

ATTITUDES TOWARDS THE INVESTIGATION OF ROTATING OBSTETRICS INMATES IN A LIMA-PERU HOSPITAL

ACTITUDES HACIA LA INVESTIGACIÓN DE INTERNOS DE OBSTETRICIA ROTANTES EN UN HOSPITAL DE LIMA-PERÚ

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ABSTRACT

Objective: Determine attitudes towards the investigation of rotating obstetrics inmates at Sergio E. Bernales Hospital (HSEB) during December 2018 to January 2019. **Methods:** Transversal study. The population was made up of obstetrics interns who performed professional practices to whom a validated scale of 28 items distributed in 6 dimensions was applied, which assessed attitudes towards research. **Results:** 57 obstetrics interns participated in the study. The average age was 23.5 ± 2.1 years and 96.5% were female. 54.4% of inmates presented a regular attitude towards scientific research, 24.6% had a good attitude and 21% had a bad attitude. 93.0% of inmates agreed or strongly agreed that publication in a journal helps improve clinical practice, most felt able to interpret a scientific article (68.4%) and prepared to conduct research career related (54.3%); On the other hand, they considered that in order to carry out quality research in the university they had to have basic physical and virtual tools (94.7%) and that the scientific writing course should focus on teaching the preparation of an article (84.2 %). The majority disagreed and disagreed in opting for another graduation modality other than the thesis (50.9%). **Conclusion:** More than half of HSEB's obstetric inmates had a regular attitude toward research. The results show the need to continue strengthening and promoting research in obstetrics students.

Key words: Attitude; Research; Students; Obstetrics. (source: MeSH NLM)

RESUMEN

Objetivo: Determinar las actitudes hacia la investigación de internos de obstetricia rotantes en el Hospital Sergio E. Bernales (HSEB) durante diciembre 2018 a enero 2019. **Métodos:** Estudio transversal. La población estuvo constituida por internos de obstetricia que realizaban prácticas profesionales a quienes se les aplicó una escala validada de 28 ítems distribuidos en 6 dimensiones, que evaluó actitudes hacia la investigación. **Resultados:** Participaron del estudio 57 internos de obstetricia. La edad promedio fue de $23,5 \pm 2,1$ años y 96,5% eran de sexo femenino. El 54,4% de internos presentó actitud regular hacia la investigación científica, el 24,6% tuvo una buena actitud y 21% una mala actitud. El 93,0% de internos estuvo de acuerdo o muy de acuerdo con que la publicación en una revista ayuda a mejorar la práctica clínica, la mayoría se sentía capaz de interpretar un artículo científico (68,4%) y preparados para realizar una investigación relacionada con la carrera (54,3%); por otro lado, consideraban que para realizar investigaciones de calidad en la universidad debían contar con herramientas básicas físicas y virtuales (94,7%) y que el curso de redacción científica debía centrarse en la enseñanza de la elaboración de un artículo (84,2%). La mayoría estuvo muy en desacuerdo y en desacuerdo en optar por otra modalidad de graduación que no sea la tesis (50,9%). **Conclusión:** Más de la mitad de los internos de obstetricia del HSEB tenían actitud regular hacia la investigación. Los resultados evidencian la necesidad de continuar fortaleciendo y promoviendo la investigación en los estudiantes de obstetricia.

Palabras clave: Actitud; Investigación; Estudiantes; Obstetricia. (fuente: DeCS BIREME)

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INTRODUCTION

The university is an institution that constitutes the direct link between society and science, since it contributes to the resolution of problems that are generated in various areas (such as health), from the use of new knowledge produced through research, recognizing this as one of its primary functions¹, so that this function is properly performed, it is necessary that university faculties or schools not only recognize the importance of the research skills that undergraduate students must acquire, but also help to develop and consolidate them as professional habits².

Research is one of the transversal axes of the curriculum and of the teaching-learning process during vocational training; However, this is not always achieved since many students do not give importance to it, not knowing it as a useful tool for its development³, despite this reality, it is necessary for every student to learn how to conduct research in order to generate new knowledge⁴.

