NURSING CARE FOR USERS DIAGNOSED WITH CROHN'S DISEASE: AN INTEGRATIVE REVIEW

Maria Alice Nascimento de Lima1
José Nacélio da Silva Ferreira2
Andréa Couto Feitosa3
Janayle Kéllen Duarte de Sales4
Ana Maria Machado Borges5
Hercules Pereira Coelho6

ABSTRACT

Objective: to identify the nursing care provided to patients diagnosed with Crohn's disease. Method: this is an integrative literature review carried out in the Latin American and Caribbean Health Sciences Literature, Nursing Database, Medical Literature Analysis and Retrieval System Online, Scientific Electronic Library Online and Google Scholar. The sample consisted of seven studies. Results: the analysis of the studies reveals a series of significant results in the context of nursing care, including: the need to plan nursing care adapted to the particularities of the disease; the growing relevance of telehealth; symptom monitoring, nutritional guidance, medication administration and emotional support, emphasizing the individualization of this care. Final considerations: the main results of the study highlight the importance of nursing care centered on the user’s well-being, disease control, emotional support and encouraging self-care.

DESCRIPTORS: Crohn’s disease; Regional enteritis; nursing Care;

Received: 19/02/2024; Accepted: 04/04/2024; Published online: 12/05/2024

Corresponding Author: José Nacélio da Silva Ferreira nacelliosilva@gmail.com

INTRODUCTION

According to the Brazilian Association of Ulcerative Colitis and Crohn’s Disease (ABCD), Crohn’s Disease (CD) is a chronic inflammatory disease of the Gastrointestinal Tract (GIT), which predominantly affects the lower part of the small intestine (ileum) and the large intestine (colon), and can affect any part of the GIT.1

In Brazil, according to the Brazilian Society of Coloproctology (SBCP), the occurrence of new cases of CD is represented by 7 per 100,000 inhabitants, with a higher concentration mainly in the Southeast and South.2 The conditions that predispose to the development of CD are related to immunological and environmental factors, such as: sedentary lifestyle, poor diet, alcoholism and smoking, which are directly related to the risk of CD.3

The main symptoms of CD mentioned in the scientific literature are: abdominal cramps, diarrhoea (which may or may not be associated with haematochezia), vomiting, fever and weight loss. It can also cause complications outside the GIT, such as skin rashes, arthritis and inflammation of the eyes.4,5

During the progression of CD, one or more complications can occur, namely: ulcers, fistulas, abdominal abscesses, intestinal obstructions caused by thickening of the wall of the affected site, malnutrition and cholelithiasis, due to poor absorption of certain substances.6 Other, less frequent complications are cancer of the large intestine and digestive haemorrhages.7-9

CD can affect practically all systems and organs, either locally or systemically. Extra-intestinal manifestations can accompany or appear after the onset of intestinal alterations, which can be joint, eye, dermatological, hepatobiliary, nephrological, haematological, vascular, pancreatic, pulmonary and cardiac alterations.10

As it is a chronic disease, treatment for CD aims to control symptoms, delay the progression of the disease and improve the quality of life of users. Anti-inflammatory and immunosuppressive medications are used to treat this comorbidity, with the aim of relieving symptoms, prolonging the remission of the disease and postponing possible surgical interventions.11

In the meantime, nurses are part of this context, guiding and facilitating care for individuals living with CD, and they must provide qualified and equitable assistance. To this end, nurses must make use of available health technologies, which can help to achieve systematised, organised and resolutive nursing care.

The main nursing care provided to users with CD is related to education and health promotion for self-care and lifestyle changes; guidance on diet, maintaining self-esteem and the use of non-steroidal anti-inflammatory drugs (NSAIDs); encouraging the construction of coping strategies, among others.12

This study is justified by the need to understand the main nursing care provided to patients diagnosed with CD, with a view to identifying the risks and implications of the disease, as well as the difficulties faced by patients living with this pathology, in order to understand the paths to equitable care.

