -62.52 to -38.67. The degree of difference in the means was large (eta squared = .91).

Table 3

Paired t-test Comparison of Mean Pre-OAS Score and Post-OAS Score

Group	Mean \pm SD	t	df	p
Pre-OAS (Time 1) (n=10)	125.6 \pm 27.27	-9.59	9	.000
Post-OAS (Time 2) (n=10)	176.2 \pm 15.44			

A One-way ANOVA explored the effect of educational status on ostomy adaptation, as measured by the OAS (Table 4). The reporting of participant educational status was as follows (1) high school/equivalency, (2) some college/vocation educ., (3) college degree, or (4) graduate degree. There was a significant difference in mean OAS scores between the four groups: $F(3, 8) = 10.84, p = .008$.

Table 4

One-way ANOVA for Educational Status Category and OAS

	Sum of Squares	df	Mean Square	F	p
Between Groups	1813.10	3	604.37	10.84	.008
Within Groups	334.50	6	55.75		
Total	2147.60	9			

A One-way ANOVA explored the effect of stoma reason status on ostomy adaptation, measured by the OAS (Table 5). The reporting of participant stoma reason status was as follows

(1) cancer, (2) injury, (3) inflammatory bowel disease, (4) familial adenomatous polyposis, or (5) other. There was a significant difference in mean OAS scores between the five groups: $F(2, 7) = 5.50, p = .037$.

Table 5.

One-way ANOVA for Stoma Reason Category and OAS

	Sum of Squares	df	Mean Square	F	<i>p</i>
Between Groups	1312.40	2	656.20	5.50	.037
Within Groups	835.20	7	119.31		
Total	2147.60	9			

Discussion and Implications

The PL set out to explore the experiences of people living with an ostomy. The present sample, of 10 participants, may not be representative of all ostomates. Additionally, the project results are based entirely on self-reports. Though subjective perceptions are valuable, more objective assessment methods would be useful in the future. Project limitations included: (1) small sample size, (2) busy clinic location for the group session, and (3) brief timeframe for intervention and follow-up. However, results indicate the value of the ostomy support group and its positive impact on the ostomate's adaptation to his/her stoma. Anecdotally, temporary ostomates verbalized an overall positive outlook since stoma reversal was within the next three to six months.

Project results demonstrate the importance of ostomy education in psychosocial adaptation. The next steps for ostomy education lie in the preoperative setting with the creation

of a preoperative ostomy education class. Preoperative preparation of patients for ostomy surgery links to a reduced likelihood of ostomy-related complications, better patient acceptance of the stoma, best location for stoma site-marking, and positive long-term outcomes (Haugen, Bliss, & Savik, 2006).

Summary and Conclusion

Illness-based support groups bring people together who face similar disease-related challenges, to give and receive emotional support, and exchange information either through face-to-face activities, online, or via telephone (Davison, Pennebaker, & Dickerson, 2000). Many people with shared chronic conditions, such as the ostomate, join support groups in order to cope with the emotional and practical challenges of their situation (Lieberman et al., 2005). Studies demonstrate that support group participation assists the ostomate to move more rapidly toward acceptance of the ostomy (Cross & Hottenstein, 2010). This ostomate-to-ostomate project encouraged acceptance and understanding in the expression of feelings that emerge during the ostomy adaptation process. The mantra “each one, reach one” will remain the foundation for the support group as the ostomate has the ability to relate and assist other ostomates on the path to physical and psychological adaptation.

