ORIGINAL ARTICLE

Characterization of academic performance in residents of the first period of General Comprehensive Medicine Barinas 2019

Caracterización del rendimiento académico en residentes del primer periodo de Medicina General Integral Barinas 2019

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ABSTRACT

Introduction: postgraduate education should serve for the formation of professionals as agents of social change, in the exercise of responsible citizenship, a commitment to the community and acting with values, guided by academic scientific knowledge and professional practice from and in the university.

Objective: to characterize the factors that influenced the academic performance of Venezuelan residents of the first period of Comprehensive General Medicine in the State of Barinas, Venezuela in the academic year 2019.

Methods: a retrospective descriptive study was conducted, the universe was constituted by 73 residents presented to the first modular exam, 42 of them were selected by simple random sampling. Socio-demographic variables, psychological factors and attitudes towards study, family factors and teachers of the Comprehensive Community Health Area were taken into account.

Results: young adult female residents between 23 and 32 years of age predominated; in the psychological factors and attitudes towards the study, stress was evidenced followed by optimism towards the study, within the associated family factors, families with more than 5 members were highlighted, and as for the factors related to the teaching process, overload of care predominated.



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Conclusions: stress, care overload, unfavorable conditions for the development of teaching encounters and families with more than 5 members influenced the academic performance of the Venezuelan residents present in the study.

Keywords: Postgraduate; Academic Performance; Stress, Psychological.

RESUMEN

Introducción: la educación en postgrado debe servir para la formación de profesionales como agentes de cambio social, en el ejercicio de una ciudadanía, responsable, un compromiso con la comunidad y un actuar con valores, guiados desde el conocimiento científico académico y la práctica profesional desde y en la universidad

Objetivo: caracterizar los factores que influyeron en el rendimiento académico de los residentes venezolanos del primer periodo de Medicina General Integral en el Estado Barinas, Venezuela en el curso académico 2019.

Métodos: se realizó un estudio descriptivo retrospectivo, el universo estuvo constituido por 73 residentes presentados al primer examen modular, se seleccionaron 42 de ellos por un muestreo aleatorio simple. Se tuvieron en cuenta variables socio demográficas, factores psicológicos y actitudes ante el estudio, factores familiares y docentes del Área de Salud Integral Comunitaria. **Resultados:** predominaron residentes adultos jóvenes del sexo femenino en las edades de 23 a 32 años; en los factores psicológicos y las actitudes ante el estudio se evidenció el estrés seguido del optimismo ante el estudio, dentro de los factores familiares asociados se destacó las familias integradas por más de cinco miembros y en cuanto a los factores relacionados al proceso docente, predominó la sobrecarga asistencial.

Conclusiones: el estrés, la sobrecarga asistencial, las condiciones no favorables para el desarrollo de encuentros docentes y las familias con más de cinco miembros, influyeron en el rendimiento académico de los residentes venezolanos presentes en el estudio.

Palabras clave: Postgrado; Rendimiento Académico; Factores Psicológicos.

INTRODUCTION

University life is a fundamental change in the development of the human being, since it means deciding on his professional training which may determine his socioeconomic conditions in the future. Therefore, it can influence their lifestyle and cause problems that may be reflected in their state of health and, in turn, have repercussions on their academic performance.⁽¹⁾

Academic performance is a measure of the student's abilities, which expresses what the student has learned throughout the educational process. It is also a measure of the student's ability to respond to educational stimuli. It is an indicator of great importance for all those professionals dedicated to teaching, as well as for the control of the quality of the educational teaching process at any educational level, especially in higher education, and in the case of the Cuban medical university, it is very necessary due to the human role that its graduates will play professionally. (2)



Academic performance, in addition to the requirements of the standards set by the study programs, is the result of a series of causal factors that derive from broader and more complex structures, linked to family, socioeconomic, cultural and political conditions. The study of academic performance allows a permanent evaluation and monitoring of students in order to identify the factors that influence it, for the adoption of decisions to improve the quality of educational services.⁽³⁾

On the other hand, the academic performance of students has been conceptualized as the fulfillment of the goals, achievement of the competencies or objectives established in the subject or course of a given program that a student is receiving. From an operational point of view, this indicator has been limited to the expression of a quantitative or qualitative grade.⁽⁴⁾

Training is also a work on oneself, freely imagined, desired and sought, carried out through means that are offered or sought by the subject him/herself. In this logic, there is an evident personal component in training, which is joined to a discourse referring to purposes, goals and values, we understand that this term is inserted as an element of professional development and growth of teachers in their pedagogical practice and in their functions as teachers.⁽⁵⁾

