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Bibliometric analysis of qualitative research on patients' experiences of intestinal stoma published between 2002 - 2018

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Abstract

Aims: The purpose of this paper was to perform a bibliometric analysis of the production of qualitative research in scientific journals through aggregation by levels and to identify factors of diversity, such as types of designs, in qualitative research on the experience of having an intestinal stoma between 2002 and 2018.

Design: Descriptive bibliometric study focused on the production of qualitative research on the subject of study, on three levels: micro, meso and macro.

Methods: Databases such as PubMed, CINAHL, Web of Knowledge, Scopus, SciELO, CUIDEN, Lilacs and Google Scholar were used to collect the data, between August - November 2018.

Results: Nursing was the main area of knowledge. Brazil was the predominant country of origin. The most productive journal was the Journal of Wound, Ostomy & Continence Nursing. English and Portuguese were the main languages of scientific communication. The number of authors was typically between 2 and 6. Authors conducted descriptive and phenomenological studies.

Conclusion: The present bibliometric study helps us to map the qualitative research on the experiences of individuals with an intestinal stoma and to understand patterns in the designs, methods, disciplines and journals involved in this area of research. This will allow nurses to have a leading contribution to stoma care at their disposal.

KEYWORDS

bibliometrics, nursing research, nursing, ostomy, qualitative research

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1 | INTRODUCTION

Colorectal cancer is the primary reason for the creation of an intestinal stoma. Stoma is a surgically created opening in the abdominal wall that results in the external diversion of faeces and urine. An ostomy may be permanent or temporary, and each procedure results in a stoma, which is the end of the small or large intestine that can be seen protruding through the abdominal wall (R.N.A.O., 2019). In Europe, colorectal cancer is the most common type of cancer and the second leading cause of mortality in both sexes, with 446,000 new cases diagnosed each year (Siegel, Miller, & Jemal, 2017). The American Cancer Society (2017) estimates that, in the United States in 2017, there were 71,420 new cases of colorectal cancer in men and 64,010 in women. Several authors have requested studies that provide a comprehensive conceptualization of the bodily changes associated with stomata (Li, 2009; Thorpe, McArthur, & Richardson, 2009), and studies with a similar perspective and research design: these aspects remaining constant would facilitate better data analysis (Recalla et al., 2013). In this sense, qualitative research (QR) presents us with an opportunity to respond to these demands, since it offers a methodology that allows us to understand and explore the experiences of people who are living with an intestinal stoma.

1.1 | Background

Numerous qualitative studies on intestinal stomata have been published in different countries (Capilla-Díaz et al., 2018). One limitation associated with QR is the difficulty of transferring findings to different contexts, as sociocultural characteristics may condition patient responses.

It is therefore necessary to emphasize the sociocultural approaches' claim that the development of QR is a useful source of evidence for decision making in care practice (Higgins & Green, 2011). This type of approach is very visible in health sciences, where the volume of knowledge generated by QR is increasing, as QR is understood to be the most appropriate method of research for humanistic and social approaches to health-disease processes, allowing the bottom-up construction of knowledge from the subjects (Morse, 2017). This is of great importance for nursing, which ultimately leads the development of QR in health sciences, possibly due to experiencing, on a daily basis, the human responses to treatment (González-López & Ruiz-Hernández, 2011).

In the field of nursing, bibliometric indicators are a fundamental tool for the identification of the number and distribution of publications, authorship, co-authorship, and most cited articles (Haddad, 2017; Hunt, Jackson, Watson, & Cleary, 2012). Accordingly, it is worth mentioning that there are no studies in the international field of nursing comparing these bibliometric indicators in the most important international journals. This manuscript performs a bibliometric analysis of the scientific production of the process of having an intestinal stoma from the perspective of the qualitative research developed in different countries (Dubner, 2009; Fu & Ho, 2015; Smith & Watson, 2016; Tsay & Shu, 2011; Vosner, Kokol, Bobek, Zeleznik, & Zavrsnik, 2016).

What problem did the study address?

