








# Analysis of self-care videos on YouTube about exchange of intestinal ostomy bags

Análise de vídeos de autocuidado no YouTube sobre troca de bolsas de estomias intestinais

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## Special Call 2 - Stomatherapy Nursing

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## ABSTRACT

**Objective:** to analyze YouTube videos about self-care during the exchange of ostomy bags. **Methods:** quantitative, descriptive research, carried out on Google. Descriptive statistics and the Kruskal-Wallis test were used. **Results:** of the 32 videos analyzed, 15 addressed the exchange of the one-piece bag and 20, the exchange of two, of these, three presented both bags. The items less performed when exchanging bags for one (73.0%) and two (95.0%) were related for proper collection from the collector. As for the association between who conducted the videos of one and two pieces and the number of hits and errors, there weren't significant differences ( $p=0.896$ ;  $p=0.953$ ). **Conclusion:** the videos didn't include all the elements about self-care during the exchange of ostomy bags, especially with regard to the adequate removal of the collector; however, they provided general information about the exchange of the bag and which can assist in the self-care of this people.

**Descriptors:** Ostomy; Self Care; Health Education; Nursing Care; Disease Management.

## RESUMO

**Objetivo:** analisar os vídeos do YouTube sobre o autocuidado durante a troca das bolsas de estomia. **Métodos:** pesquisa quantitativa, descritiva, realizada no Google. Utilizou-se estatística descritiva e teste Kruskal-Wallis. **Resultados:** dos 32 vídeos analisados, 15 abordaram a troca da bolsa de uma peça e 20, de duas peças, destes, três apresentaram ambas as bolsas. Os itens menos realizados na troca das bolsas de uma (73,0%) e duas (95,0%) foram referentes de retirada adequada do coletor. Quanto à associação entre quem conduziu os vídeos de uma e duas peças e o quantitativo de acertos e erros, não houve diferenças estatísticas significantes ( $p=0,896$ ;  $p=0,953$ ). **Conclusão:** os vídeos não contemplaram todos os elementos sobre o autocuidado durante a troca das bolsas de estomia, principalmente com relação à retirada adequada do coletor; no entanto, forneceram informações gerais sobre a troca da bolsa e que podem auxiliar no autocuidado das pessoas com estomias.

**Descritores:** Estomia; Autocuidado; Educação em Saúde; Cuidados de Enfermagem; Gerenciamento Clínico.

## Introduction

YouTube is a popular platform for sharing videos of various contents, which include not only videos for leisure and entertainment, but also videos in the health field. Currently, it is the second most accessed website in Brazil and in the world, second only to Google<sup>(1)</sup>.

Among the audiovisual content that can be found on YouTube, there are videos regarding the ostomy, covering everything from surgery to techniques related to self-care. Ostomy, in turn, is defined as a surgical procedure, in which a connection between an internal organ and the abdominal wall is created, allowing gas exchange, feeding and excrement elimination. Elimination ostomies can be classified according to position, such as ileostomy, colostomy, urostomy, or according to duration, as definitive or temporary<sup>(2)</sup>.

Bearing in mind that one of the main difficulties reported by ostomized patients is the lack of guidance regarding the ostomy and, mainly, the exchange of the bag; it is possible to identify a deficit in services provided in institutions, especially in the postoperative period<sup>(3)</sup>. Thus, the importance of qualifying the assistance provided by health professionals<sup>(4)</sup> is highlighted, especially with regard to the development of autonomy for people with ostomy bags.

In addition, in nursing care for people with an ostomy, the nursing process seeks actions relevant to achieving quality of life and adapting patients. For this, Orem's Theory of Self-Care is applied, which aims to evaluate, implement and plan self-care, through patient instruction on the prevention of complications and proper treatment, promoting the individual's responsibility for self-care, which allows the understanding about the new health condition and ease in social reintegration<sup>(5)</sup>.