References

- Andrews, H., & Roy, C. (1986). *Essentials of the Roy adaptation model*. Norwalk, CT: Appleton-Century-Crofts.
- Bekkers, M.J., van Knippenberg, F.C., van den Borne, H.W., & van Berge-Henegouwen, G. P. (1996). Prospective evaluation of psychosocial adaptation to stoma surgery: The role of self-efficacy. *Psychosomatic Medicine*, 58(2), 183-191.
- Berg, R.L., & Cassells, J.S. (1992). *The second fifty years: Promoting health and preventing disability*. Washington, D.C.: National Academy Press.
- Broadbent, E., Petrie, K.J., Main, J., & Weinman, J. (2006). The brief illness perception questionnaire. *Journal of Psychosomatic Research*, 60(6), 631-637.
- Burkhardt, C.S. (1990). The ostomy adjustment scale: Further evidence of reliability and validity. *Rehabilitation Psychology*, 35(3), 149-155.
- Carver, C.S., Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267-283.
- Cotrim, H., & Pereira, G. (2008). Impact of colorectal cancer on patient and family: Implications for care. *European Journal of Oncology Nursing*, 12(3), 217-226. doi: 10.1016/j.ejon.2007.11.005
- Cross, H.H., & Hottenstein, P. (2010). Starting and maintaining a hospital-based ostomy support group. *Journal of Wound, Ostomy & Continence Nursing*, 37(4), 393-396.
- Davison, K.P., Pennebaker, J.W., & Dickerson, S.S. (2000). Who talks? The social psychology of illness support groups. *The American Psychologist*, 55(2), 205-217.

- De la Quintana Jiménez, P., Pastor, J.C., Prados, H.I., Pérez López, C., González Fuentes, M., De Mena Casaseca, C.,...Espirac, B. (2010). A prospective, longitudinal, multicenter, cohort quality-of-life evaluation of an intensive follow-up program for patients with a stoma. *Ostomy Wound Management*, 56(5), 44-52.
- Derogatis, L.R., & Lopez, M.C. (1983). *PAIS and PAIS-R scoring manual I*. Baltimore, MD: Johns Hopkins University.
- Flanagan, J.C. (1982). Measurement of quality of life: Current state of the art. *Archives of Physical Medicine and Rehabilitation*, 63(2), 56-59.
- Follick, M.J., Smith, T.W., & Turk, D.C. (1984). Psychosocial adjustment following ostomy surgery. *Health Psychology*, 3(6), 505-517.
- Frohlich, D.O., & Zmyslinski-Seelig, A. (2012). The presence of social support messages on youtube videos about inflammatory bowel disease and ostomies. *Health Communication*, 27(5), 421-428. doi: 10.1080/10410236.2011.606524
- Ginossar, T. (2008). Online participation: A content analysis of differences in utilization of two online cancer communities by men and women, patients and family members. *Health Communication*, 23(1), 1-12. doi: 10.1080/10410230701697100
- Grant, M., McCorkle, R., Hornbrook, M.C., Wendel, C.S., & Krouse, R. (2013). Development of a chronic care ostomy self-management program. *Journal of Cancer Education*, 28(1), 70-78. doi: 10.1007/s13187-012-0433-1
- Haugen, V., Bliss, D.Z., & Savik, K. (2006). Perioperative factors that affect long-term adjustment to an incontinent ostomy. *Journal of Wound, Ostomy & Continence Nursing*, 3(5), 525-535.

IBM Corporation (2016). SPSS statistics for windows, version 24.0. Armonk, NY: IBM Corporation.

Indrebø, K.L., Andersen, J.R., & Natvig, G.K. (2014). The ostomy adjustment scale: Translation into the Norwegian language with validation and reliability testing. *Journal of Wound, Ostomy & Continence Nursing*, 41(4), 357-364.

Indrebø, K.L., Natvig, G.K., & Andersen, J.R. (2016). A cross-sectional study to determine whether adjustment to an ostomy can predict health-related and/or overall quality of life. *Ostomy Wound Management*, 62(10), 50-59.

Karabulut, H.K., Dinç, L., & Karadağ, A. (2014). Effects of planned group interactions on the social adaptation of individuals with an intestinal stoma: A quantitative study. *Journal of Clinical Nursing*, 23(19-20), 2800-2813. doi: 10.1111/jocn.12541

Kiliç, E., Taycan, O., Belli, A.K., & Özmen, M. (2007). The effect of permanent ostomy on body image, self-esteem, marital adjustment, and sexual functioning. *Turkish Journal of Psychiatry*, 18(4), 1-8.

Knowles, S.R., Tribbick, D., Connell, W.R., Castle, D., Salzberg, M., & Kamm, M.A. (2014). Exploration of health status, illness perceptions, coping strategies, and psychological morbidity in stoma patients. *Journal of Wound, Ostomy & Continence Nursing*, 41(6), 573-580. doi: 10.1097/WON.0000000000000073

Krames Patient Education (2014a). *Living with an ileostomy*. Greensboro, NC: The StayWell Company.