This study sought to analyses the production of original qualitative research that explored the perspectives of people with intestinal stoma from 2002 to 2018.

What were the main findings?

Nursing is the most concerned field about qualitative research on experiences of people with intestinal stoma. It also remarked that there were many philosophies, designs, methods, techniques and types of analysis used.

Where and on whom will the research have an impact?

Nurse researchers need to publish their findings and align their research interests to meet national health priorities.

2 | THE STUDY

2.1 | Aims

The aim of the study was to perform a bibliometric analysis of the production of QR on the experience of having an intestinal stoma from 2002 to 2018.

2.2 | Design

A descriptive bibliometric analysis of original QR articles exploring the perspectives of individuals with an intestinal stoma was performed. This analysis was carried out on three levels: micro (that of the individual researcher), meso (the institutional) and macro (the national). Based on the above, bibliometric variables and indicators are those related to authorship (production and collaboration between authors), institutional affiliation (collaboration between research institutions and countries), methodological aspects of the studies (methodological design, collection techniques and data analysis) and bibliographic data of the journals in which they were published (name of journal, year, country and language of publication) (Romaní, Huamaní, & González-Alcaide, 2011). Studies of paediatric populations were excluded.

2.3 | Sample

Initially, 201,048 articles were identified by their titles and abstracts. 4,843 of them were considered to be original QR studies and likely to be eligible for inclusion in the study. After filtering articles and considering them potentially relevant references, 316 full-text articles

