Rev. Fac. Med. Hum. October 2019;19(4):60-67.
DOI 10.25176/RFMH.v19i4.2220
ORIGINAL ARTICLE

ISSN Versión Online: 2308-0531
Faculty of Human Medicine URP

BURNOUT SYNDROME IN PHYSICIANS OF A HOSPITAL IN THE PERUVIAN AMAZON

SÍNDROME DE BURNOUT EN MÉDICOS DE UN HOSPITAL DE LA AMAZONÍA PERUANA

Jennifer Vilchez-Cornejo[1,2,a], Luccio Romaní-Ojeda[3,b], Katerine Ladera-Porta[2,b], Mario Marchand-Gonzales[1,a]

ORIGINAL ARTICLE

ABSTRACT

Objective: To determine Burnout Syndrome (SBO) in physicians treated in the outpatients clinic of a hospital in the Peruvian Amazon during 2017. **Methods:** Analytical cross-sectional study; which included 30 medical surgeons who attended in the external offices of the specialties of Internal Medicine, General Gynecology and Pediatric Surgery of the Regional Hospital of Pucallpa, professional exhaustion was determined through the Maslach Burnout Inventory (MBI) and the perception of the patient-doctor relationship using the scale (PREMEPA). Generalized linear models were performed by prevalence ratios crude and adjusted estimated with a 95% confidence interval. **Results:** 76.7% of the doctors were male, eight out of ten suffered Burnout. 20% of the patients were satisfied and only 16.7% indicated they had a median physician-patient medical relationship. Statistically significant association was found among those suffering from Burnout and the outpatient offices were treated of surgery services (RPa: 1.46; 95% CI: 1.20–1.76), obstetric gynecology (RPa: 1.69; 95% CI: 1.41–2.03) or in those patients who were dissatisfied with the consultation provided (RPa: 1.59; 95% CI: 1.22-2.07), having medical residency was a protective factor to develop Burnout (RPa: 0.62; 95% CI: 0.62– 0.77). **Conclusion:** Patients claim to have adequate levels of physician-patient relationship despite the high rate of doctors suffering from Burnout, surgical specialties predispose doctors to develop Burnout. However, having performed medical residency predisposed the doctor to have less Burnout Syndrome.

Key words: Burnout; Physician-Patient Relations; Physicians. (source: MeSH NLM)

RESUMEN

Objetivo: Determinar el Síndrome de Burnout (SBO) en médicos cirujanos de los consultorios externos de un hospital de la Amazonía peruana. **Métodos:** Estudio transversal analítico; que incluyó a 30 médicos cirujanos que atendieron en los consultorios externos de las especialidades de Medicina, Cirugía, Gineco-Obstetricia y Pediatría del Hospital Regional de Pucallpa, determinando el agotamiento profesional mediante el Inventario de Burnout de Maslach (MBI) y la percepción de la relación médico paciente mediante la escala PREMEPA. Se emplearon modelos lineales generalizados para evaluar razones de prevalencia cruda y ajustada. **Resultados:** El 76,7% de los médicos fueron varones, ocho de cada diez padecieron SBO. El 20% de los pacientes estuvieron satisfechos con la consulta y sólo el 16,7% indicó tener una mediana relación médico paciente. Se encontró asociación estadísticamente significativa entre quienes padecían SBO y se atendieron en las consultas externas de los servicios de cirugía (RPa: 1.46; IC 95%: 1.20–1.76) , gineco obstetricia (RPa: 1.69; IC 95%: 1.41–2.03) o en aquellos pacientes que se encontraban insatisfechos con la consulta brindada (RPa: 1.59; IC 95%: 1.22-2.07), el haber realizado el residentado médico fue un factor protector a desarrollar SBO (RPa: 0.62; IC 95%: 0.62–0.77). **Conclusión:** Los pacientes manifiestan tener niveles adecuados de relación médico-paciente a pesar del elevado índice de SBO en médicos, las especialidades quirúrgicas predisponen a desarrollar Burnout..