Krames Patient Education (2014b). *Living with a colostomy*. Greensboro, NC: The StayWell Company.

- Krouse, R., Grant, M., Ferrell, B., Dean, G., Nelson, R., & Chu, D. (2007). Quality of life in 599 cancer and non-cancer patients with colostomies. *The Journal of Surgical Research*, *138*(1), 79-89.
- Lieberman, M.A., Winzelberg, A., Golant, M., Wakahiro, M, DiMinno, M., Aminoff, M., & Christine, C. (2005). Online support groups for Parkinson's patients: A pilot study of effectiveness. *Social Work in Health Care*, *42*(2), 23-38.
- Mahjoubi, B., Mohhammadsadeghi, H., Mohammadiour, M., Mirzaei, R., & Moini, R. (2009). Evaluation of psychiatric illness in Iranian stoma patients. *Journal of Psychosomatic Research*, *66*(3), 249-253. doi: 10.1016/j.jpsychores.2008.10.015
- McHorney, C.A., Ware, J.E., & Raczek, A.E. (1993). The MOS 36-item short-form health survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. *Medical Care*, *31*(3), 247-263.
- Marquis, P., Marrel, A, & Jambon, B. (2003). Quality of life in patients with stomas: The Montreux study. *Ostomy Wound Management*, *49*(2), 48-55.
- Mitchell, K.A., Pawl, S.M., Schmidt, C.M., Grant, M., Ko, C.Y., Baldwin, C.M.,...Krouse, R.S. (2007). Demographic, clinical, and quality of life variables related to embarrassment in veterans living with an intestinal stoma. *Journal of Wound, Ostomy & Continence Nursing*, *34*(5), 524-532. doi:10.1097/01.WON.0000290732.15947.9e
- Nichols, T.R. (2011). Social connectivity in those 24 months or less postsurgery. *Journal of Wound, Ostomy & Continence Nursing*, *38*(1), 63-68.
- Olbrisch, M.E. (1983). Development and validation of the ostomy adjustment scale. *Rehabilitation Psychology*, *28*(1), 3-12.

Piwonka, M.A., & Merino, J.M. (1999). A multidimensional modeling of predictors influencing the adjustment to a colostomy. *Journal of Wound, Ostomy & Continence Nursing*, 26(6), 298-305.

Polit, D.F. (2010). *Statistics and data analysis for nursing research* (2nd ed.). Boston, MA: Pearson.

Recalla, S., English, K., Nazarali, R., Mayo, S., Miller, D., & Gray, M. (2013). Ostomy care and management: A systematic review. *Journal of Wound, Ostomy & Continence Nursing*, 40(5), 489-500.

Richbourg, L., Thorpe, J.M., & Rapp, C.G. (2007). Difficulties experienced by the ostomate after hospital discharge. *Journal of Wound, Ostomy & Continence Nursing*, 34(1), 70-79.

Rosenburg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Roy, C. (1970). Adaptation: A conceptual framework in nursing. *Nursing Outlook*, 18(3), 42-45.

Roy, C. (1984). *Introduction to nursing: An adaptation model* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Roy, C. (2009). *The Roy adaptation model* (3rd ed.). Stamford, CT: Appleton & Lange.

Salomé, G.M., De Almeida, S.A., & Silveira, M.M. (2014). Quality of life and self-esteem of patients with intestinal stoma. *Journal of Coloproctology*, 34(4), 231-239.

Salvaladena, G. (2008). Incidence of complications of the stomal and peristomal skin among individuals with colostomy, ileostomy, and urostomy. *Journal of Wound, Ostomy & Continence Nursing*, 35(6), 506-607.