Using the Nursing Process, based on Orem's Theory, nurses should instruct the client on skin care, prevention of complications, such as peristomal dermatitis, application and removal of the collection bag and, also, regarding the hygiene when removing the

device. Thus, internet platforms, such as YouTube, can serve as tools for Orem's nursing process, allowing the sharing of information and learning between the professional nurse and the person with an ostomy<sup>(5)</sup>.

Bearing in mind that the lack of information, communication and education of people with stomas negatively affects their participation in self-care, making social rehabilitation more difficult<sup>(3)</sup>, and that a large part of the population makes use of the internet for educational and leisure purposes, this study had as a research question: are the videos published on YouTube, related to the exchange of bags for people with ostomy, presenting the appropriate information? Thus, the objective was to analyze YouTube videos about self-care during the exchange of ostomy bags.

## Methods

Quantitative, descriptive research, in which we searched for Google, audiovisual resources related to self-care in the management of intestinal ostomies. The choice of Google as a search platform is justified by the fact that it has tools to filter the content in question, since YouTube did not have a total video count.

In the site search field, the option "video" was selected and using the term "stoma", indexed in the Health Sciences Descriptors (DeCS), plus the keyword "exchange of the bag", since they were not similar terms were found in the DeCS. To filter the search, the resource "Tools" was chosen, whose topics used were: "Search the web", "average duration (4-20 min)", "any date and quality", "all videos" and "presence on the website [www.youtube.com](http://www.youtube.com)".

Inclusion criteria were defined as: video length (4-20 min), videos present on the YouTube website, in Portuguese, Spanish and English, of any date and quality and that presented the person with an intestinal stoma performing the exchange of bag or someone teaching how self-care should be performed. The exclusion criteria adopted were: not to demonstrate the technique of changing the ostomy bag and duplicate videos.

The data referring to the analysis of the visual resources that comprised the sample of this research were collected between December 2018 and January 2019. The search for the videos was carried out in just one day, on December 3, 2018, due to the dynamics of information and publications and organized in a spreadsheet developed in Microsoft® Office Excel. The first search stage consisted of identifying the videos, which are organized in spreadsheet one, called Characterization of the videos; the second stage, in turn, consisted of feeding worksheet two, which refers to the self-care content present in the videos. The items that made up the second worksheet were extracted from the booklet related to self-care. Both steps were carried out in pairs, with final consensus among researchers, after selection of the final sample. It was adopted as a strategy to save the link of each video, so that it would not be lost and there would be no change in the search result, thus being able to be accessed several times for analysis.

In the subsequent phase, the videos were screened, analyzing the title and content, checking whether they were in accordance with the inclusion and exclusion criteria. After this phase, three researchers carried out an exhaustive evaluation of the selected videos that made up the final sample.

Regarding self-care, Orem proposes that patients should be encouraged to take care of themselves, maintaining life, health and well-being, actively participating in the care process<sup>(6)</sup>, which is the main theoretical framework used to support the study. Therefore, videos that met the inclusion criteria were sent to the self-care worksheet. The data obtained were characterized and analyzed from the elaboration of some quantitative variables (video length, number of views, creator of the content, year of posting, language spoken, and model of approach). Data were analyzed using descriptive statistics, with absolute and relative frequencies, and the Kruskal-Wallis test, used to verify the association between categories and correct answers/errors, adopting a statistically significant value <0.05.

In the identification stage, search filters were applied to the search, resulting in 295 videos. In the screening process, 195 videos were selected, initially, by title, of these, 94 were excluded in the next stage of the selection, for escaping the theme, leaving 101 videos. Then, in the eligibility stage, the videos were carefully analyzed by three researchers, according to the type of bag, through a checklist constructed according to the theoretical content of the Educational Booklet for the Care of the Person with Intestinal Ostomy<sup>(7)</sup>, elaborated and validated by judges in the area of stoma therapy and who presents a set of techniques suitable for carrying out the exchange of bags and self-care, with nine steps for exchanging one-piece bags and 14 for exchanging two-pieces bags.