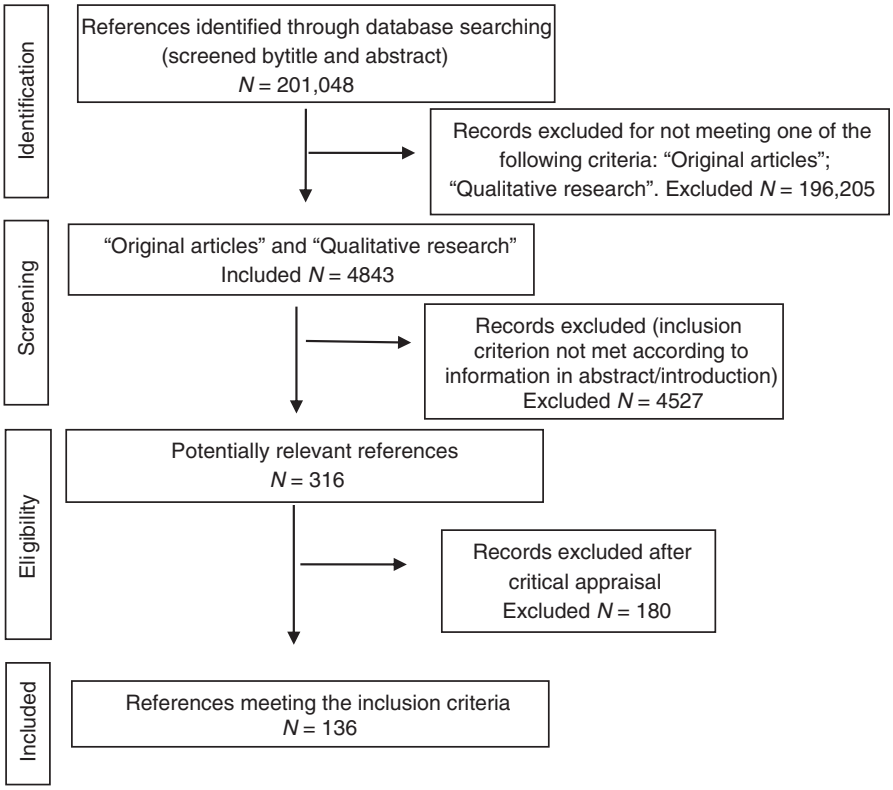

FIGURE 1 Flow chart of the sampling process

TABLE 1 Terms searched

Ostomy *[MeSH]*	Ileostomy *[MeSH]*
Ostomía *[DeCS-Spanish]*	Ileostomía *[DeCS-Spanish]*
Estomia *[DeCS-Portuguese]*	Ileostomia *[DeCS-Portuguese]*
Peritoneal Stomata *[MeSH]*	Qualitative Research *[MeSH]*
Estomas Peritoneales *[DeCS-Spanish]*	Investigación Cualitativa *[DeCS-Spanish]*
Estomas Peritoneais *[DeCS-Portuguese]*	Pesquisa Qualitativa *[DeCS-Portuguese]*
Surgical Stomas *[MeSH]*	Colostomy *[MeSH]*
Estomas Quirúrgicos *[DeCS-Spanish]*	Colostomías *[DeCS-Spanish]*
Estomas Cirúrgicos *[DeCS-Portuguese]*	Colostomia *[DeCS-Portuguese]*

were selected. Only 136 could be considered qualitative primary research.

Figure 1 shows the flow chart of the sampling process.

2.4 | Data collection

An expansive search was conducted using descriptors referring to ostomy (Finfgeld-Connett & Johnson, 2013) to obtain the general results of the studies in this field. The terms searched are shown in Table 1.

The databases included were the following: PubMed, CINAHL, Web of Knowledge, Scopus, SciELO (Spain and Latin America), CUIDEN (Spain and Latin America), Lilacs (Latin America) and Google Scholar (English and Spanish versions). The reviewers involved had a very good command of English and Portuguese, and also had the assistance of a professional translator to solve any doubts.

The following is an example of a search string followed for the term 'colostomy' in one of the databases included (PubMed): ('Surgical stomas'[MeSH Terms] OR 'Surgical stomas'[All Fields]) AND Journal Article{ptyp} AND ('2002/01/01'[PDAT]: '2018/11/30'[PDAT]) AND 'humans'[MeSH Terms] AND (English[lang] OR Portuguese[lang] OR Spanish[lang]).

The bibliometric information of the publications included (title, year of publication, authors, nationality, affiliations, publishing journal, keywords, document type and abstract) was collected in a Microsoft Excel® database created ad hoc.

The search was carried out from August to November 2018.

2.5 | Ethical considerations

No ethical approval was required, as this was a review of existing qualitative evidence.

2.6 | Data analysis

The articles were selected after reading the title and abstract during the identification phase, after reading the full text during the screening phase, and after assessing the quality of the studies for

review during the final selection phase. The articles selected were subsequently analysed using descriptive statistics. Bibliometric indicators for scientific literature allow the dissemination of scientific knowledge to be objectively measured across different types of publications, such as scientific journals (the subject of analysis in this study). Bibliometric indicators also provide information about the quantity of publications in order to determine the scientific activity carried out by researchers, groups or institutions, and to identify thematic areas, but without assessing the quality of these publications (Aleixandre-Benavent et al., 2017). According to Glänzel (2003), aggregation by levels is one of the possibilities of this type of analysis. The levels referred to are the following: micro, which refers to the analysis of publications of individuals and research groups; meso, which analyses the institutions with which the first author is affiliated and the journals in which the first author publishes; and macro, which analyses publications by country and region.

2.7 | Validity and reliability/Rigour

The articles were evaluated via peer review. An evaluation of the methodological quality was conducted using the Critical Appraisal Skills Program (CASP) Qualitative Research Checklist (05.31.13). This tool includes 10 questions relating to methodological quality, relevance of the results and applicability of the study. The decision to include the articles was then made on the basis of a judicious discussion by the review team about the methodological rigour of the study in question. Applicability was not assessed, as it is not an inclusion criterion according to our design.

3 | RESULTS

3.1 | Authorship patterns

The microanalysis of the data shows that the mean number of authors was 6 (16.18%). In 58.83% of the articles there were between 2 and 6 authors, with articles being most commonly written by 2 (22.06%), 3 (20.59%) or 4 (14.71%) authors. 8.09% (*N* = 11) of the articles were written by a single author and the highest number of authors in a study was 11 (0.74% of the cases, that being just one article).

