

Characteristics and Scientific Production of Research at a Nursing School in Peru

Características y producción científica de las investigaciones de una escuela de enfermería en Perú

Received: 20 January 2020 | Accepted: 26 February 2021

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ABSTRACT

Introduction: The scientific production of the universities in our country is very low in part because the investigations carried out as a requirement to complete the undergraduate studies cannot be published as scientific articles, in this sense the objective was set: To characterize the investigations carried out in the School of Nursing of the Santo Toribio de Mogrovejo Catholic University, Chiclayo, Peru, between 2006 and 2020. **Material and methods:** Observational, descriptive, retrospective study that included 744 undergraduate theses in digital format from the School of Nursing of the Santo Toribio de Mogrovejo Catholic University. **Results:** 83.60% of the investigations are qualitative with a case study design (63.44%); 31.26% have adults as their population; 60.48% were carried out in public and private health institutions. Only 17.20% of the theses were adapted to a scientific article and published in indexed journals, the majority in Latindex (58.59%) followed by Cuiden (32.03%). **Conclusion:** There is a large number of theses that have not yet been converted into a scientific article format, losing the opportunity to gain visibility with the scientific production of the nursing school, few were published in indexed databases, highlighting Latindex.

Keywords

nursing research; academic dissertation; scientific publications; students nursing.

RESUMEN

Introducción: En Perú, la producción científica de las universidades es muy reducida, en parte porque las investigaciones realizadas como requisito para culminar los estudios de pregrado no llegan a publicarse como artículos científicos. **Objetivo:** Caracterizar las investigaciones realizadas en la Escuela de Enfermería de la Universidad Católica Santo Toribio de Mogrovejo, Chiclayo, Perú, entre 2006 y 2020. **Material y métodos:** Estudio observacional, descriptivo, retrospectivo que incluyó 744 tesis de pregrado en formato digital de la Escuela de Enfermería de la

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How to cite: Tenorio Paz C, Rodríguez Cruz L, Ñique Carbajal C, Diaz Manchay R. Characteristics and scientific production of research at a nursing school in Peru. Univ. Med. 2021;62(2). <https://doi.org/10.11144/Javeriana.umed62-2.Cpci>

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Resultados: El 83,60 % de las investigaciones es de tipo cualitativo con diseño de estudio de caso (63,44 %); el 31,26 % tiene como población a personas adultas, y el 60,48 % fue llevada a cabo en instituciones de salud pública y privada. Solo el 17,20 % de las tesis se adaptó a artículo científico y se publicó en revistas indexadas, la mayoría en Latindex (58,59 %), seguidos de Cuiden (32,03 %).

Conclusión: Existe un gran número de tesis que aún no se han convertido a formato de artículo científico y que están perdiendo la oportunidad de ganar visibilidad con la producción científica de la Escuela de Enfermería. Pocas fueron publicadas en bases indexadas, y se destaca Latindex.

Palabras clave

investigación en enfermería; tesis académica; publicación científica; estudiantes de enfermería.

Introduction

Research, creativity, and innovation together constitute an indispensable tool and an important pillar for developing the scientific skills of health science students (1). The development of these skills is as important as clinical skills because scientific methods and their application are essential in health care work. Therefore, undergraduate research is the foundation and the beginning of their professional and postgraduate stage (2, 3, 4).

In Peru, according to the University Law, it was established that universities use a thesis defense as the only way to obtain a professional degree (5). However, this should not culminate with the defense before a jury, but when it is disseminated in scientific articles published in indexed journals (6). Despite the lack of knowledge production culture, some students try to publish privately or under the guidance of their advisors. Universities should also showcase scientific achievements through articles, patents, intellectual property rights, etc. However, in the university environment, there is no adequate motivation to publish the university thesis, since it is often seen as an administrative process to obtain the degree or title (4, 7).

The quality of higher education in nursing is directly related to the practice of scientific research. Its importance lies in the need to form research hotbeds that identify problems or risks,

analyze and interpret them, develop intervention proposals for the country's health problems, and in turn, build knowledge and develop science (8). In particular, the curriculum of the School of Nursing of the Universidad Católica Santo Toribio de Mogrovejo (USAT), Chiclayo, Peru, created in 2001, includes the preparation of the research project (Thesis I), execution (Thesis II) and report writing (Thesis III) in the last two years of studies. At present, 29 classes have graduated, and 744 research projects have been defended.

In this sense, this research was conducted in order to structure in detail the type of research project, whether they have been converted into a scientific article format and whether they have been published in journals indexed in databases. Its objectives were to characterize the theses defended to obtain the professional nursing degree according to type, design, population and place; as well as to verify how many of these have been published in a scientific article format in USAT between 2006 and 2020.

Materials and methods

This was an observational, descriptive, retrospective study that included 744 theses defended from January 2006 to December 2020, to obtain the professional degree in nursing at USAT. They were accessed through the virtual catalog of the P. Dionisio Quiroz Tequén Library of that institution. The following characteristics were analyzed in each of these research projects: type, design, population and place of research.