Training in research and development in undergraduate students of health sciences is essential because in the daily work of a professional information is collected, analyzed, possible responses are proposed, a presumptive diagnosis is established and patients are followed in order to verify what was initially proposed⁵. Research allows a professional profile to be oriented towards the resolution of certain situations that have a major impact on the public health of a country, in this sense, there needs to be a willingness to encourage and develop it in the students' themselves⁶.

Attitudes towards research are closely linked to the skills and competencies of teachers and students, which will essentially depend on the educational context in which they develop. The study of these attitudes reflects a critical approach to training and provides an opportunity to implement quality measures at the university level⁷.

In Peru, according to National Superintendent of Higher Education (SUNEDU), the number of citable documents is one of the indicators to measure university research activity; In this regard, there has been an increase in these documents, from 927 in 2010 to 1610 by 2015, this information is especially relevant to understand the interest of research by university students nationally.

The professional training of the obstetrics student involves much more than learning the clinical care of pregnancy, childbirth or postpartum, or addressing the sexual and reproductive health of women of childbearing age, but also the development of research skills. For this reason, the present study was developed with the objective of determining the

attitudes towards research that rotating obstetrics inmates have in the Sergio E. Bernales Hospital during December 2018 to January 2019.

METHODS

Cross-sectional study. The population was made up of obstetrics interns from the National University of San Marcos (UNMSM), Federico Villarreal National University (UNFV), University of San Martín de Porres (USMP), Arzobispo Loayza University (UAL) and Alas Peruanas University (UAP) who were rotating in the Sergio Bernales Hospital. The inmates were selected according to inclusion and exclusion criteria:

- **Inclusion criteria:** Obstetrics interns from national or private universities who have completed at least one internship rotation at the Sergio Bernales Hospital.
- **Exclusion criteria:** Not accepting to participate voluntarily in the research or being rotated in another location. A scale of evaluation of attitudes towards research for university students was applied to the inmates, which has 27 items and five response categories established by Likert scale. The scale has been validated (content and construct validity) in Peru by Arellana-Sacramento⁹ who obtained a Cronbach's alpha coefficient of 0.65 for this instrument. The attitude scale is made up of six dimensions:
 - » Attitude towards writing scientific articles
 - » Participation in research
 - » University actions to encourage student research
 - » Parameters in research within the university
 - » Possibility to carry out research within the university
 - » Review of research material

The final value of the poses was determined according to the scale of the instrument: by the sum of scores of the items, being a "good" attitude when the score was greater than or equal to 103; "regular" attitude when the score was between 93 and 102; And "bad" attitude when the score was less than or equal to 92 points.

Statistical analysis was performed using SPSS version 25 for Windows. Univariate statistics were used based on obtaining frequencies, percentages, measures of central tendency and dispersion.

Regarding the ethical aspects, the participation of the obstetrics inmates was voluntary and confidential and they signed an informed consent. The project was approved for implementation by the teaching and research office of the Sergio Bernales Hospital.

RESULTS

The population consisted of 69 obstetrics inmates; However, 12 inmates did not want to participate in the research and 57 were available for analysis. The

average age was 23.5 ± 2.1 years, 71.9% of the inmates were between 20 and 24 years old and 96.5% were female. 36.6% of the inmates were from UNMSM, 28.1% from UAL and 7% from USMP (Table 1).

Table 1. Characteristics of obstetrics inmates.

Characteristics of interns	N°	%
Age		
20 to 24 years	41	71,9
25 to 33 years	16	28,1
Sex		
Female	55	96,5
Male	2	3,5
University		
UNMSM	22	36,6
UAL	16	28,1
UNFV	8	14,0
UAP	7	12,3
USMP	4	7,0
Total	57	100

ARTÍCULO ORIGINAL

The highest frequency of inmates showed a regular attitude towards scientific research (54.4%); While, 24.6% had a good attitude and 21% a bad attitude.

The regular attitude was the most frequent among the inmates of all the universities (Table 2).

Table 2. Attitude towards scientific research according to universities.