- Scardillo, J., Dunn, K.S., & Piscotty, R. (2016). Exploring the relationship between resilience and ostomy adjustment in adults with a permanent ostomy. *Journal of Wound, Ostomy & Continence Nursing*, 43(3), 274-279.
- Simmons, K.L., Smith, J.A., & Maekawa, A. (2009). Development and psychometric evaluation of the ostomy adjustment inventory-23. *Journal of Wound, Ostomy & Continence Nursing*, 36(1), 69-76. doi: 10.1097/WON.0b013e3181919b7d
- Titler, M.G., Klieber, C., Steelman, V., Goode, C., Rakel, B., Barry-Walker, J.,...Buckwalter, K. (1994). Infusing research into practice to promote quality care. *Nursing Research*, 43(5), 307-313.
- University of Kentucky HealthCare (UKHC) (2015). *Rationalizing health care in Kentucky. 2015-2020 strategic plan*. Retrieved from [http://ukhealthcare.uky.edu/uploadedFiles/about/leadership/strategic-plan\(1\)/home/2015-2020-strategic-plan.pdf](http://ukhealthcare.uky.edu/uploadedFiles/about/leadership/strategic-plan(1)/home/2015-2020-strategic-plan.pdf)
- University of Kentucky HealthCare (UKHC) (2016). *About us*. Retrieved from <https://ukhealthcare.uky.edu/About/home/>
- Vaux, A. (1988). *Social support: Theory, research, and intervention*. New York, NY: Praeger Publishers.
- Wade, B.E. (1990). Colostomy patients: Psychological adjustment at 10 weeks and 1 year after surgery in districts which employed stoma care nurses and districts which did not. *Journal of Advanced Nursing*, 15(11), 1297-1304.
- Waginald, G.M. & Young, H.M. (1993). Development and psychometric evaluation of the resilience scale. *Journal of Nursing Measurement*, 1(2), 165-178.
- Ware, J.E. (1976). Scales for measuring general health perceptions. *Health Services Research*, 11(4), 396-415.

Wick, E.C., Shore, A.D., Hirose, K., Ibrahim, A.M., Gearheart, S.L., Efron, J.,...Makary, M.A.

(2011). Readmission rates and cost following colorectal surgery. *Diseases of the Colon and Rectum*, 54(12), 1475-1479.

Zigmond, A.S., & Snaith, R.P. (1983). The hospital anxiety and depression scale. *Acta*

Psychiatrica Scandinavica, 67(6), 361-370.

Appendix A



Eastern Kentucky University
 Department of Baccalaureate and Graduate Nursing
 Doctor of Nursing Practice Program

Statement of Mutual Agreement for DNP Project

I. General Information

Student Name: Marjorie Summers
 Project Title: The Effect of Ostomate-to-Ostomate Support on
 Psychosocial Adaptation to Stoma.
 Agency: UKHealthCare Good Samaritan Hospital
 Agency Contact: Lisa Thornsberry, MSN, RN

II. Brief description of the project

The focus of my DNP Project will be the development of an ostomate-to-ostomate support group in the local community. The facility where I work performs eight or more colorectal procedures per day with 80% of these patients having a temporary or permanent fecal diversion ostomy as a result (S. Beck, personal communication, November 2, 2016). I became a permanent ostomate in August 2016 and realized quite quickly, after discharge, that there were few face-to-face ostomate resources in our community. This clinical problem provides an opportunity to decrease preventable readmission rates for patients who lacked appropriate stomal education and support. The goal of the project will be to address the gap that exists in ostomate aftercare by offering educational awareness, addressing the feelings of grief, loneliness, and anxiety, and providing a safe place for questions and concerns to be answered. The Olbrisch (1983) Ostomy Adjustment Scale (OAS) will be administered prior to and three months after implementation of the support group. The OAS is a 34-item scale that assesses psychological adjustment to an ostomy with responses based on a 6-point Likert scale (1 = totally disagree and 6 = totally agree); the total score ranges from 34 to 204 with higher scores indicating better levels of adjustment.

References

Olbrisch, M.E. (1983). Development and validation of the ostomy adjustment scale. *Rehabilitation Psychology, 28*(1), 3-12.