The aim of this study was therefore to identify the nursing care provided to patients diagnosed with Crohn’s disease.
METHOD

This is a descriptive integrative literature review, carried out in accordance with the following stages: development of the guiding question; literature search or sampling; data collection; critical evaluation of the studies included in the review; discussion of the review’s results; and presentation of the integrative review method.13

The Population, Variables and Outcomes (PVO) strategy was used to draw up the guiding research question, as shown in Chart 1.


<table>
<thead>
<tr>
<th>Strategy Items</th>
<th>Components</th>
<th>DeCS</th>
<th>MeSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>Usuários com doença de Crohn e/ou Enterite regional</td>
<td>Doença de Crohn OR Enterite Regional</td>
<td>Crohn Disease</td>
</tr>
<tr>
<td>Variables</td>
<td>Assistência de enfermagem</td>
<td>Cuidados de Enfermagem</td>
<td>Nursing Care</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Melhoria dos sinais e sintomas</td>
<td>Qualidade de vida</td>
<td>Quality of Life</td>
</tr>
</tbody>
</table>

DeCS: Descritores em Ciências da Saúde; MeSH: Medical Subject Headings; OR: Ou.
Source: Data extracted from the study (own elaboration).

After applying the PVO strategy, the guiding question of the research was: what nursing care is provided to patients diagnosed with Crohn’s disease?

The search and selection of studies was carried out in several databases, between July and August 2023, in a paired manner, including the Latin American and Caribbean Literature in Health Sciences (LILACS) and the Nursing Database (BDENF), via the Virtual Health Library (VHL); the Medical Literature Analysis and Retrieval System Online (MEDLINE), via PubMed; the academic search engine Google Scholar; as well as the journal directory Scientific Electronic Library Online (SciELO).

The Boolean operators AND and OR were used to cross-reference the Health Sciences Descriptors (DeCS) and their corresponding Medical Subject Headings (MeSH). Chart 2 shows the search strategies derived from the various DeCS/MeSH combinations used in the study.

Inclusion criteria were: primary scientific articles published in full, free of charge in journals available in the selected databases; and articles published between 2017 and 2022 (the last six years).

The period from 2017 to 2022 was chosen to ensure the inclusion of the most recent evidence on nursing care for users diagnosed with CD. This ensures that the review reflects contemporary practices, updates to guidelines and possible innovations that have occurred in the last six years. It is important to emphasise that language was not used as an inclusion criterion in order to avoid possible restrictions on the sample that could introduce linguistic bias into the research.

On the other hand, the exclusion criteria adopted included: duplicate articles in the databases; and articles that did not fit the theme or did not provide answers to the guiding question of the research, by fully reading the titles and abstracts of the articles.

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was used to conduct the search and select the studies, where applicable, as shown in Figure 1.

During the search and selection of studies, 1849 articles were initially identified. During the identification stage, 1696 (91.7%) articles were excluded due to unavailability in full (paid-for studies) or duplication, resulting in 153 (8.3%) studies. After applying the inclusion criteria, 93 (60.8%) records were excluded, leaving 60 (39.2%) articles. When eligibility was analysed, 53 (88.3%) studies were excluded because they addressed another population or did not answer the research question, by reading the full title and abstract. Therefore, the final sample consisted of seven studies (11.7%), indexed in BDENF (28.6%), LILACS (14.3%), MEDLINE (42.86%) and Google Scholar (14.3%).

To analyse the studies, a database was created using Microsoft Office Word (version 2019), which served as the basis...
for filing, synthesising, coding and categorising the articles selected for the integrative review.

In consideration of the ethical and legal precepts, it is important to note that this study was not submitted to the Research Ethics Committee (REC), since its methodological nature exempts it from ethical evaluation, in accordance with the guidelines established in Resolutions 466/12 and 510/16.15-16 However, it is essential to emphasise that all the works and sources used to construct this review were duly cited and referenced, following the principles of authorship and copyright.

