

BRIEF REPORT

INTERNS' PERCEPTIONS ABOUT THE MEDICAL INTERNSHIP SUSPENSION DURING THE COVID-19 QUARANTINE

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ABSTRACT

The objective of the study was to describe the medical interns' (MI) perceptions about the internship suspension during the COVID-19 quarantine in Peru. A cross-sectional descriptive study was conducted by means of a virtual survey regarding the perception of the internship suspension, return conditions and academic activities during quarantine. A total of 353 MIs participated in the study; 54.9% agreed or totally agreed with returning to their hospital sites if biosecurity measures were guaranteed, more than 90% felt uncertain about the restart and end dates, and 85.6% participated in academic virtual classes. It is concluded that the intention to return to the hospital increases when biosecurity measures are guaranteed. Hospitals should guarantee these measures and ensure health coverage for the MIs, if their return to hospitals is intended.

Keywords: Students, Medical; Pandemics; Internship and Residency; Protective, Device; Personal Protective Equipment; Education, Medical; Quarantine; COVID-19 (source: MeSH NLM).

INTRODUCTION

The medical internship consists of pre-professional practices during the last year of medical school ⁽¹⁾. After this year, medical interns (MIs) take the National Medical Exam (ENAM). Completing the the internship and passing ENAM are requirements to become a member of the Peruvian Medical Association and practice medicine in Peru ⁽²⁾.

In March 2020, the Peruvian government took measures to control the spread of COVID-19, including the suspension of educational activities ⁽³⁾. Thus, universities and hospitals suspended all undergraduate academic activities ⁽⁴⁾. As of May 2020, the Peruvian authorities had not set the conditions, nor the date of a possible resumption of the internship. This study aimed to describe the MIs' perceptions on the suspension of medical internship during the COVID-19 quarantine in Peru.

THE STUDY

Design and participants

A cross-sectional descriptive study conducted on medical interns in Peru. It included an estimated population of 3500 MIs from 45 medical schools created before 2014, 55.4% of whom were women ⁽⁴⁻⁶⁾. MIs who consented to participate in the study were selected. A pilot study

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was conducted with 14 MIs, who were asked whether they found the survey's questions and answers difficult to understand. Data collection took place April 15-20, 2020, during the fifth week of quarantine. Those who participated in the pilot study or who stated that they had previously answered the survey were excluded.

Survey

A 24-question ad hoc survey was designed (Appendix 1) to be completed in approximately 15 minutes. It included sociodemographic data: age, university of origin, place of internship, health insurance, city of internship, people living together and their health condition, marital status, and children; questions about the agreement regarding the suspension of the internship during quarantine and their opinion on recovering one month of internship in January 2021; their reasons to be for or against the internship suspension and the motives and conditions for resuming the internship. In addition, we investigated the degree of uncertainty regarding education, the dates of return and the end of internship, and the date for the ENAM. All responses were presented on the five-option Likert scale. Finally, MIs were asked about their academic and extracurricular activities during the quarantine.

Procedures

The interns were contacted through their delegates (participants in the Peruvian Association of Human Medicine Interns)⁽⁷⁾ and were asked to disseminate the survey on the social networks (WhatsApp and Facebook) of the MIs' respective universities; to do so, they were given instructions and a standardized message. The snowball method was used by asking each participant to replicate the invitation sent among their MI contacts. A sample of 347 interns was calculated with OpenEpi version 3, considering an expected frequency of 50% of intention to return to the internship, with a statistical power of 80% and a 95% confidence interval. The survey was self-administered using Google Forms platform (www.docs.google.com/forms).

Statistical analysis

The analysis was performed using STATA 14.0 (Stata Corp, TX, USA). Sample characteristics were described using proportions for categorical variables, and medians and interquartile ranges (IQR) for numerical variables, after the normality assessment. Bar charts were used to describe responses according to the Likert scale.

KEY MESSAGES

Motivation for the study: As a result of the COVID-19 pandemic, the medical internship was suspended for a long time, affecting the training of medical interns in Peru.

Main findings: The intention to return to medical internship increases if biosecurity measures are ensured and quarantine ends. Most interns invest their time in preparing to take the National Medical Examination.

Implications: This is the first report on medical interns' perceptions on the suspension of internship during the COVID-19 pandemic in Peru. In the event of a return to medical internship, biosafety and academic training should be ensured.