Eastern Kentucky University
Department of Baccalaureate and Graduate Nursing
Doctor of Nursing Practice Program

Student Name: Marjorie Summers

Project Title: The Effect of Ostomate-to-Ostomate Support on Psychosocial Adaptation to Stoma

III. Agreement of written and oral communication

- Reference to clinical agency in student's academic work, publications, and presentations
- Restrictions on discussion of any project or agency details
- Formal agency approval needed for any publicly shared findings

IV. Required Signatures:

Marjorie Summers
Student

4/7/2017
Date

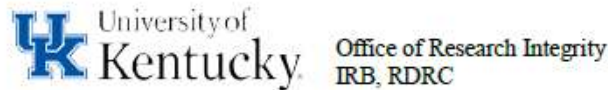
[Signature]
DNP Project Advisor

4-11-2017
Date

[Signature]
Agency Representative

4/7/2017
Date

Appendix B



Initial Review

Approval Ends
October 2, 2018

IRB Number
17-0637-P3K

TO: Marjorie Summers, RN
Nursing Staff Development
Good Samaritan Hospital Room B-152
Lexington KY
PI phone #: (859)323-2491

FROM: Medical Institutional Review Board (IRB)

SUBJECT: Approval of Protocol Number 17-0637-P3K

DATE: October 5, 2017

On October 3, 2017, the Medical Institutional Review Board approved your protocol entitled:

The Effect of Ostomate-to-Ostomate Support on Psychosocial Adaption to Stoma

Approval is effective from October 3, 2017 until October 2, 2018 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, attached is the IRB approved consent/assent document(s) to be used when enrolling subjects. **[Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.]** Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and returned to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigators responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol's status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's IRB Survival Handbook web page [<http://www.research.uky.edu/ori/IRB-Survival-Handbook.html#PIresponsibilities>]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [<http://www.research.uky.edu/ori>]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

see blue.

315 Kinkead Hall | Lexington, KY 40506-0057 | P: 859-257-9428 | F: 859-257-8995 | www.research.uky.edu/ori/

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Appendix C

Institutional Review Board (IRB) Authorization Agreement

Name of Institution or Organization Providing IRB Review (Institution/Organization A):
University of Kentucky

IRB Registration #: IRB00000977 Federalwide Assurance (FWA) #, if any: FWA00005295

Name of Institution Relying on the Designated IRB (Institution B):
Eastern Kentucky University

IRB Registration #: IRB00002836 Federalwide Assurance (FWA) #, if any: FWA00003332

The Officials signing below agree that Eastern Kentucky University may rely on the designated IRB for review and continuing oversight of its human subjects' research described below: (*check one*)

This agreement applies to all human subjects' research covered by Institution B's FWA.

This agreement is limited to the following specific protocol(s):

Name of Research Project: *The Effect of Ostomate-to-Ostomate Support on Psychosocial Adaption to Stoma*

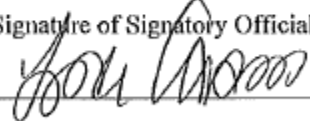
Name of Principal Investigator: Marjorie Summers, RN

Protocol Number: 17-0637-P3K

Other (*describe*): _____

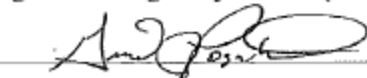
The review performed by the designated IRB will meet the human subject protection requirements of Institution B's OHRP-approved FWA. The IRB at Institution/Organization A will follow written procedures for reporting its findings and actions to appropriate officials at Institution B. Relevant minutes of IRB meetings will be made available to Institution B upon request. Institution B remains responsible for ensuring compliance with the IRB's determinations and with the Terms of its OHRP-approved FWA. This document must be kept on file by both parties and provided to OHRP upon request.

Signature of Signatory Official (Institution/Organization A):

 Date: 12/1/17

Print Full Name: Lisa A. Cassis, Ph.D Institutional Title: Vice President for Research

Signature of Signatory Official (Institution B):

 Date: 12/1/17

Print Full Name: Dr. Gerald J. Pogatschnik Institutional Title: Associate Vice President for Research

Appendix D

Ostomy Tips Education Brochure

During changes, care:

- o With clean hands, warm the ring by rolling in your hands. Then form the ring to the desired shape.
- o Make sure your skin near the stoma is clean and dry. Then place the ring around your stoma. Place your one- or two-piece pouch system over top of the ring.
- o The ring will swell to fill in the small gap between your stoma and the edge of your barrier. This creates a seal, good seal. The rings will help protect the skin near your stoma.