**RESULTS**

After carrying out the article search and selection strategy, identification, selection and inclusion, a total of seven studies were identified which, in short, synthesised the main findings regarding nursing care for users diagnosed with CD. Chart 3 provides crucial information on each study.

Analysing the characterisation of the studies, we observed that the highest concentration of publications occurred in the years 2018 and 2021, with two studies published in each year, totalling 57.1% of the articles included in the research.

The publications covered a wide range of journals, both national and international. With regard to the origin of the studies, we observed that the majority of publications originated in Brazil, three studies (42.9%). In addition, the other studies were distributed in different countries, with one study coming from Belgium (14.3%), one from the United Kingdom (14.3%), one from Lebanon (14.3%), and one from Spain (14.3%).

With regard to the methodological approach, the majority of the studies, i.e. four (57.1%), used quantitative methods in their research. As far as NEC is concerned, the vast majority of studies are classified at level 4, six articles (85.7 per cent).

Table 4 provides a concise summary of the main information from each study.

Analysing the seven studies on CD reveals a series of significant results in the context of nursing care. Machado et al.17 emphasise the need to plan nursing care adapted to the particularities of adolescents with the disease. From a contemporary perspective, Navarro-Correal et al.18 emphasise the growing relevance of telehealth, where the "Advanced IBD Nurse (EADII)" plays a crucial role in providing remote care.

In addition, Guimarães; Gonçalves and Silva19 highlight the different facets of nursing care, including symptom monitoring, nutritional guidance, medication administration and emotional support, emphasising the individualisation of this care. Lopes et al.12 present a comprehensive list of nursing activities for users with CD.

**Chart 3 - Characterisation of the articles included in the integrative review. Juazeiro do Norte, CE, Brazil, 2023.**

<table>
<thead>
<tr>
<th>A</th>
<th>Article title</th>
<th>Authors, year and origin</th>
<th>Magazine / Journal and Database</th>
<th>Approach</th>
<th>NEC†</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aspectos sociodemográficos e clínicos relacionados à doença de crohn em adolescentes</td>
<td>Machado et al., 2021 (Brasil)17</td>
<td>Enferm Foco (BDENF)</td>
<td>Estudo Quantitativo</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Impact of the COVID-19 pandemic on the activity of advanced-practice nurses on a reference unit for inflammatory bowel disease</td>
<td>Navarro-Correal et al., 2021 (Espanha)18</td>
<td>Gastroenterología y Hepatología (MEDLINE)</td>
<td>Estudo Qualitativo</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Doença de Crohn: um estudo de caso</td>
<td>Guimarães; Gonçalves; Silva, 2020 (Brasil)19</td>
<td>FINOM (Google Acadêmico)</td>
<td>Estudo de caso</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Authors and year</td>
<td>Aim of the study</td>
<td>Main results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>------------------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Diagnosis and nursing activities for the care of patient with Crohn’s disease</td>
<td>Lopes et al., 2019 (Brasil)</td>
<td>Rev Enferm UFPI (BDENF)</td>
<td>Estudo Quantitativo 4</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Second N-ECCO consensus statements on the european nursing roles in caring for patients with Crohn’s Disease or Ulcerative Colitis</td>
<td>Kemp et al., 2018 (Reino Unido)</td>
<td>Journal of Crohn’s and Colitis (MEDLINE)</td>
<td>Estudo Quantitativo 4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Effects of introduction of an inflammatory bowel disease nurse position on the quality of delivered care</td>
<td>Coenen et al., 2017 (Bélgica)</td>
<td>European Journal of Gastroenterology &amp; Hepatology (MEDLINE)</td>
<td>Estudo Qualitativo 4</td>
<td></td>
</tr>
</tbody>
</table>

1Souza; Silva; Carvalho (2010).
Source: Data extracted from the study (own elaboration).

**Chart 4 -** Synthesis of the results of the studies included in the integrative review. Juazeiro do Norte, CE, Brazil, 2023.