Ethics

The project was approved by the Research Ethics Committee for COVID-19 of the Instituto de Evaluación de Tecnologías Sanitarias e Investigación of the Seguro Social del Perú (Es-Salud), under the category of exempt review. The study protocol was registered in the PRISA repository of the Instituto Nacional de Salud del Perú (code: EI00000824).

FINDINGS

A total of 381 participants answered the survey, 28 were excluded (9 did not sign informed consent, 14 had previously participated, and 5 were not MIs). Finally, data from 353 MIs (94.0% of the total) from 41 Peruvian universities were analyzed (Appendix 2). The median age was 25 years (IQR: 23-26), 230 (65.2%) were students from private universities; 257 (72.8%) had health or accident insurance, 196 (55.5%) were receiving remuneration, and 232 (65.7%) declared to live with people at high risk of infection by COVID-19 (Table 1).

The majority (74.8%) of the MIs agreed with the internship suspension; 81.1% agreed or strongly agreed with the suspension because hospitals did not guarantee biosecurity measures; 76.2%, because it was a risk for family members or people close to them; 62.0%, because they were still students; 38.5%, because they did not feel qualified to face a pandemic; and 37.7%, because they did not receive a salary. On the other hand, 53.1% agreed or strongly agreed against the suspension because it was a good learning opportunity; 48.0%, because the MI provides essential work; and 51.4%, because

the health system would collapse without the MIs. At the time of the survey, 70.0% agreed to continue in quarantine.

Of the participants, 91.5% reported feeling very or moderately uncertain about the restart of the internship, and 85.1%, very much or moderately uncertain about its completion. On the other hand, 90.3% felt moderate or very uncertain about the date of the ENAM (Figure 1). The

Table 1. Characteristics of the sample studied (n = 353).

Characteristics	n (%)
Age (years) ^a	25 (23-26)
University type	
National	123 (34.8)
Private	230 (65.2)
Internship type	
MINSA	270 (76.5)
EsSalud	44 (12.5)
Healthcare and Armed Forces	25 (7.1)
Private	14 (4.0)
Remunerated internship	
No	157 (44.5)
Yes	196 (55.5)
Internship in the university campus	
No	101 (28.6)
Yes	252 (71.4)
Health insurance type ^b	
SIS	134 (38.0)
EsSalud	44 (12.5)
Private insurance	43 (12.2)
University insurance	37 (10.5)
Insurance by internship location	30 (8.5)
Healthcare and Armed Forces	5 (1.4)
None	96 (27.2)
Persons with MI during internship	
Family core	215 (60.9)
Lives alone	78 (22.1)
Other family members	30 (8.5)
Friends	30 (8.5)
Lives with people at risk for COVID-19	
No	121 (34.3)
Yes	232 (65.7)
Children	
No	327 (92.6)
Yes, and they are financially dependent on the MI	17 (4.8)
Yes, and they are not financially dependent on the MI	9 (2.6)

MI: medical intern, SIS: Seguro Integral de Salud, MINSA: Ministerio de Salud, EsSalud: Seguro Social de Salud.

^a Median and interquartile range, ^b possibility to check more than one option.

majority (85.6%) participated in virtual classes to prepare for ENAM (Figure 2).

Regarding biosecurity measures and equipment not being guaranteed, only 11.9% agreed or totally agreed to return to hospitals during quarantine. Under these conditions, 29.6% agreed or totally agreed to return in the event of a collapse of the health system. If biosecurity measures and equipment were guaranteed, 54.9% agreed or fully agreed to return to their hospital sites during quarantine; and 72.9% if the return was after quarantine. However, 24.9% agreed or totally agreed not to return to the hospital despite the guarantee of biosecurity measures (Figure 3). When asked about their position on recovering one month of internship in January 2021, 41.9 % agreed or strongly agreed, and 48.2 % disagreed or strongly disagreed.