University	Attitude towards research					
	Bad		Regular		Good	
	N°	%	N°	%	N°	%
UNMSM	6	27,3	9	40,9	7	31,8
UAL	3	18,8	9	56,2	4	25,0
UNFV	1	12,5	7	87,5	0	00
UAP	2	28,6	3	42,8	2	28,6
USMP	0	0	3	75	1	25,0

With regard to attitudes towards writing scientific articles, it was observed that the highest frequency of interns agreed or strongly agreed that publication in a journal helps to improve clinical practice (93.0%), research is only important when undertaking a master's, doctorate or specialty (66.7%) and that university professors should undertake research at the university (93.0%). Regarding attitudes towards participation in research, the majority felt able to

interpret a scientific article (68.4%) and prepared to undertake career-related research (54.3%). In the dimension related to the actions of the university to encourage research in the student, the majority of the interns considered that if they asked a teacher for advice they could take advantage of their work (59.6%) and that to carry out quality research in the university they had to have basic physical and virtual tools (94.7%). (Table 3)

Table 3. Attitudes towards the dimensions of writing scientific articles, participation in research and actions of the university to encourage research in the student.

ARTÍCULO ORIGINAL	Dimensions	MD	ED	NA/ND	DA	MDA
Attitudes towards the development of scientific articles						
	Publication in a scientific journal helps improve clinical practice	0	0	7	52,6	40,4
	Research is only important when you complete a master's degree, doctorate or specialty	7	7	19,3	40,4	26,3
	University teachers should conduct research at the university	0	0	7	43,9	49,1
	Research courses should be complemented outside class hours	0	3,5	21,1	40,3	35,1
	Research reinforces university academic training	0	0	5,3	52,6	42,1
	Attend by own decision to scientific and academic events	5,3	10,4	21,1	42,1	21,1
Attitudes towards participation in research						
	I feel able to judge and interpret a scientific article of my career	0	7	26,6	52,6	15,8
	I know all the requirements for a thesis in my university	3,5	19,2	24,6	31,6	21,1
	I have consulted on my own at least one scientific journal this month	5,3	14	24,6	45,6	10,5
	I feel ready to do research related to my career	1,8	10,6	33,3	36,8	17,5
Attitudes towards university actions to encourage student research						
	I think teachers don't have time to research	8,8	17,5	36,8	28,1	8,8
	If I ask a teacher for advice, he or she will take advantage of my job	5,3	5,3	29,8	43,9	15,7
	University does not encourage us to research	5,3	24,6	21	35,1	14
	To conduct quality research in the university you must have basic physical and virtual tools	0	0	5,3	45,6	49,1
	Scientific research is the first activity to be carried out at the university	0	0	21,1	47,3	31,6

SD: Strongly Disagree; D: Disagree; NA/ND: Neither Agree Nor Disagree; A: Agree; SA: Strongly Agree.

Regarding attitudes towards parameters in university research, it was evident that the highest percentage of inmates agreed or strongly agreed that the course of scientific writing should focus on teaching the development of an article (84.2%) and participation in a research group (80.7%). Regarding the attitudes towards the possibility of conducting research within the university, the majority strongly disagreed and disagreed in opting for another type of graduation

other than the thesis (50.9%), however, the majority strongly agreed and agreed that the teacher should be a role model in terms of research (87.7%). Regarding attitudes towards reviewing bibliographic material, the majority agreed or strongly agreed that the student who produces scientific publications has an advantage in the professional work and that a good professional is one who has developed scientific research during university.

Table 4. Attitudes in the dimensions of parameters in research within the university, possibility of undertaking research within the university and review of research material.

Dimensions		MD	ED	NA/ND	DA	MDA
ARTÍCULO ORIGINAL	Attitudes towards research parameters within the university					
	The fact that an investigation is published in a scientific journal guarantees the rigor of the research methodological process	12,1	43,8	28,1	7	0
	The course writing should focus on teaching how to prepare a scientific article	0	0	15,8	49,1	35,1
	Participate in research groups formed by university students	0	0	19,3	43,9	36,8
	The desire to investigate disappeared as the cycles progressed	7	28,1	33,3	22,8	8,8
	Attitudes towards research within the university					
	Choosing another type of graduation instead of doing a thesis	22,8	28,1	31,6	12,2	5,3
	The university teacher should be the role model for research within the university	0	0	12,3	45,6	42,1
	Not knowing English is a limitation to doing good research	0	15,8	15,8	47,3	21,1
	An intelligent person has more advantage in conducting research	5,3	0	31,5	38,6	24,6
Courses take up a lot of time and prevent research	15,8	22,8	42,1	17,5	1,8	
Attitudes towards reviewing research material						
The student who publishes scientific journals has an advantage in the good exercise of the career	0	8,8	22,8	40,4	28,1	
The summary of scientific articles shows the reliability of the research	12,3	31,6	31,6	19,3	5,2	
A good professional is one who has researched at university	1,8	15,8	33,3	31,6	17,5	

SD: Strongly Disagree; D: Disagree; NA/ND: Neither Agree Nor Disagree; A: Agree; SA: Strongly Agree.