After analysis, 68 videos were excluded, as they did not portray the topic in question, show only the types of bags, adjuvants or other materials used or do not present the exchange of the bag and, therefore, did not include any item of the adopted checklist. Then, the videos that led the person with an ostomy to self-care, with a focus on exchanging the bag, resulted in 32 videos, which made up the final sample.

## Results

The final sample of the study in question totaled 32 videos analyzed, of which 15 addressed the exchange of one-piece bag and 20, the exchange of two pieces; the sum of the videos was different from 32, as three videos reported the exchange of both bags. The videos of the final sample totaled 05h3min42s of content analyzed, with an average of 09min70s (+4.58) in length. The videos that presented exchange of the bag of one piece had an average duration of 10min12s (+4.99) and the videos on two pieces, average duration of 9min39s (+ 4.36).

The 32 component videos of the research sample were classified by categories, with 15 (47.0%) of them inserted in the Person and Blog category, seven (22.0%) in the pharmaceutical industry, eight (25.0%) in the Blog industry and only two (6.0%) in the Institution.

Among the videos, it is noteworthy that the items less performed when exchanging both bags referred to the proper removal of the collection equipment: of the videos about exchanging the one-piece bag, 11 did not perform item one and, regarding the exchange of the two-piece bag, 19 videos did not elucidate item three, according to the checklist shown in Table 1.

Regarding the approach, there was a (3.0%) video on the Theoretical approach; five (16.0%), in Practice; and 26 (81.0%), in Theoretical-practical. Regarding the language, Spanish was the most spoken, with 16 (50.0%) videos, followed by Portuguese, with 14 (44.0%), and English, with two (6.0%).

The temporal dimension of the analyzed videos covered the last eight years, with emphasis on the year

2014 - seven videos published. The videos resulted in 1,174,993 views, with an average of 36,718 views per video. The most viewed video was the Changing of a one-piece Ileostomy bag - Hnutri, produced by the category people and blog, viewed by 381,382 thousand people.

As for the number of views, 15 (46.9%) videos had 59 to 5,000 views; 11 (34.3%) from 5,001 to 50,000; and six (18.7%) had more than 50,000. Of the videos presented, five (16.0%) of them were posted on the YouTube platform, in 2012; five (16.0%), in 2013; seven (22.0%), in 2014; four (12.0%), in 2015; three (9.0%), in 2016; three (9.0%), in 2017; and five (18.0%), in 2018.

**Table 1** – Checklist for evaluating the stages of changing the collector of one and two pieces. Natal, RN, Brazil, 2018

Items	One piece	Two pieces
	n (%)	n (%)
Gently remove the collector so as not to traumatize the skin using a soft tissue soaked in water, while bathing	4 (26.7)	-
Throw the used collector in the trash	5 (33.3)	-
Gently clean the skin around the stoma with soap and water. Dry well without rubbing, after drying the body	8 (53.3)	-
Cut the bag to the size of the stoma before starting the exchange. If necessary, use the stoma meter	11 (73.3)	-
Remove the paper that protects the adhesive	14 (93.3)	-
Place the bag from the bottom up, massaging for about 5 minutes to stick well on the skin	7 (46.7)	-
Do not leave folds or air bubbles that facilitate leaks, causing the collector to peel off	13 (86.7)	-
Make sure the bag is well adapted to the skin	11 (73.3)	-
Remove the clamp and empty the collector	-	2 (10.0)
Detach the bag from the plate glued to the body	-	10 (50.0)
During the bath, under the shower, loosen the plate gently, pressing the skin and releasing the adhesive	-	1 (5.0)
Clean the skin around the stoma and the stoma with gentle movements	-	14 (70.0)
Use the soap foam to remove remnants of feces or adhesives	-	3 (15.0)
After bathing, dry the skin around the stoma well	-	7 (35.0)
Do this after drying your body	-	5 (25.0)
Remove the paper that protects the resin and hold it with both hands	-	15 (75.0)
Position the stoma in front of the mirror; stretching the skin	-	4 (20.0)
Fit the plate from the bottom up, trying to adapt it to the stoma, from the center to the end	-	13 (65.0)
Do not leave pleats or air bubbles that facilitate leaks	-	14 (70.0)
Make sure that the plate is well adapted to the skin	-	16 (80.0)
Fit the collection bag to the plate	-	18 (90.0)
Remove the air from inside the bag and close with the clamp	10 (66.7)	11 (55.0)