The total number of authors in the studies included was 635, without taking into consideration their order of appearance in the articles. For instance in the case of an author appearing 12 times, this was considered to be 12 articles, even if the real number of authors would have been 446, had their order of appearance been considered. In 79.57% (*N* = 355) of cases, the researchers' production was concentrated in one article, whereas 12.10% (*N* = 54) of the researchers had published two articles, and 8.29% (*N* = 37) of them had published three or more articles. The most productive authors were Marcia Grant, Robert S. Krouse and Mark C. Hornbrook, who have each published 12 articles (12 articles being equivalent to 8.82% of the literature). In Table 2 are the most productive authors (those who published 4 or more articles).

TABLE 2 Most productive authors (4 or more articles published)

Author	Number of articles	%
Grant, Marcia	12	8.82
Krouse, Robert S.	12	8.82
Hornbrook, Mark C.	12	8.82
Altschuler, Andrea	9	6.62
Baldwin, Carol M.	7	5.15
McMullen, Carmit K.	7	5.15
Mohler, M. Jane	6	4.41
Kamada, Ivone	5	3.68
Kimura, Cristilene Akiko	5	3.68
Guilhem, Dirce	5	3.68
Herrinton, Lisa J.	5	3.68
Wendel, Christopher S.	5	3.68
Gomes, Giovana Calcagno	4	2.94
Bonill-de-las-Nieves, Candela	4	2.94
Crespillo Díaz, Antonia Yolanda	4	2.94
Sun, Virginia	4	2.94
Maruyama, Sônia Ayako Tao	4	2.94
Erdmann, Alacoque Lorenzini	4	2.94
Mota, Marina Soares	4	2.94

In more than half of the articles (*N* = 70), the first author came from Brazil (51.47%), followed by the United States (*N* = 16, 11.76%), the UK (*N* = 15, 11.03%), Spain (*N* = 10, 7.35%), Portugal and Denmark (*N* = 4, 2.94%), Turkey, China, Iran and Sweden (*N* = 3, 2.21% each), Australia (*N* = 2, 1.47%), and finally the Philippines, Canada and Uruguay (*N* = 1, 0.74% each).

3.2 | Areas of knowledge

For the analysis of the areas of knowledge and the institutions where the researchers work, only the first author was taken into account. In 55.15% (*N* = 75) of the articles, the area of knowledge was nursing. Nevertheless, in 37.50% (*N* = 51) of the articles this information was not available. In a smaller proportion, the area of knowledge was from another area, such as psychology (*N* = 3, 2.21%), public health (*N* = 2, 1.47%), enterostomal therapy (*N* = 1, 0.74%), nutrition (*N* = 1, 0.74%), other health science specializations (*N* = 1, 0.74%) and social sciences, such as sociology (*N* = 1, 0.74%) and journalism (*N* = 1, 0.74%).

With regards to the information on the affiliation of the first author, a ranking of the most productive institutions is shown according to the topic of study (including those with 2 or more articles published) in Table 3. At the top of the list are the Universidade de Brasília (UnB), Brazil (4.41%) and the City of Hope National Medical

TABLE 3 Institutions assigned to the first author (with 2 or more articles published)

Institution	Number of articles	%
Universidade de Brasília (UnB) (Brasília, DF, Brazil)	6	4.41
City of Hope National Medical Center (City of Hope, Duarte, California, United States)	4	2.94
University Hospital Carlos Haya (Málaga, Spain)	4	2.94
Universidade do Estado do Rio de Janeiro (Rio de Janeiro, Brazil)	3	2.21
Universidade de São Paulo, Escola de Enfermagem de Ribeirão Preto (Ribeirão Preto, Brazil)	2	1.47
Hospitais da Universidade de Coimbra (Coimbra, Portugal)	2	1.47
Centro de Pesquisas René Rachou, Fundação Oswaldo Cruz (Belo Horizonte, Minas Gerais, Portugal)	2	1.47
Center for Health Research, Kaiser Permanente Northwest (Oregon, United States)	2	1.47
Universidade de Passo Fundo (Passo Fundo, State of Rio Grande do Sul, Brazil)	2	1.47
Universidade Federal de Mato Grosso (Coxipó da Ponte, Cuiabá - State of Mato Grosso, Brazil)	2	1.47
Faculty of Nursing, Prince of Songkla University (Hat Yai, Thailand)	2	1.47
Universidade Federal do Rio Grande (Rio Grande, State of Rio Grande do Sul, Brazil)	2	1.47
Universidade Federal do Piauí (Ininga, Teresina, State of Piauí, Brazil)	2	1.47
Kaiser Permanente Northern California (Oakland, California, United States)	2	1.47
University of Copenhagen (Copenhagen, Denmark)	2	1.47
Sahigrenska University Hospital (Gotemburgo, Sweden)	2	1.47
Southern Arizona Veterans Affairs Health Care System (Tucson, Arizona, United States)	2	1.47
No data	8	5.88