To assess whether the research projects had been published in indexed journals, each research title was entered in the search engines of the databases Cuiden, Latindex, SciELO, Scopus, Web of Science and the Virtual Health Library.

The data obtained were tabulated in Excel® 2003 and analyzed with the SPSS statistical program (version 25). A descriptive analysis of the qualitative variables was performed using frequency tables.

In this study, the confidentiality of the data of the students and thesis advisors was guaranteed

using coding for their identification. Informed consent was not used because the data are publicly accessible.

Results

The results obtained from the different characteristics of the research projects to opt for the professional degree in nursing have shown that the majority (83.60 %) of the research projects are of qualitative type with case study design (63.44 %), and that only 16.54 % are of quantitative type with descriptive design (8.33 %). Approximately two thirds of the investigations were conducted in the population of adults (31.26%) and nurses (27.65%).

60.48% of the research to opt for the professional degree in nursing took place in public/private health institutions, and only 19.76% were in urban, peri-urban and rural community areas. This information is shown in Table 1.

Table 1
Characteristics of the research projects 2006-2020

Type of research	n	%
Qualitative	622	83.60
Quantitative	122	16.40
Research design		
Case study	472	63.44
Descriptive	62	8.33
Correlational	40	5.38
Exploratory-descriptive	32	4.30
Ethnography	30	4.03
Social representation	31	4.17
Phenomenology	24	3.23
Quasi-experimental	20	2.69
Participatory action research	17	2.28
Life history	15	2.02
Creative-sensitive	1	0.13
Type of population		
Adults	251	31.26
Nurses	222	27.65
University students	72	8.97
Pre-schoolers/school children	68	8.47
Family caregiver	63	7.85
Adolescents	58	7.22
Older adults	57	7.10
Health care team	12	1.49
Place		
Public and private health institutions	450	60.48
Community (urban, peri-urban and rural)	147	19.76
University	98	13.17
School (infant, primary, secondary)	49	6.59

Table 2 shows that only 17.20% of the total research projects was published in indexed journals. In the databases consulted, it was found that 58.59% were registered in Latindex, 32.03% in Cuiden and only 4.68% in Scopus.

Table 2
Publication of scientific articles of the theses carried out 2006-2020

Published	n	%
No	616	82.80
Yes	128	17.20
Databases		
Latindex	75	58.59
Cuiden	41	32.03
Scopus	6	4.68
SciELO	3	2.35
Web of Science	3	2.35

Discussion

In relation to the characteristics of the research projects to opt for the professional degree in nursing at USAT, the results indicate that more than a third are qualitative with a case study approach, while less than a quarter are quantitative with a descriptive design. These findings are contrary to those of several studies in which descriptive quantitative research with a non-experimental design predominates, both in nursing (9, 10) and in other health careers (11, 12, 13, 14). This tendency toward qualitative studies may be due to the training and mastery by the thesis advisors since in their graduate studies they were advised by doctors trained in Brazil with expertise in qualitative research. A study asserts that qualitative research prevails in doctoral theses in nursing in Brazil (15).

In this research, more than 50% of the theses focused on adult and professional nursing

population in public and private institutions, similar to other studies involving hospital population (8,11,13) and adults (13). Most of the research is conducted at the institutions where the thesis advisors work. The results in terms of research publication are low (17.20%), and are registered mainly in the Latindex and Cuiden databases and are scarce in Scopus, SciELO and Web of Science. Although these results are low, the reports of these criteria in Peru are much lower than what we have obtained. In Puno (11), where they conducted a two-year study with other areas of health sciences, including nursing, only 1% of the theses were published in an indexed journal.

The USAT School of Nursing has the journal *Acc Cietna*, indexed in Latindex, in which graduate students and faculty have published articles. The fact of having an indexed journal offers the possibility of publicizing the articles, as some studies have shown (3,16). However, participation and knowledge about scientific publications are scarce and it is recommended to form research groups and perform various scientific activities from undergraduate level (16, 17).

Students write scientific articles together with their thesis advisors, and in the case of teachers, with a doctoral degree from the school in question, in the last five years (2014-2019) they have published articles in the following databases: Cuiden, Latindex, SciELO and Scopus, showing a limited production. It can also be observed that no articles have been published in journals in English (18). In order for students to publish, the guidance of teachers and advisors with such an experience is essential. However, some studies show that the publication of Psychology (19) and Medicine (20) undergraduate advisors is low and worrisome, although half of them has published at least one article in their lifetime. A study on publications by thesis jurors shows that it is low (21).

It is concluded that most of the research projects to obtain the professional degree in nursing at USAT were qualitative, mostly with a case study approach. Less than one-fifth

of the research projects were published, and these were indexed in the Latindex and Cuiden databases, and few in Scopus and Web of Science. One limitation of the study is that only one observational study was conducted in a nursing school of a private university. It is recommended that comparative studies be conducted between other nursing schools and faculties of public and private universities at the regional and national levels.

Source of financing

Self-financed

Conflicts of interest

The authors deny conflicts of interest.

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