Regarding the association between the conduct of the videos of a play and the number of correct answers and errors, there were no statistically significant differences by the Kruskal-Wallis test, with  $p=0.896$ . Table 2 describes how many errors and successes the videos that presented the exchange of bags for a piece obtained and who conducted each video. Most of the videos, 10, were conducted by people with ostomies; two, by industry; and one, by a health professional, and 13 videos, of the 15 analyzed, obtained more hits than errors.

As for the videos on the exchange of two-piece bags, it was observed that there were no statistically significant differences, by the Kruskal-Wallis test, between those who conducted the videos and the number of hits and errors, with  $p=0.953$ . Table 3 shows the number of hits and errors for each video and who made it. Most of the videos were conducted by people with ostomy and only nine videos out of the 20 on the exchange of the two-piece bags obtained more success than errors, of these, seven were conducted by people with ostomy; one, by industry; and one, by a health professional.

**Table 2** – Frequency of hits and errors of the videos about changing one-piece bags. Natal, RN, Brazil, 2018

One-piece bags video titles	Hits n (%)	Errors n (%)
Como trocar Bolsa de Colostomia*	4 (44.4)	5 (55.6)
Ostomia colocar bolsa parte 2*	5 (55.6)	4 (44.4)
Como trocar bolsa de colostomia*	5 (55.6)	4 (44.4)
Cambio bolsa de colostomia*	6 (66.7)	3 (33.3)
Vitae Saúde - Como colocar uma bolsa drenável de uma peça – Hollister†	5 (55.6)	4 (44.4)
Trocando sua bolsa de Ileostomia sistema uma peça – Hnutri*‡	6 (66.7)	3 (33.3)
Como aplicar una Bolsa para Ostomia de una pieza Premier†	6 (66.7)	3 (33.3)
Ostomias*‡	1 (11.1)	8 (88.9)
Cambio de bolsa colostomia*	7 (77.8)	2 (22.2)
Material necesario para la higiene y el cambio del dispositivo en las estomas*	8 (88.9)	1 (11.1)
Colocación de bolsa para colostomía Adulto y Pediátrica‡	7 (77.8)	2 (22.2)
Vídeos educativos: Programa de ayuda en el cuidado de la estoma*‡	8 (88.9)	1 (11.1)
Cambio de una bolsa de colostomía/ileostomía*	5 (55.6)	4 (44.4)
Como curar un estoma*	5 (55.6)	4 (44.4)
Paso 5: Como poner la bolsa de Ileostomía*	5 (55.6)	4 (44.4)

Videos that demonstrate the exchange of both exchanges: \*Industry; †Health professional; ‡Person with ostomy; §Caregiver