After changes

- * Warm the barrier or after placing it on your skin. To warm it, hold your hand's over the pouch or use a hair dryer on a low heat setting. This will help patch barrier to "bond" to your skin.

EMPTYING THE POUCH

- See pages 10-11 in *Living with an Ostomy or Living with a Colostomy*.
- Empty the pouch before it gets half full. Emptying the pouch before it gets too full will help keep stool from backing out.
- Get your toilet ready before you empty it.
- * Lay a few sheets of toilet paper flat on top of the water in the toilet bowl. This will help prevent the water from splashing.
- * Sit backward on the toilet facing the tank.
- * Place hands you will need on top of the toilet tank. This will make it easy to reach them.
- * Before you empty, use a disinfecting spray such as "700 Isotrin" to reduce odor. Shut

agony a few sprays on top of the toilet water before emptying your pouch.

- * Use a post-wash table to raise all your empty pouch. This is very useful if your stool is thick.
- * Clean the tail of your pouch with flushable toilet paper. Or you can toilet toilet paper and insert it into the tail of your pouch to remove any stool.
- How to make a "Portable poop pail"**
- * Get a half-gallon homogeneous bottle with a wide mouth and a screw top.
- * Place a doggie poop bag inside it with a small scoop of dumping out later.
- * This works great if you like to boat or camp.

COPING WITH GAS AND ODOR

- See pages 11 and 16 in *Living with an Ostomy or Living with a Colostomy*.
- It is normal to have more gas after surgery. It will get better as you go back to your normal diet and activity. You will also pass gas during sleep and if you skip meals. To reduce gas, watch what you eat. Remember, if it gives you gas, reduce your ostomy. It will give you gas, too.
- * Empty your pouch as needed. Some pouches come with filters for gas. But the filters may not work if they get wet. If you have a two-piece system, you can "burp" the pouch with an anal plug. Of course, you should do this in a private area just as you would when you had to pass gas.
- A disinfecting lubricant may help. It makes it easier to empty the pouch and reduce odor. You will get samples of this in your welcome kit. You should only use small odor when emptying the pouch. If you smell odor at any other time,

you may have a leak under your barrier or the pouch tail was not cleaned well after emptying.

CHOOSING CLOTHES

- See pages 20-21 in *Living with an Ostomy or Living with a Colostomy*.
- You can keep wearing your normal clothes. Just make sure that the waistband does not keep your stool from falling to the bottom of your pants.

Consider wearing underwear that good for ostomies. While you can wear your normal underwear, special underwear for ostomies may be more comfortable. These are available for men and women. Some have an inner pocket to support your pouch and prevent leaking. Your ostomy supplier may have these. Another source is www.ostomywarehouse.com.

ONLINE RESOURCES AND SUPPORT

- * United Ostomy Association's of America: www.ostomy.org
- * Facebook and Twitter: @OUSA
- * Crohn's and Colitis Foundation: www.crohnscolitisfoundation.org
- * Facebook and Twitter: @CrohnsColitisFdn
- * Incontinence: www.incontinence.org
- * Facebook, Twitter and YouTube: @Incontinence
- * Ostomy Outlook: www.ostomyoutlook.com
- * Facebook and Twitter: @OstomyOutlook

MS-014



HealthCare
OSTOMY TIPS
FROM OSTOMY PATIENTS



After getting your ostomy, it may take a while to figure out the best ways to care for yourself and get back to your life. To help you get started, here are a few tips from patients who have lived with ostomas. Don't hesitate to ask your other healthcare providers for help.

FOOD, FLUIDS AND MEDICINES

See pages 14-18 in *Living with an Ileostomy* or pages 16-17 in *Living with a Colostomy*. **Cut plenty of protein.** You may not feel like eating much for many weeks after surgery. That's normal, but you must still get enough protein. Your body needs it to heal if you don't feel like eating. Try protein supplements or shakes.