<table>
<thead>
<tr>
<th></th>
<th>Authors and year</th>
<th>Aim of the study</th>
<th>Main results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Machado et al., 2021</td>
<td>Descrever as características sociodemográficas e clínicas de adolescentes com doença de Crohn.</td>
<td>Although it does not indicate specific care, the study highlights the importance of evaluating the sociodemographic and clinical characteristics of Crohn’s Disease in adolescents, in order to provide nursing/health care planning based on the peculiarities of the health-disease process, with an impact on improving the health condition and well-being of users with Crohn’s Disease.</td>
</tr>
<tr>
<td>2</td>
<td>Navarro-Correal et al., 2021</td>
<td>Relatar o impacto da pandemia de COVID-19 na atividade dos enfermeiros que trabalham numa unidade de Doença Inflamatória Intestinal (DII) e identificar as razões para a prestação de cuidados de saúde à distância e a sua relação com determinadas características.</td>
<td>The study highlights that the Crohn’s-Colitis Care Unit (UACC) of a University Hospital in Barcelona follows a model of comprehensive patient-centred care through face-to-face and distance care, with emphasis on the role of the Advanced Inflammatory Bowel Disease (IBD) Nurse in Telehealth Assistance (TA), known as telemedicine, due to their clinical profile and professional skills. It is possible that these professionals could provide more detailed information on specific nursing care for users with IBD.</td>
</tr>
<tr>
<td>3</td>
<td>Guimarães; Gonçalves; Silva, 2020</td>
<td>Realizar um estudo de caso, evidenciando o papel do enfermeiro no cuidado e acompanhamento do paciente portador da Doença de Crohn.</td>
<td>Nursing care aimed at users diagnosed with Crohn’s disease includes: symptom monitoring, user education, nutritional guidance, medication administration, pain management, prevention and treatment of complications, emotional support, and self-care education. It is important to stress that nursing care must be individualised, taking into account the specific needs of each user. In addition, collaboration with other health professionals, such as doctors, nutritionists and psychologists, is essential for comprehensive and effective care.</td>
</tr>
</tbody>
</table>
Nursing care for users diagnosed with Crohn's disease: an integrative review

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Lopes et al., 2019&lt;sup&gt;12&lt;/sup&gt;</td>
<td>Elaborar e validar diagnósticos e atividades de enfermagem para cuidado ao paciente com Crohn.</td>
<td>This study provides a list of 62 nursing activities aimed at users with Crohn's disease, which were drawn up on the basis of 26 clinically validated nursing diagnoses. These activities include, for example, monitoring vital signs, administering medication, nutritional counselling, education about the disease and its symptoms, and emotional support.</td>
</tr>
<tr>
<td>5</td>
<td>Siegel, 2018&lt;sup&gt;20&lt;/sup&gt;</td>
<td>Identificar os pacientes com alto risco de ter complicações da sua doença, para que possamos interromper esta história natural e alterar o seu curso.</td>
<td>According to the study, nurses’ attention should be centred on the individual patient and what we can do for them now, i.e. provide them with an optimal quality of life and prevent complications related to Inflammatory Bowel Disease (IBD) in the future.</td>
</tr>
<tr>
<td>6</td>
<td>Kemp et al., 2018&lt;sup&gt;21&lt;/sup&gt;</td>
<td>Melhorar os cuidados prestados aos doentes com Doença Inflamatória Intestinal (DII) através do desenvolvimento de diretrizes, educação e investigação.</td>
<td>The study addresses the fact that Inflammatory Bowel Disease (IBD) is highly complex and requires specialised nursing care and management. To inform, inspire and improve standards of care in IBD by providing evidence-based guidelines that enable IBD nurses to move from fundamental to advanced care, encouraging research by IBD nurses. With this, new and expanding IBD services will also serve as a basis for creating educational programmes for Inflammatory Bowel Disease nurses.</td>
</tr>
<tr>
<td>7</td>
<td>Coenen et al., 2017&lt;sup&gt;22&lt;/sup&gt;</td>
<td>Tornar possível que o enfermeiro responsável pela doença inflamatória intestinal (DII) seja o principal ponto de acesso para educação, aconselhamento e apoio.</td>
<td>Nursing care for patients diagnosed with Crohn’s disease includes long-term outpatient follow-up, maintenance therapy and acute interventions for disease flares. The Inflammatory Bowel Disease (IBD) nurse plays an important role in this care, providing counselling, support and education to users and their families so that they understand the pathophysiology and follow-up strategies in IBD. The introduction of an IBD nurse in a tertiary referral centre has proved effective in reducing emergency admissions and unscheduled outpatient visits, improving the quality of care and reducing costs.</td>
</tr>
</tbody>
</table>