**Table 3** – Frequency of hits and errors of the videos on the exchange of two-piece bags. Natal, RN, Brazil, 2018

Two-piece bags video titles	Hits n (%)	Errors n (%)
Troca de bolsa sistema de duas peças Coloplast*	9 (64.3)	5 (35.7)
Adorável Ostomia - Trocando a bolsinha†	6 (42.9)	8 (57.1)
Troca de bolsa de ileostomia/colostomia†	8 (57.1)	6 (42.9)
Como utilizar bolsa sistema de duas peças*	1 (7.1)	13 (92.9)
Aplicação de bolsa de colostomia†	4 (28.6)	10 (71.4)
como utilizar sistema de duas peças- Hnutri†	6 (42.9)	8 (57.1)
Trocando sua bolsa de Ileostomia sistema uma peça – Hnutri*‡	5 (35.7)	9 (64.3)
Ostomizada, Abençoada e Feliz!!! †	10 (71.4)	4 (28.6)
Ostomizada devido câncer no intestino†	5 (35.7)	9 (64.3)
Cambio de la bolsa de ostomia en 3 etapas Florian†	12 (85.7)	2 (14.3)
Ostomias*‡	2 (14.3)	12 (85.7)
Ileostomia    Cambio de bolsa para Ileostomía/Colostomia†	4 (28.6)	10 (71.4)
Tratamiento de Ostomias Dn Oscar Hollister†	5 (35.7)	9 (64.3)
Alcantara – ostomizado§	7 (50.0)	7 (50.0)
Depois da diverticulite no intestino – 2‡	9 (64.3)	5 (35.7)
Vídeos educativos: Programa de ayuda en el cuidado de la estoma*‡	10 (71.4)	4 (28.6)
Colitis Ulcerosa Cambiando el sistema de ostomía parte 2†	8 (57.1)	6 (42.9)
Guía de Aplicación Alterna Coloplast†	6 (42.9)	8 (57.1)
Uso de bolsa de duas piezas adhesiva†	8 (57.1)	6 (42.9)
Trocando a bolsa de colostomia de peças hollister†	8 (57.1)	6 (42.9)

Videos that demonstrate the exchange of both bags: \*Health professional; †Industry; ‡Person with ostomy; §Caregiver

## Discussion

When considering the dynamics of the video platform and the need to access materials referring only to the proposed theme, the limitations found for the development of the research referred to the search for videos on YouTube itself, in which there are few filter options and restrictions on the number total videos resulting from a search.

It is noteworthy that the results of this study reinforce the incentive regarding the use of Google and YouTube platforms for the development of other research related to health care, considering that the use of educational videos can be an aid tool in health education and self-care. In addition, the results promote content of audiovisual resources suitable for the practice of self-care, by indicating more assertive videos, referring to the theme.

It was observed that most of the sample of the one- and two-piece videos neglected the item referring to the adequate removal of the collection bag, a procedure that, when performed during the bath, facilitates its collection. It is emphasized that of the complications associated with the ostomy, mechanical trauma, resulting from the inadequate removal of the collecting device, is one of the main causes that cause the loss of the integrity of the peristomal skin, as well as the exposure of the skin to the effluent and allergy caused by the material collector system adhesive<sup>(8)</sup>.

It is known that many complications in the peristomal skin can be avoided with proper skin care and the appropriate use of the bag for each person<sup>(9)</sup>. In view of this, nursing planning, linked to the use of interventions, with educational technologies, proves to be effective in adapting the person with an ostomy to the changes faced with the new reality, used from the preoperative period to the outpatient follow-up<sup>(10)</sup>.

Regarding the conduction of the videos that composed the sample; both those that demonstrated the exchange of the collection bag for one piece, as for two pieces, were conducted by ostomates people. The literature has shown that the use of technological to-

ols presents itself as an important resource to support families, patients and caregivers<sup>(11)</sup>, and is also a way to use the pedagogical practices of nursing, thus contributing to the proper construction of care and care up<sup>(12-13)</sup>.

Regarding the correctness of the content of the videos, the steps proposed by the checklist, directed to the collection bag of one piece were, in most cases, carried out properly. In contrast, of the videos referring to the two-piece bag, less than half of the sample carried out the proposed steps correctly. It is pointed out that despite the benefits brought by the use of audiovisual resources; the use of this technology often requires a monitoring process to verify the appropriation of the contents<sup>(14)</sup>.

The construction of the ostomy directly affects the quality of life of individuals, especially in the social and physical aspect, and over time, the person with an ostomy adapts to the new routine<sup>(15-16)</sup>. However, people with an ostomy, even adapted, have difficulties, mainly in aesthetic aspects, related to insecurity, fear of leaks and flatulence and causing discomfort in those around them<sup>(16)</sup>.