Before the triumph of the Cuban Revolution, graduate education was limited to certain courses of the so-called "Summer School", particularly at the University of Havana. Other postgraduate activities, generally of greater seriousness and scope, were developed in some professional colleges and some prestigious and qualified professors taught them to select and reduced groups, in their chairs, but of course in none of their manifestations did these activities characterize a mechanism capable of satisfying the objectives of postgraduate education.⁽⁶⁾

In Cuban higher education, for some years now, "D" curricula have been implemented in university careers. Medical science careers have been inserted little by little and after an analysis of their contents, objectives, topics, methodological strategies, forms of evaluation and organizational forms of teaching in relation to the current social task.⁽⁷⁾

As a result of the Barrio Adentro Mission created in Venezuela, the need arose to train health professionals to strengthen it. In order to give continuity to the teaching process in the mission, a postgraduate course was started for the continuity of studies for Venezuelan residents of General Comprehensive Medicine (MGI), which did not have the optimal conditions necessary for an adequate teaching-learning process, where consultations were carried out in adapted premises, with deficiencies in them. All this forced the training process to be limited in some areas such as: acquisition of certain knowledge skills and competencies that the resident had to overcome.

This research aims to characterize the factors that influenced the academic performance of the residents of the first period of General Comprehensive Medicine in the State of Barinas during the academic year 2019.

METHODS

An observational, retrospective, cross-sectional, descriptive study was conducted to characterize the factors that influenced the academic performance of the residents of the first period of General Comprehensive Medicine during the first modular examination in Barinas State during the 2019 academic year. The universe was constituted by 73 residents who took the first modular exam of General Comprehensive Medicine. Forty-two of them were sampled by simple random sampling.



Theoretical methods: they made possible to explain the facts and to deepen in the essential relations and fundamental qualities of the processes not directly observable, assimilation of facts, phenomena and processes and in the construction of model and hypothesis of investigation, within them the analysis and synthesis, historical logical, induction deduction, hypothetical deductive.

Empirical level methods: observation and interview were used, designed for the evaluation of the objectives outlined in the research with closed questions.

Statistical methods: absolute numbers and percentages, mean, median and mode were taken into account for the analysis.

Ethical considerations: the data obtained were taken into account to identify the characteristics of the teaching process in the Areas of Integral Community Health given by the perception of the residents, as well as the family and psychological factors that influenced the academic performance found during the first modular exam of the postgraduate course of General Integral Medicine of the University of Health Sciences Hugo Chávez Frías in Venezuela, academic year 2019, and to be able to outline strategies to improve the educational teaching process that is carried out, For this purpose, informed consent (Appendix 1) was requested from the residents, this information being anonymous and was only used for research purposes, complying with the principles of beneficence, non-maleficence, justice and autonomy.

RESULTS

Table 1. Distribution according to age and sex of the Venezuelan residents of the first period of Medicina General Integral Barinas 2019.

Age groups	Male		Female		Total	
	No.	%	No.	%	No.	%
23 to 32	8	72,72	24	77,41	32	76,19
33 to 42	3	27,27	6	19,35	9	21,42
43 and over	0	0	1	3,22	1	2,38
Total	11	26,19	31	73,80	42	100

Table 1 shows the distribution of residents according to age and sex, where 77,41 % were female and 76,19 % were between 23 and 32 years of age.



Table 2. Psychological factors and attitudes associated with the academic performance of Venezuelan residents of the postgraduate course in General Comprehensive Medicine, Barinas 2019.

Psychological Factors and Attitudes towards the study of residents Residents	Residents	
study of residents Residents	No.	%
Academic Stress	40	95,23
Optimism	39	92,85
Self-control	26	61,90
Social Interaction	23	54,76
Communication	30	71,42
Cooperation	29	69,04
Participation in educational events	19	45,23
Knowledge of curricular units	28	66,66

Table 2 shows the distribution of residents according to academic performance, psychological factors and attitudes towards study, with 95,23 % reporting academic stress and 92,85 % optimism.

Table 3. Family factors associated with the academic performance of Venezuelan residents of the postgraduate course in General Comprehensive Medicine, Barinas 2019.

Associated family factors	Residents	
	No.	%
Mother's educational level	18	42,85
Father's level of education	20	47,61
More than 5 members in the family nucleus	25	59,52
Monetary level for satisfaction of needs	5	11,90
Family cooperation	11	26,19

Table 3 shows the family factors associated with academic performance, where 59,52 % of the residents had a family with more than 5 members in the family nucleus, followed by the educational level of their father with 47,61 %.

Table 4. Relationship between the factors of the teaching process and academic performance, according to the opinion of Venezuelan residents of the postgraduate course in General Comprehensive Medicine, Barinas 2019.