Source: Data extracted from the study (own elaboration).

Siegel<sup>20</sup>, in turn, emphasises the importance of improving Quality of Life (QoL) and preventing complications related to IBD. Kemp et al.<sup>21</sup> highlight the complexity of IBD and the need for guidelines and specialised education for nurses. Finally, Coenen et al.<sup>22</sup> highlight the effectiveness of introducing IBD nurses in improving the quality of care and reducing costs, with an emphasis on education, counselling and support as key components of nursing care.

**DISCUSSION**

The results underline the vital role of nursing in caring for users with CD, emphasising assessment, personalised care, telehealth and interdisciplinary collaboration in improving users’ QoL. That said, analysing the results revealed two categories related to nursing care for users diagnosed with CD, as shown below:
Ferreira et al.

Approaches to nursing care in Crohn's disease

This category discusses the importance of nursing care for users with CD, highlighting the planning of more effective care, the relevance of sociodemographic assessment, symptom monitoring, nutritional guidance, medication administration and mental support.

As explored, nursing offers various care approaches for users diagnosed with CD. It is crucial to stress that nursing care must be individualised, meeting the specific needs of each user. In this context, collaboration with other professionals broadens the scope of treatment and increases its effectiveness.19

The clinically validated nursing activities and diagnoses, according to the taxonomies, meet the needs of patients diagnosed with CD in outpatient clinics, favouring the provision of resolutive nursing care. In general, nursing activities aim to provide a professional service adapted to the user’s real health needs, promoting QoL in various dimensions. It can be seen that the main nursing care is centred on QoL, including encouraging the user, raising self-esteem and managing symptoms, among others.12

In order to optimise treatment, reduce the number of patients and achieve disease remission, it is essential to focus on the individual needs of each user and take immediate action to improve their QoL and prevent future complications or changes in the course of the disease.20

The inclusion of nurses specialising in IBD in the multidisciplinary team has made them responsible for counselling, support and care, facilitating rapid intervention during disease flares. This has resulted in a significant reduction in emergency consultations and unscheduled outpatient visits, thanks to the effectiveness of nurse management.21

Considering the active role of nursing in the care process, it is essential that it encourages users diagnosed with CD to adopt self-care practices, providing relevant information on adherence to treatment, diet and mental health, as well as surgical procedures and clinical follow-up.22

In their study, Silva et al.24 emphasise that CD is chronic, requiring prolonged treatment, affecting both the physical and psychosocial health of users, with the potential to change their routines, QoL and well-being. They conclude that social factors have a direct impact on the psychological well-being of users diagnosed with CD.

In line with this, the results of Martinelli’s study25 show an improvement in the QoL of individuals with CD through the Systematisation of Nursing Care (SNC). This process proves essential in life, treatment and daily routine, allowing users to achieve a healthier life in their health-disease process, adjusting their plans and dreams to the restrictions and complications of this comorbidity. It is clear to users diagnosed with CD that, with proper nursing care, it is possible to guarantee a satisfactory and lasting degree of QoL, even considering that the disease has no cure.