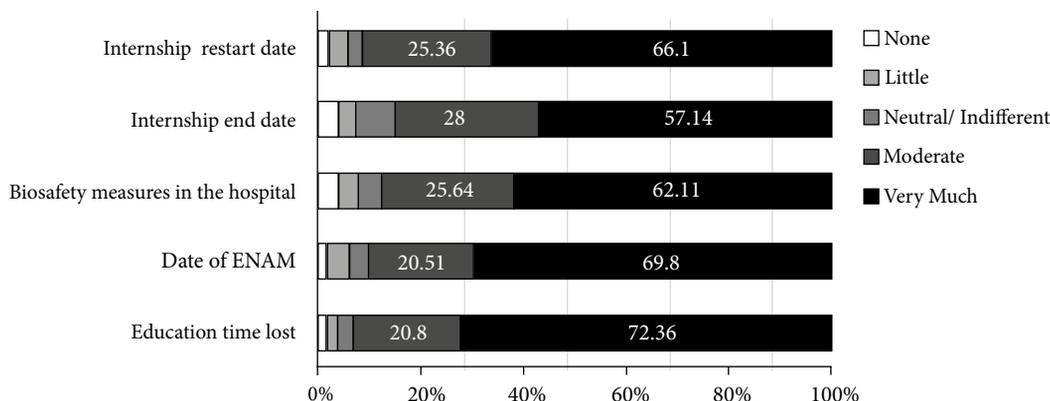
DISCUSSION

Less than half of the MIs agree to return to the internship if biosecurity measures are not guaranteed. This perception increases when biosecurity measures are guaranteed and the quarantine ends. On the other hand, there is great uncertainty about the restart and end dates of the internship. In turn, most respondents invest their time in preparing for the ENAM.

During the internship, MIs are exposed to develop mental disorders, suffer aggressions, and work accidents ^(1,8,9), in addition, the scarcity of protection equipment and the lack of adequate biosecurity training are highlighted ⁽⁸⁾. The 2020 MIs carried out their activities for more than two months and probably observed limitations in the health systems. Perhaps because of this, almost all of them feel great uncertainty about the availability of biosafety equipment and do not agree to return to their activities if their protection is not guaranteed.

Previously, MIs groups suspended their activities for some weeks demanding better working conditions ⁽¹⁰⁾. During the 2009 AH1N1 pandemic, MIs continued their activities normally ⁽¹¹⁾. However, the COVID-19 pandemic resulted in the interruption of several months of internship, with the possibility of suspending the entire academic year. In the face of this, MIs have felt uncertain about their education. On the other hand, prolonging the internship would postpone the 2020 ENAM and begin the internship in 2021. However, half of the MIs would not support the extension of the internship.

Other countries are facing their own reality during the pandemic. Mexico also suspended the internship due to lack of bios-



ENAM: Examen Nacional de Medicina

Figura 1. Uncertainty perceived by medical interns participating in the study

afety equipment ⁽¹²⁾. However, other countries involved MIs or seniors in the fight against the pandemic ⁽¹³⁾. Thus, degree processes were earlier in some universities in the United States ⁽¹⁴⁾, Colombia ⁽¹⁵⁾, and Ireland ⁽¹⁶⁾, prioritizing the number of available personnel over formal education of MIs. It is important to consider that in these countries MIs start to work midyear and at the time of the pandemic they were close to completing their internship.

During quarantine, MIs spend their time mainly studying through virtual classes for the ENAM. This is probably due to the recent obligation to pass the ENAM to become a member of the Peruvian Medical Association ⁽²⁾, and because many students perceive that the knowledge provided by their universities is not sufficient to take the ENAM ⁽¹⁷⁾. On the other hand, more than half of the respondents used virtual classes

or conferences for their education, not necessarily related to ENAM but probably in the context of the pandemic ⁽¹⁸⁾. Despite this, trainings at their universities or hospital sites are not frequent. This was a missed opportunity, as virtual clinical discussions could have been held and MIs involved in virtual orientation to the population and identification of risk groups ⁽¹⁹⁾.

The limitations were the following: the sample was not representative of the MI population in Peru, since the selection of participants was not randomized. The sex variable was not included due to an error in the design of the survey. A non-validated instrument was used, with the possibility of a particular interpretation by each participant; however, with the realization of the pilot, the intention was to diminish this possibility. These