Factors related to the teaching process, according to the opinion	Residents		
of the residents	Nº.	%	
Overload of assistance	38	90,47	
Unfavorable conditions for the development of teaching meetings	32	76,19	
Access to medical literature.	25	59,52	
Advice from the teaching tutor	10	23,80	



In Table 4. In the factors related to the teaching process in the Integral Community Health Area, according to the opinion of the residents, the predominant factors were the overload of care with 90,47 % and the unfavorable conditions for the development of teaching meetings represented by 76,19 %.

DISCUSSION

When analyzing the age and sex of the Barinas residents, a predominance of 77,41 % of the female sex was observed, coinciding with a study by authors Santander Montes AJ, $^{(8)}$ Rubén Quesada M $^{(9)}$ being its greater representativeness of 90,2 %. Other authors Caballero Muñoz EM, Ben-Azul Avendaño M, $^{(10)}$ reported that 80,88 % were women and 19,12 % were men, coinciding with the prevalence in the female sex in our study. The average age was 19,6 years, with a minimum of 18 years and a maximum of 32 years, being similar to the study where the prevalence was between 23 and 32 years, representing 76,19%.

Stress is the physiological, psychological and behavioral response of a subject who seeks to adapt and readjust to both internal and external pressures. Conchado Martínez JH, Álvarez Ochoa RI, Cordero Cordero G, comment in their article. Academic stress and teaching results in medical students, which is one of the multiple factors generating stress is academic activity, from primary school to university, many of these changes are not received in appropriate ways or simply the adaptation to them is very complex and do not have the necessary or sufficient tools for proper maturity, generating difficulties in students, which are reflected in their academic performance. $^{(12,13)}$ with results similar to the study conducted.

Stress is the organism's response to any event in which environmental demands, internal demands or both, exhaust or exceed the adaptation resources of the social system or the individual's organic system, giving great importance to the subject's evaluation of the stimulus, which will influence the intensity of the response, developing negative emotional states interfering in the organic and emotional well-being of people.

In an article published in the journal Educación médica superior entitled Factores sociodemográficos asociados al rendimiento académico en estudiantes de la licenciatura en Médico Cirujano-Partero by the authors Rodríguez López A, Martínez Montaño ML,⁽¹⁴⁾ they state that the number of family members has been found as a stress factor, coinciding with the results of the study.

According to Mero Patricia L, Barreto Pico A, Mendoza Rodríguez ER,⁽¹⁵⁾ it has been shown that the low self-esteem of adolescents associated with an unfavorable family environment leads to low academic performance, in a range of 2-30 %. Likewise, they reaffirm what has been pointed out by other authors that "the family is the primary natural social group that has the objectives of being the protector and matrix of the psychosocial development of its members through the parents".⁽¹⁴⁾ Revealing results similar to the study conducted.

There are characteristics in the family dynamics that drive students to maintain their level of academic performance or not, for example, dysfunctionality, and it has also been suggested that the relationship established between family functioning and the academic results obtained by the student is generally direct. Furthermore, the student's perception of the influence of the family on his or her social development situation is decisive.⁽¹⁴⁾



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The family plays a fundamental role in the education and motivation of children at an early age towards school and study activities, developing an adequate attitude, habits and skills that contribute to the good academic performance of children and their development in later stages, favoring the study activity as one of the guiding activities of the stage, contributing to their cognitive development and to the perception of the teaching process in the different stages through which the student goes through.

At present, innumerable investigations have been carried out with groups of teachers from different public and private institutions. These investigations have been motivated, after observing daily a certain symptomatology in some of the professionals in the same work environment, who, working under the same conditions, react differently to stressful situations, they pointed out that "the education sector seems to be especially vulnerable to this problem, which is why the discomfort of teachers threatens not only their possibilities of self-realization but also their physical and psychological balance, with important consequences on the quality of teaching". Thus, the interest in the study of burnout syndrome is a result of the fact that the detrimental effects on workers in the educational field, as well as on the institutions in which they participate, generate situations in the organization that can affect their performance.⁽¹⁵⁾

Professional burnout is a topic that has attracted the attention of academia and several investigations have been carried out with the aim of delving into its symptoms, causes and phases that characterize changes in attitudes or behaviors; and that imply, an intervention at a personal, group or institutional level.⁽¹⁶⁾

The author considers that there are other factors such as time for preparation, bibliography and those related to the personal characteristics of the tutor, which influenced the results analyzed.

CONCLUSIONS

The residents presented associated factors which affected the low academic performance, such as overload of care, psychological factors and attitudes such as stress, in addition to families with more than five members and unfavorable conditions for the development of teaching meetings.

Conflict of interest: The authors declare that there is no conflict of interest.

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