Therefore, with the range of collecting equipment and adjuvant materials available for the use of the person with an ostomy, nurses have a fundamental role in orienting and indicating the collecting equipment and adjuvants that best suit the patient, in order to significantly reduce , complications with ostomy and promote better quality of life for the individual<sup>(9,17)</sup>.

Despite the absence of significant statistical differences between errors and successes and those who led the exchange of the one and two-piece bags, it was seen that the video was predominantly conducted by people with an ostomy, a fact explained by the lack of guidance received, limited only to postoperative guidelines, in which many people with ostomy end up developing, in a self-taught way, a way to meet their own needs, often not in line with the literature<sup>(13)</sup>.

In addition, only two videos (one-piece and one-two) were conducted by health professionals.

Educational videos used as health education tools strengthen the science of nursing and are shown as new intervention options for comprehensive care. In this perspective, nursing needs to invest in the construction, validation and evaluation of materials that are used for care, in order to make the practice more agile, innovative, reliable and responsible for the care and assistance provided<sup>(18)</sup>.

The construction and validation of educational videos for people with an ostomy are effective practices for the adaptation process of the person with an ostomy<sup>(12,18)</sup>, facilitating not only the person's adaptation process, but also support for families, being a way to use the pedagogical practices of nursing, thus contributing to the proper construction of care and self-care<sup>(13)</sup>.

Regarding the correctness of the content of the videos, the steps proposed by the checklist, directed to the collection bag of one piece, were mostly carried out in an appropriate manner. In contrast, of the videos referring to the two-piece bag, less than half of the sample carried out the proposed steps properly. Despite the benefits brought by the use of audiovisual resources, the use of this technology often requires a follow-up process in order to verify the appropriation of the contents<sup>(14)</sup>.

## Conclusion

In the analyzed videos, of one and two pieces, there was no statistically significant difference between the driver and the number of errors and successes, in which the majority of the videos were presented by people with ostomy. Although the videos did not present all the elements about self-care, during the exchange of ostomy bags, they provided important general information for learning self-care, being a relevant means of dissemination for reaching this population. Thus, further studies are needed for the production and validation of audiovisual technologies, on digital platforms, which can support the self-care of people with ostomy.

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## Collaborations

Silva BWAC, O LB, Araújo AKD, Medeiros MBC, Melo VL, Sena JF and Costa IKF contributed to the conception and design or analysis and interpretation of data, writing of the article, relevant critical review of the intellectual content and final approval of the version to be published.

## References

1. Nagumo E, Teles LF, Silva LA. A utilização de vídeos do Youtube como suporte ao processo de aprendizagem. *Rev Eletr Educ.* 2020; 14:1-12. doi: <http://dx.doi.org/10.14244/198271993757>
2. United Ostomy Associations of America. New Ostomy Patient Guide The Phoenix: Kennebunk (ME) [Internet]. 2018 [cited May 24, 2020]. Available from: [https://www.ostomy.org/wp-content/uploads/2018/05/All-In-One-New-Patient-Guide\\_2018.pdf](https://www.ostomy.org/wp-content/uploads/2018/05/All-In-One-New-Patient-Guide_2018.pdf)
3. Nieves CB, Díaz CC, Celdrán-Mañas M, Morales-Asencio JM, Hernández-Zambrano SM, Hueso-Montoro C. Ostomy patients' perception of the health care received. *Rev Latino-am Enfermagem.* 2017; 25:e2961. doi: <https://doi.org/10.1590/1518-8345.2059.2961>
4. Moraes AA, Balbino CM, Souza MMT. O desconforto em pacientes ostomizados. *Rev PróUniverSUS [Internet].* 2015 [cited May 24, 2020]; 6(1):5-8. Available from: <http://editora.universidad-ekevassouras.edu.br/index.php/RPU/article/view/399>
5. Vasconcellos FM, Xavier ZDM. O enfermeiro na assistência do cliente colostomizado baseado na teoria de Orem. *Rev Cient Enferm.* 2015;