Center, United States (2.94%), and the University Hospital Carlos Haya, Spain. The institutions of the first authors appear in six articles (Universidade de Brasília) and in four articles in the case of the City of Hope National Medical Center and the University Hospital Carlos Haya. 59.94% of the institutions appeared in just one article each.

Once the researchers' institutions were reviewed, a classification of the institution by the first author was done. Thus, 66.12% (*N* = 90) of authors published from a university, followed by health institutions, where hospitals predominated (*N* = 24, 17.71%). Research foundations represented (*N* = 10) 7.35%, and government institutions, such as Health Ministries, 2.94% (*N* = 4). In 8 articles (5.88%) there was no information on the institutional affiliation of the first author, so that it could not be known what type of institution the author was affiliated with, since the institution in which the author had studied could be different to the author's affiliation in the paper.

3.3 | Institutional collaboration

Regarding the collaboration of institutions for the development of the studies, in 38.97% of the articles (*N* = 53) there was no collaboration between institutions, that is the authors were all affiliated with the same institution. In 28.68% (*N* = 39), more than two institutions have been identified and the type of collaboration was not classified. The most frequent collaboration was between universities (13.97%, *N* = 9), followed by the collaboration between health institutions and universities (13.24%, *N* = 18), between universities and government institutions (*N* = 2, 1.47%), between health institutions (0.74%, *N* = 1), between health institutions and foundations (0.74%, *N* = 1). In some cases, there was no information available (2.21%, *N* = 3).

3.4 | Journals

The 136 articles included in the study were published in 86 different journals. The most productive in the selected period were as follows: Journal of Wound, Ostomy & Continence Nursing (7.35%); Revista Latino-Americana de Enfermagem (5.88%); Revista Brasileira de Enfermagem (5.15%); Revista Estima, Journal of Coloproctology (Rio de Janeiro) and Texto & Contexto Enfermagem (3.68% each); Index de Enfermería and Revista Referencia (2.94% each). Revista de Enfermagen UFPE Online, Journal of Clinical Nursing, Revista Electrónica de Enfermagem, and Revista da Rede de Enfermagem Nordeste (2.21% each) (Appendix A).

Both the journal with the highest production and the most productive country (Brazil) publish in English. The most frequent language of publication was therefore English, which was the publication language of 47.06% of the articles (*n* = 64), followed very closely by Portuguese, with 60 contributions (44.12%). Publications in Spanish were scarce, with nine articles (6.62%). Of the total number of articles, 81.63% (*n* = 111) were published between 2009 and 2013, which shows a growing interest in QR in relation to the topic of study (Figure 2). The years with the greatest share of publications were 2013 and 2016, with 13.24% (*n* = 32) of publications published in each of those years.