If you have an ileostomy:

- Before you swallow, you must chew your food very well. Chunks of food may not pass through your stoma. This could cause the bowel to get blocked, which is a serious health problem. Remember: chew, chew and chew some more!
- Replace lost fluids and electrolytes. When you have an ileostomy, you may lose fluids and electrolytes through your stool. One way to replace these is to drink sports drinks like Gatorade or Powerade. But be careful: These drinks are high in sugar and calories. You should talk with your doctor about what you should do to replace lost fluids and electrolytes.
- Talk to your doctor if you take any long-acting or extended-release medication. You will need to switch to a short-acting

medication if you take a long-acting medication. Long-acting medications will come out of your stoma before they do their work. When that happens, some of the medicine gets into your body.

You may need to take a B-complex vitamin supplement. Ask your doctor if this is the right thing for you. That will depend on how much of your bowel was removed. These can be in liquid or diaphragm form.

ORDERING SUPPLIES

See pages 8-9 in *Living with an Ileostomy* or *Living with a Colostomy*. The advantage of free samples, vitamins that will be sent to your home. You will get them from the three main ostomy product makers: Hollister, Coloplast and Conveen. You should try different products until you find ones that best meet your needs. These companies may help you send you free samples of any product you wish to try. Please take advantage of this.

Know where you should buy supplies.

Before you place an order, call your medical insurance company and ask who your medical equipment supplier is. This will be the company you will order your supplies from. There are so local stores for ostomy supplies. They will send a doctor's order for supplies before they will ship to your home.

BARRIER AND POUCH CHANGES

See pages 12-13 in *Living with an Ileostomy* or *Living with a Colostomy*.

Before changes

- Change the barrier every three to five days. The longer you try to use a barrier, the past the time, the bigger the risk for stool leaks under the barrier. This is especially true if you have an ileostomy.

During changes

- Take one large meal about 20 minutes before changes. This allows 20-30 minutes with no output from stoma.
- Remove adhesive left on your skin. Buy a high-quality adhesive remover that does not contain alcohol. They will be labeled as "fingertips." These products come as foams or gels.
- Be sure to measure your stoma each time you change your barrier and pouch. The stoma will keep shrinking for the first six to eight weeks.
- You may shower with or without your barrier and pouch. There is no need to cover your exposed stoma. If you shower with your barrier and pouch, you can soak up the

excess medicine on the barrier and pouch with paper towels. Then use a hair dryer on a low heat setting. Make sure the barrier is dry before putting on your underwear. This step will help reduce fungal infections under your barrier.

- Cut a hole "a bit" using paper towels. Cut the paper towel into 1- or 2-inch strips. Place these around your stoma after bathing to catch any stool until you finish the change.
- Do not use any bath soap or body wash with in a shower near your stoma. It may keep the new barrier from sticking to your skin.
- Check with your ostomy supply maker about how to prep your skin. Some long-wear barriers are meant to have direct contact with the skin. They do not recommend the use of any skin-prepping wipes or sprays.

You may want to use a ring, Bannister or Hollister Adaptic or Conveen Skin Seal. These rings can be inflated or inflated to match the size of your stoma. *Continued on back.*



Appendix E

Permission to Use Ostomy Adjustment Scale

Summers, Margie**Subject:** Re: Permission to Use the Ostomy Adjustment Scale

From: Mary Olbrisch [mailto:mary.olbrisch@vcuhealth.org]
Sent: Monday, April 24, 2017 11:59 AM
To: Summers, Margie
Subject: Re: [EXTERNAL] Permission to Use the Ostomy Adjustment Scale

Hi, Margie; The Ostomy Adjustment Scale is in the public domain. You may use it without permission. However, please keep me apprised of your findings and any publications that come from work using the scale.

Mary Ellen Olbrisch, Ph.D., ABPP
 Emeritus Professor of Psychiatry and Surgery
 Clinical Health Psychologist
 Virginia Commonwealth University

Sent from my iPhone
 My address has changed:
 My office is now located at the Jackson Center
 501 N. 2nd St.
 Richmond, VA 23219
 Address mail to:
 Box 980308 VCU
 Richmond, VA 23298-0308
 804-827-4174

On Apr 24, 2017, at 11:49 AM, Summers, Margie <[mailto:margie.summers@uky.edu]> wrote:

Dr. Olbrisch,

I am currently finishing my doctorate of nursing practice (DNP) degree, at Eastern Kentucky University, and would like permission to use your Ostomy Adjustment Scale tool in my DNP project. I seek to answer the following question: In fecal diversion ostomates, how does ostomate-to-ostomate support affect ostomy adjustment scores three months post-intervention?