DISCUSSION

This research shows that the majority of obstetrics interns have regular attitudes towards research, this is similar to what was found in a study conducted in Lima, which reports that 81.7% of obstetrics students showed attitudes of indifference¹⁰, such results highlight the need to reinforce formative research from the first years of study and in a transversal way in all professional subjects, through workshops or curricular and extracurricular educational programmes aimed at improving research¹¹; In this context, some authors demonstrated that interest in research, as well as research skills, improve after a vacation program, concluding that the program, as well as other strategies, can have a positive impact on the profile of students and graduates¹². In a study of nursing interns at UNMSM13, 47% were in favour of research.

In the analysis of the dimensions of the variable of study, aspects are highlighted as a positive trend to consider that the scientific production of teachers and students published in journals of impact contributes to the improvement of the clinical practice of health professionals, in this sense, promoting research in university students is outlined as a critical axis for development, This is reinforced by the findings of a study conducted in Honduras that showed that 9 out of 10 medical students reported that scientific research contributes significantly to a country's scientific production¹⁴.

In the analysis of attitudes towards the university's actions to encourage research, a significant number of obstetrics interns felt that the university did not encourage research; However, UNMSM has an undergraduate thesis promotion program, in which it finances, after a competition, the research of students from the 5 professional schools that make up the school of medicine. The inmates also felt that some teachers could take advantage of the study, a situation that should be agreed upon from the advisor's thesis, since the advisors can be considered co-authors when the results of the research are intended to be disseminated in research articles. Universities should have research policies that include multiple strategies and resources to encourage and develop formative research and scientific research. In many universities, tutoring or research advice is one of the most relevant, given that it has been demonstrated that its role in teaching research methodology allows significant learning of this process¹⁵. A study of dental students at a university in Lima shows a reality that reinforces this idea, as inadequate counseling was reported as the main limitation to conducting research¹⁶.

Regarding the attitude towards participation in research and the possibility of undertaking it within the university, there is a positive inclination to be prepared to undertake research, as well as the desire and willingness to graduate in the form of a thesis rather than an examination. In this context, the information contrasts with a study where a low proportion of medical students showed an adequate attitude towards research; However, they were not participating in the implementation of any projects¹⁷; Likewise, in another study of nursing students, it was reported that 80.6% had not participated in any research project so far as their professional training¹⁸. With these data it is clear that the willingness to carry out research must be realized during and at the end of the university stage, for which it is essential to improve university management, and consequently, significantly enhance the research capabilities of students, through a continuous and integrative education¹⁹.

In the dimension on the review of research material, it is evident that approximately 3 out of 10 inmates agreed that the summary of a research article does not allow its reliability to be determined; In addition, most agreed that if the student publishes he has advantages in the exercise of his career. While this information is favorable, it is necessary that universities, through educational managers and trainers, encourage ongoing training in the use of technological tools such as bibliographic managers and databases, systematic search for sources of bibliographic information, as well as critical analysis of these for correct interpretation, in order to promote the production of new knowledge with adequate theoretical support, methodological and statistical.

Among the limitations of the study is that the obstetrics interns selected were only from one hospital; However, it is possible that these conditions are similar in patients admitted to other hospitals, so the results of this study may be applicable; In spite of this, multicentric research with a representative sample was necessary, another limitation was the limited documentation of studies carried out with students of the professional career of obstetrics.

CONCLUSION

In conclusion, more than half of the obstetrics interns at the Sergio E. Bernales Hospital had a regular attitude towards research. The results show the need to continue strengthening and promoting research as a transversal axis in the training of obstetrics students.

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