- 5(14):25-37. doi: <https://doi.org/10.24276/rre-cien2358-3088.2015.5.14.25-37>
6. Orem DE. *Nursing: concepts of practice*. St Louis: Mosby; 1991.
  7. Sena JF, Silva IP, Lucena SKP, Oliveira ACS, Costa IKF. Validation of educational material for the care of people with intestinal stoma. *Rev Latino-am Enfermagem*. 2020; 28:e3269. doi: <https://doi.org/10.1590/1518-8345.3179.3269>
  8. Tielemans C, Probert R, Forest-Lalande L, Hansen AS, Aggerholm S, Ajslev TA. Evaluation of a new ostomy mouldable seal: an international product evaluation. *Br J Nurs*. 2016; 25(22):16-22. doi: <https://doi.org/10.12968/bjon.2016.25.22.S16>
  9. Steinhagen E, Colwell J, Cannon LM. Intestinal stomas – postoperative stoma care and peristomal skin complications. *Clin Colon Rectal Surg*. 2017; 30(3):184-92. doi: <https://doi.org/10.1055/s-0037-1598159>
  10. Sousa CPF, Santos CSB. Effect of a Stoma Nursing Care Program on the adjustment of patients with an ostomy. *Aquichan*. 2020; 20(1):e2014. doi: <https://doi.org/10.5294/aqui.2020.20.1.4>
  11. Farahani MA, Dorri S, Yousefi F. Design and validation of education multimedia program for patients with fecal diversions. *J Wound Ostomy Cont Nurs*. 2020; 47(1):39–44. doi: <https://doi.org/10.1097/WON.0000000000000603>
  12. Stragliotto DO, Girardon-Perlini NMO, Rosa BVC, Dalmolin A, Nietsche EA, Somavilla IM, et al. Implementação e avaliação de um vídeo educativo para famílias e pessoas com colostomia. *Rev Estima*. 2017; 15(4):191-9. doi: <https://doi.org/10.5327/Z1806-3144201700040002>
  13. Dalmolin A, Girardon-Perlini NMO, Coppetti LC, Rossato GC, Gomes JS, Silva MEN. Educational video as a healthcare education resource for people with colostomy and their families. *Rev Gaúcha Enferm*. 2016; 37(spe):e68373. doi: <https://doi.org/10.1590/1983-1447.2016.esp.68373>
  14. Martínez MVR, Silva SLC. El video como soporte social a cuidadores de personas con enfermedad crónica, Girardot 2010. *Av Enfermería*. 2016; 33(2):199-208. doi: <https://doi.org/10.15446/av.enferm.v33n2.49784>
  15. Silva CRDT, Andrade EMLR, Luz MHBA, Andrade JX, Silva GRF. Quality of life of people with intestinal stomas. *Acta Paul Enferm*. 2017; 30(2):144-51. doi: <https://doi.org/10.1590/1982-0194201700023>
  16. Aguiar FAS, Jesus BP, Rocha FC, Cruz IB, Neto GRA, Rios BRM, et al. Colostomy and self-care: meanings for ostomized patients. *Rev Enferm UFPE online [Internet]*. 2019 [cited May 20, 2020]; 13(1):105-10. Available from: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/236771/31134>
  17. Bavaresco M, Manfredini GMDSG, Moraes CM, Lima RS, Fava SMCL, Dázio EMR. Complications of ostomy bowel and peristomal skin: evidence for nursing care. *Rev Enferm UERJ*. 2019; 27:e45758. doi: <https://doi.org/10.12957/reuerj.2019.45758>
  18. Rosa BVC, Girardon-Perlini NMO, Gamboa NSG, Nietsche EA, Beuter M, Dalmolin A. Development and validation of audiovisual educational technology for families and people with colostomy by cancer. *Texto Contexto Enferm*. 2019; 28:e20180053. doi: <https://doi.org/10.1590/1980-265x-tce-2018-0053>



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