The focus of my DNP Project will be the development of *OstoCots*, an online ostomy support group for the central Kentucky region. The facility where I work performs eight or more colorectal procedures per day with 80% of these patients having a temporary or permanent fecal diversion ostomy as a result. I became a permanent ostomate in August 2016 and realized quite quickly, after discharge, that there were few ostomate-to-ostomate resources in our community. This clinical problem provides an opportunity to decrease preventable readmission rates for patients who lacked appropriate stoma education and support. The goal of the project will be to address the gap that exists in ostomate aftercare by offering educational awareness, addressing the feelings of grief, loneliness, and anxiety, and providing a safe place for questions and concerns to be answered.

I appreciate your thoughtful consideration of my request.

Warmest regards,

Margie

Margie Summers, MSN, DNP(c), RN
 Staff Development Specialist
 UKHealthCare Good Samaritan Hospital
 310 South Limestone Street, B-152
 Lexington, KY 40508-3008
 Office: 859-323-2491
margie.summers@uky.edu
<http://ukhealthcare.uky.edu/goodsamaritan/>



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Appendix F

Ostomy Adjustment Scale

The statements below relate to how you feel about your stoma. For each statement please insert a ✓ in one of the boxes, “Strongly Agree to Strongly Disagree” to indicate your agreement with the statement. Please try to answer all of the questions.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. I can lead a productive and fulfilling life despite my ostomy.						
2. I think I am leading quite a normal life despite my ostomy.						
3. There are many things I would do if I did not have an ostomy. **						
4. I feel free to travel where I want despite my ostomy.						
5. I have felt comfortable participating in sports and physical exercise since my ostomy surgery.						
6. I find that I unnecessarily restrict the range of my activities because of my ostomy. **						
7. I have been better able to work since I had my ostomy surgery.						
8. I am more able to enjoy sexual activities because of improved health since having ostomy surgery.						
9. At times I lack self-confidence because of my ostomy. **						
10. I feel ashamed of my ostomy, as if it were a sign of my own physical or emotional weakness. **						
11. At times I resent my friends who do not have ostomies or the health problems that lead to ostomy surgery. **						
12. My self-respect has not suffered because of my ostomy.						
13. I feel somehow “dirty” and “unclean” because of my ostomy. **						
14. I leave places early to avoid producing embarrassing odors in the bathroom. **						
15. I feel comfortable with my body, including my stoma.						
16. I feel that I am somehow being punished for something by having this ostomy. **						
17. I get depressed when I realize that I will have this ostomy for the rest of my life. **						
18. I can discuss even the most embarrassing aspects of my ostomy with my doctor.						
19. I feel like a complainer when I have to contact my doctor or ET (stoma nurse) about my ostomy. **						
20. I avoid telling my doctor about changes in my stoma and its functioning. **						
21. I feel that I am well educated about my stoma and caring for it.						
22. I am confident that I know the proper methods for managing my ostomy.						
23. Since I’ve had my surgery, I feel I’m more likely to get sick than other people. **						
24. I find myself worrying that my surgery did not really cure my health problems. **						
25. I worry more than I used to about being left alone. **						
26. I feel embarrassed by my ostomy, as though it were something to hide. **						

27. I feel that I am not as sexually attractive as I used to be because of my stoma. **						
28. I can laugh afterwards about awkward situations that happen because of my ostomy.						
29. Most of the time, I forget about my ostomy and am not aware of it.						
30. I worry about embarrassing accidents happening in the course of normal sexual activity. **						
31. I think other people would be uncomfortable around me if they knew about my stoma. **						
32. I feel confident that I can trust my appliance when I am in public places.						
33. My ostomy surgery helped me decide what things are most important in my life.						
34. My ostomy reminds me how fortunate I am to have received good medical care.						