The impact of telehealth and the role of nurses in Crohn’s disease

This section highlights the crucial impact of telehealth and the adaptation of nurses to this new reality in CD care. Thus, this category addresses the influence of telehealth and nurses on various aspects, including accessibility, quality of care and the financial impact on CD management.

Telehealth has emerged as a crucial tool in the provision of remote care. Its relevance in CD care is undeniable, because through this technology, users can receive medical and nursing care flexibly, regardless of location. The flexibility offered by telehealth empowers users, allowing them greater autonomy over their health. In addition, telehealth eliminates geographical barriers, enabling distant users to access specialists and specialised care, contributing to accessibility.28

Robust evidence has shown that the use of telehealth offers a series of additional benefits. These include a significant reduction in the time it takes to provide care, since users can be seen promptly in their own homes. This approach also contributes to a reduction in costs related to travelling for users and health professionals, relieving the financial burden and stress associated with frequent trips.26

One notable aspect is the improvement in the quality of care provided by telehealth, allowing access to specialists even in remote areas where the presence of highly specialised professionals can be limited. Telehealth’s ability to effectively connect users and healthcare professionals, regardless of their geographical location, enhances treatment and support options, resulting in more efficient and effective care.27

Navarro-Correal et al.18 emphasised in their study the relevance of telehealth in CD care and the role of the EADII in providing remote care. Nurses, including EADIIIs, play a crucial role in CD care through telehealth. They provide support, education and ongoing monitoring to users, even at a distance. This transition requires a change in practices and the development of new skills to meet users’ needs remotely. The ability to adapt to this new type of care is fundamental for effective care and for promoting quality care.18-28

Corroborating this, Santos29, in his dissertation on telecare in the treatment of CD, identified positive results in relation to the reduction in the incidence rate of drug complications related to CD, by monitoring users with this technology.

Thus, users diagnosed with CD can access specialists for their conditions more conveniently, avoiding unnecessary travelling. However, as noted in the study29, remote visits may not be suitable for all user profiles. Therefore, telehealth must be implemented in a personalised way, taking users’ individual needs into account to guarantee the quality of care offered.

In addition to the benefits for users and healthcare professionals, telehealth also has financial implications for healthcare management. It can reduce costs by avoiding hospitalisations and frequent travel, providing significant relief for users and the healthcare system. However, as highlighted by Shah et al.24, the success
of telehealth can be influenced by factors such as the existence of well-defined clinical protocols and accessibility challenges. It is therefore essential to address financial issues carefully and promote equal access to telehealth to ensure that all users benefit from it.

**FINAL CONSIDERATIONS**

The main results of the study highlight the importance of nursing care centred on the user’s well-being, disease control, emotional support and encouraging self-care. Nursing plays a fundamental role in promoting quality of life and in the effective management of Crohn’s disease, also showing a significant increase in the integration of telehealth into care.

These results have significant implications for nursing practice, highlighting the need for nursing professionals to seek specialisation and training in order to offer more comprehensive and targeted care to users with Crohn’s disease. With the global growth in the prevalence of Crohn’s disease, it is essential that nurses are prepared to face specific challenges, including the clinical management of the condition, psychological support and the promotion of self-care.

The study faced some limitations, such as the scarcity of national research on the subject, which restricted the contextualisation of nursing care to the Brazilian reality. In addition, the presence of outdated articles also affected the breadth of the analysis.

Given these limitations, it is suggested that future studies address these knowledge gaps. It is recommended that national research be carried out to explore the main nursing care for users with Crohn’s disease in the Brazilian context. It is also crucial to assess the understanding and perspective of users and their families in relation to nursing care, with a view to promoting autonomy in self-care.

**REFERENCES**


10. Oliveira JA, Viebig RF, Nacif M, Bazanelli AP. Relação do consumo alimentar com sinais e sintomas na doença de Crohn. Brazilian J. Development. [Internet]. 2021 [acesso em 26 de abril de 2023];7(7). Disponível em: https://doi.org/10.34117/bjdv7n7-549