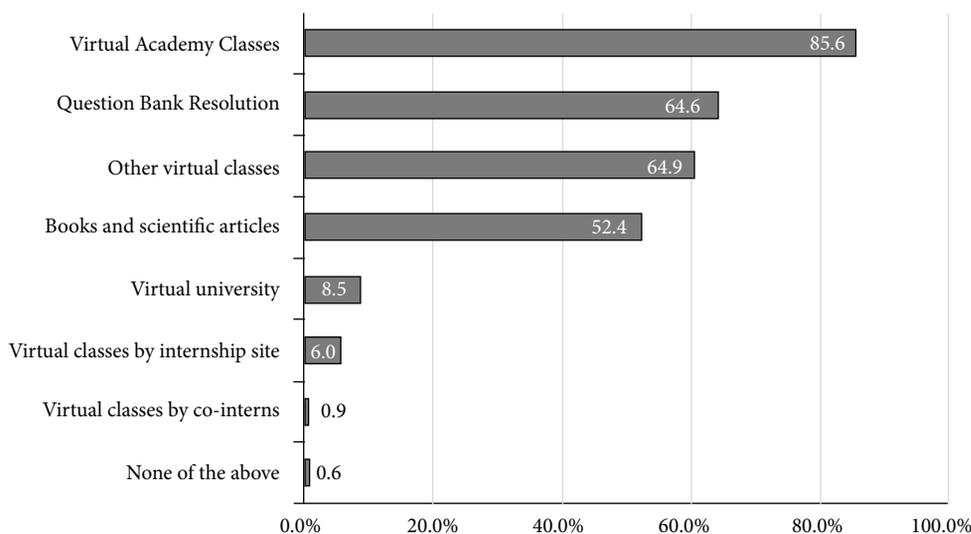


Figure 2. Academic activities carried out by medical interns participating in the study during quarantine by COVID-19

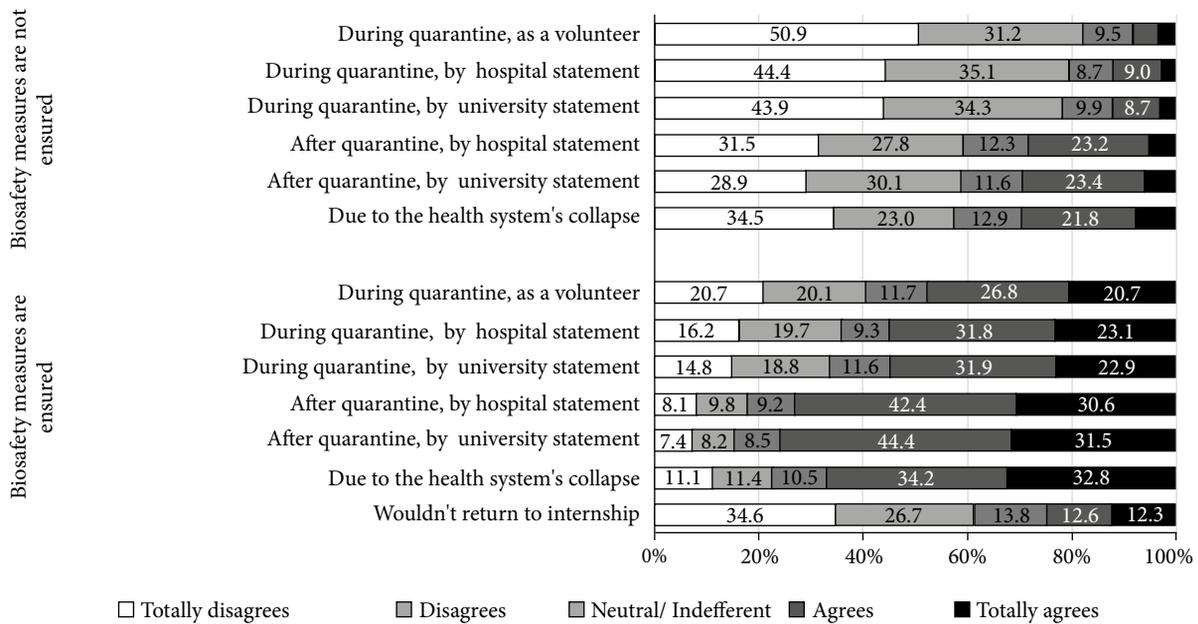


Figure 3. Perspectives on the return to medical internship in the studied population

conditions could underestimate the results of the study. Despite these limitations, this is the first report of MIs' perceptions on the pandemic in Peru that evidences an intention to return to medical internship, but under appropriate conditions. In addition, it provides insight into the uncertainty that MIs are currently experiencing regarding their academic future.

In conclusion, in a sample of MIs from Peru, the intention to return to boarding school increases if biosecurity measures are guaranteed and the quarantine is terminated. On the other hand, there is great uncertainty about the dates of return and termination of the internship. In turn, most interns invest their time in preparing for the ENAM. We recommend that universities encourage virtual training by

focusing on the resolution of real clinical cases. In addition, hospital centers, in coordination with universities, should guarantee the safety, well-being and health coverage of MIs if they intend to return to their hospital sites.

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Conflicts of Interest: LAF, YPF, KGM, RNG claim to be current medical interns and not to have responded the survey for this study.

Supplementary material: Available in the electronic version of the *RPMESSP*.

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