3.5 | Research designs

Regarding research designs used in QR, it is important to stress the diversity of techniques used (Table 4). However, there is a strong

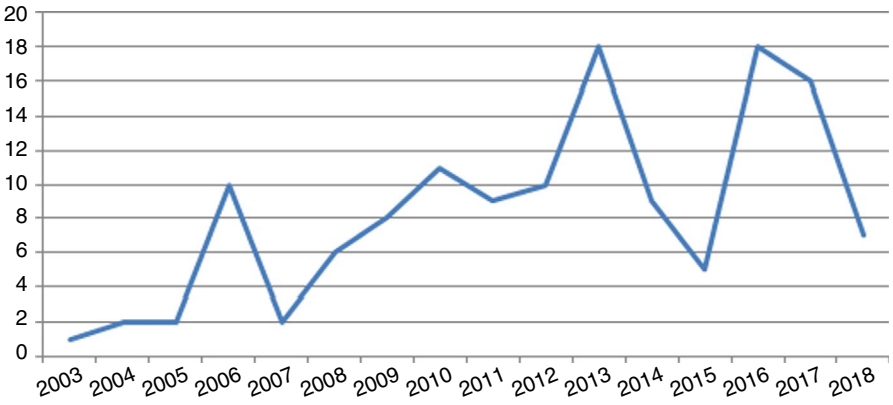

FIGURE 2 Distribution per year of articles included (X axis = year; Y axis = number of articles) [Colour figure can be viewed at wileyonlinelibrary.com]

TABLE 4 Study designs

Study design	Number of articles	%
Qualitative research	35	25.74
Descriptive exploratory study	34	25
Phenomenological study	30	22.06
Mixed study	13	9.56
Life history	7	5.15
Ethnographic study	4	2.94
Biographical study	2	1.47
Social representations	2	1.47
Convergent care research	2	1.47
Narrative	2	1.47
Grounded theory	1	0.74
Self-ethnography	1	0.74
Analytical induction	1	0.74
Itinerary of the Freirean research	1	0.74
Prospect of the extended and shared clinical	1	0.74

presence of descriptive and phenomenological studies (25% and 22.06% respectively). In some cases, only 'Qualitative Research' was mentioned without further elaboration (25.74%). A modest proportion of studies had a mixed design (9.56%).

4 | DATA COLLECTION

Researchers refer to the use of a variety of techniques and the combination of them in the same study. Semi-structured interviews predominated (*N* = 70, 51.47%), followed by in-depth interviews (*N* = 10, 7.35%), focus groups (*N* = 9, 6.61%), open-ended interviews (*N* = 5, 3.67%), unstructured interviews (*N* = 4, 2.94%), semi-structured in-depth interviews (2.94%) and questionnaires with open-ended questions (*N* = 3, 2.20%). In 9.56% of the articles (*N* = 13), different techniques were combined (questionnaire-interview, semi-structured interview-participant observation, questionnaire-focus group, in-depth interview-focus group, interview-observation and focus groups-observation). In 11.76% of the articles (*N* = 16), only the development of interviews is mentioned, without further elaboration. In 1.47% (*N* = 2) of the articles, the data collection technique was not explicitly stated.

4.1 | Data analysis

Multiple approaches and variants were also used. Content analysis was used in 35.29% of cases. In 15.44% of cases, it was carried out based on Bardin's methodology, and in 13.97% of cases this was not specified.

Thematic analysis was also very common in the included studies (19.91%). In 2.94% of cases, it was carried out based on Minayo's methodology, but in 11.76% of cases this was not specified. Likewise, the use of phenomenological analysis stands out, being used in 14.70% of the articles. Although in 9.59% of the articles the referent was not indicated, in other cases it was based on Heidegger (1.47%), Giorgi (1.47%), and Ricoeur, Colaizzi, Feijoo and Husserl (0.74% each). Analyses according to Taylor & Bogdan's methodology were also used (3.67%), and grounded theory (2.21%), according to Charmaz, Strauss & Corbin (0.74% each). 8.82% of the articles did not specify the approach used to analyse data (Table 5).

5 | DISCUSSION

The analysis of scientific production, based on bibliometric parameters, is an essential tool to evaluate the knowledge and determine the progress of disciplines and their fields. In this particular case, the subject and the context are very specific, and provide useful information towards understanding general properties of the state of qualitative knowledge on the experience of having an intestinal stoma. Nursing is indicated as the discipline most concerned with generating scientific knowledge on this using QR. This corroborates the interest of this discipline for research (Squires & Dorsen, 2018), which is consistent with the unprecedented growth and diversification of scientific production developed by nurses in the last few decades, especially in Latin America, and with qualitative approaches (Flick, 2018; Medina-García, Martínez-Casas, & Reina-Leal, 2014; Reina-Leal, Amezcua,

TABLE 5 Approaches for the data analysis

Analysis technique	Number of articles	%
Content analysis	48	35.29
Thematic analysis	23	19.91
Phenomenological analysis	20	14.07
Analysis by Taylor and Bogdan	5	3.67
Inductive analysis	5	3.67
Grounded theory	3	2.20
Oral history by Meihy	3	2.20
The Discourse of the Collective Subject	2	1.47
Analysis and interpretation	2	1.47
Convergent Care Research	2	1.47
Biographic analysis by Streuber & Carpenter	1	0.74
Speech analysis	1	0.74
Discourse analysis	1	0.74
Ethnography	1	0.74
Narrative analysis by Clandinin & Connelly	1	0.74
Self-ethnography	1	0.74
Narrative theory	1	0.74
Apprehension, synthesis, theorization and recontextualization processes	1	0.74
Non-verbal referential communication	1	0.74
No data	14	10.29

Gómez-Urquiza, & Amezcua-González, 2013). On the other hand, the difference that is established with respect to other areas of knowledge may be due to the professionals who treat patients with ostomy, known as 'stoma nurses', being mostly found in the field of nursing.

These results are consistent with a bibliometric study conducted in Brazil, which analysed scientific production about education and patients with intestinal stoma, in which almost 63% of the authors of the articles analysed were nurses or stoma care nurses (Dardas, Sawair, Nabolsi, & Simmons, 2018; García-Reveles & Toshie-Takahashi, 2017). It is of note that nursing is a discipline oriented towards human responses and, therefore, will tend towards the development of qualitative methodologies in these studies (Morse, 2017; Squires & Dorsen, 2018).

In relation to microanalysis (analysis on the level of individual researchers, authorship), there are established leading researchers in the study area. In our study, more than 60% of the publications were written by 2, 3, 4 or 5 authors, which may indicate a good level of collaborative work, followed by 16.91% of articles being written by six authors. It denotes improvement in the consolidation of teamwork, if it is taken into account that competitive research groups are usually made up of a minimum of six people. The mean number of authors in the articles included represents almost double the number found in the study by García-Reveles and Toshie-Takahashi (2017), which was 2. In relation to other thematic areas, the average number of authors was 3.8 (Dardas et al., 2018).

With respect to the country of origin of the publications, Brazil stands as the main producer, bringing together almost half of the published articles. These data are consistent with other studies, in which this country had produced 70.3% of the literature (García-Reveles & Toshie-Takahashi, 2017). Brazil is shown as an international power in terms of scientific production on ostomies. Regarding QR, the study by Mercado-Martínez, Díaz, Tejada-Tabayas, and Ascencio-Mera (2011), which explored the QR activity in Mexico, determined that Brazil was the foreign country with the highest number of publications of this type.

Considering the annual progression, a particular dynamic is observed with some periods of growth, alternated with others of regression. However, the increase in production from 2007 to 2013 is notable, followed by a recession in 2015, then continuing to grow until the present (Dardas et al., 2018). It should be noted that, given the indexing processes of the databases, it is possible that, in 2013, more were published, but they were not identified due to the dates of completion of the search. This progression coincides with other studies, in which QR was produced in several areas of health and human sciences between 2002 and 2010, where 88% of the publications reviewed were from later than 2005 (Bassora & Campos, 2010). These authors attribute this progression to the time of consolidation and expansion of qualitative methods in the academic setting.

Regarding scientific production, and according to other authors, universities stand out as research producers, often being the institution of the first researcher, which is logical given the academic nature of it and the growing interest in research. The data found in relation to the degree of institutional collaboration show that there is still a high degree of collaboration between authors from different institutions and that there is very little international collaboration between authors (Dardas et al., 2018). This seems to indicate that collaborations in this area tend to occur primarily within relatively closed systems.

The Journal of Wound Ostomy & Continence Nursing stands as the journal of choice, which was to be expected, considering that it is a journal specialized in this field. It is followed by the Revista Latino-Americana de Enfermagem, the Revista Brasileira de Enfermagem, the Revista Estima and the Journal of Coloproctology (Rio de Janeiro), Index of Nursing, and Referência. They are nursing journals by discipline and are more involved in the general approach to ostomies. These journals coincide with some of the most cited journals in Latin America (Index-f.com, 2019).

The qualitative designs most used by the studies analysed were the phenomenological studies and the exploratory descriptions, without specifying the referent followed. Some reviews (Mercado-Martínez et al., 2011) have indicated that 62% of the studies examined did not specify the design used and called themselves qualitative studies. Other studies analysed the application and methodology of QR in nursing worldwide. This study considered 240 research studies, of which 180 were defined as descriptive qualitative studies without further elaboration, there being little consensus on what descriptive meant (Ball, McLoughlin, & Darvill, 2011). According to Squires and Dorsen

(2018), a common mistake in qualitative submissions is that the coding approach is either not described or does not match the study design.

The semi-structured interview was the most recurrent technique in the articles reviewed, coinciding with other results where this use was the most common technique used in QR (Jamshed, 2014; Mercado-Martínez et al., 2011). These data are also consistent with other studies, although it is important to highlight the use of group techniques (Jashmed, 2014). Content analysis and thematic analysis are established as the main analysis techniques. These results are an intermediate point to those of other studies that find that this technique is used in 45% (Bassora & Campos, 2010) or 23% (Mercado-Martínez et al., 2011) of studies.

It is important to highlight the confusion or lack of existing criteria when classifying qualitative studies, both in terms of design and data collection and analysis techniques. In general, there is a certain confusion both in the use of the terminology of QR and when it comes to distinguishing between what philosophies, designs, methods, techniques or types of analysis are. There is an abundance of studies that classify their work as qualitative in general, but less so of studies that specify theoretical approaches to particular methodologies. In addition, publications that reduce their idea of qualitative to the use of different techniques in isolation, not giving importance to scientific rigour, in terms of citation of methods and analysis employed, predominate (Ball et al., 2011; Squires & Dorsen, 2018). It is above all the latter that is the least alluded to among the publications. This affects its validity and reveals a great disorientation and variability among the works that do mention the type of analysis carried out.

5.1 | Limitations

Within the limitations of the study, it is of note that, although the largest volume of original research is usually published in the form of original articles, sometimes researchers choose to publish their results in other formats (monographs, books, etc.). We can assume that these findings may not account for the totality of the investigations carried out.

In addition, a generous number of databases considered the most complete for the area of knowledge of health sciences have been reviewed. However, there may be research published in journals not indexed in these databases and other databases that may be of interest. Nonetheless, based on the degree of duplication found among the databases used, we consider this limitation to be minimal.

5.2 | Implications for practice

Bibliometric indicators help nurses to become aware of the importance of collaborating in research studies to manage daily nursing practice and create a nursing philosophy of 'involvement' (Hui & Stickley, 2007). Bibliometric indicators make it possible to arrange individuals, departments, disciplines and journals into a graded array of productivity or quality (Traynor & Rafferty, 2001). As a result, this study is intended to fill the existing gap in the literature regarding the production of QR studies in scientific journals on the experience of having an intestinal stoma in particular.

The quality of stoma care will depend on the quality of the related research studies that identify barriers to stoma care. If the research approach is inadequate or incomplete, nurses may not be able to deliver the best care available due to misinformation or misused research techniques.

6 | CONCLUSION

Based on the main objective of the study and the findings obtained, it is fairly safe to say that the profile of publications on the condition of people with intestinal stoma from the qualitative health research is of studies with between 2 and 6 authors, carried out mainly by nurses, mostly of them assigned to a university. The majority of these studies were carried out in Brazil and published in nursing journals and specialized ostomy journals. It is very common to develop exploratory descriptive studies in general, where different variants of interview may have been used for the collection of data and numerous techniques of data analysis, of which content analysis stands out particularly.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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