Palabras clave: Agotamiento Profesional; Relaciones Médico-Paciente; Médicos. (fuente: DeCS BIREME)

[1] Ucayali Assistance Network, Essalud II Pucallpa Hospital, Ucayali-Peru.
[2] Faculty of Human Medicine, National University of Ucayali, Ucayali-Peru.
[3] Faculty of Human Medicine, University of San Martín de Porres, Chiclayo-Peru.
[a] Surgeon.
[b] Human medicine student.

Cite as: Jennifer Vilchez-Cornejo, Luccio Romaní-Ojeda, Katerine Ladera-Porta, Mario Marchand-Gonzales. Burnout syndrome in physicians of a hospital in the Peruvian Amazon. Rev. Fac. Med. Hum. Octubre 2019; 19(4):60-67. DOI 10.25176/RFMH.v19i4.2220

Journal home page: http://revistas.urp.edu.pe/index.php/RFMH

INTRODUCTION

Burnout syndrome (BOS), is regarded as a psychological and emotional stress state, experienced by health personnel who treat structurally vulnerable patients[1], also, it often appears in heterogeneous atmospheres, from urban community hospitals until global health settings[2,3]. Many researchers could describe it as a combination of emotional exhaustion, depersonalization and low personal performance due to chronic stress of medical practice. Nowadays, it is considered as an answer to chronic occupational stress experienced by many professionals whose direct contact with people is a key part to the labor they carry out[5,6].

It has come to view as a mental health problem because of overexertion held all the time, which may increase risk of mental disease, even heart disease[7,8]. Not to mention the potential to negatively affect performance and quality service while professionals perform work functions[9].

It has been reported worldwide that 45% of physicians have had BOS or have it, including general and house physicians. In these latter the rate can reach 80% for being a staff who performs greater activity[10]. Stress in health professionals is significantly higher regarding other professions, ranging between 30 and 40% more[11], because they deal with human suffering, long working hours and, frequently, they are constantly subjected to an insufficient income.

In Peru, the 2014 largest study found a higher prevalence in physicians (3.7%) rather than in nurses (2.1%)[12]. For everything mentioned, it could be estimated that physicians are a vulnerable group to experience BOS, which may predispose them to provide a poor quality treatment towards patients and increase medical errors. Not to mention their exposure to health detriment[13].

This research work arises from the need to identify Burnout Syndrome associated factors in physicians at a hospital in the Peruvian Amazon, as well as their repercussion in physician-patient relationship.

METHODS

Analytical cross-sectional study carried out throughout the month of October 2017, addressed to physicians who worked in outpatients departments from medical, gynecology and obstetrics, and pediatrics services at Regional Hospital of Pucallpa.

It included those physicians or specialists who worked in outpatients departments in October 2017 and those who accepted being part of the study. Afterwards, patients were surveyed after their consultation ended and/or parents whose children were treated in pediatrics. It excluded those patients with some kind of mental retardation or condition that may affect their lucidity, those who were hemodynamically unstable or who failed on completing the survey. Moreover, it only included respondents who provided their informed consent properly.

The initial population of the study was made up of 40 physicians distributed in the previously mentioned services. However, there was a 25% rejection rate (10 physicians), thus they had to be removed, as well as their patients.

DATA COLLECTION TECHNIQUES AND INSTRUMENTS

This research work was carried out once approved by Ethics Board of Ucayali National University Faculty of Medicine Human. Authorization of the institution was requested and subsequently that of the Regional Hospital of Pucallpa administration, in order to carry out the study. Thereafter, physicians were invited to be part of the research, filling data collection instruments with those who accepted. Immediately after doing this, outpatients treated in a 2-weeks period were surveyed. Every respondent was informed about the aim of the study to invite him/her to be part of it.

A two-questionnaire survey gathered the whole information. The first questionnaire made a BOS diagnosis, employing Maslach Burnout Inventory (MBI) addressed to physicians. The second one measured perception of physician-patient relationship, employing PREMEPA scale addressed to outpatients.

Maslach Burnout Inventory (MBI) is a validated-to-Spanish scale[14], which has a factor analysis (questionnaire and its components) with a Cronbach's alpha higher than 0.7 15. It consist of 22 items which measure three main components: depersonalization (DP) corresponding to items 5, 10, 11, 15, 22; emotional exhaustion (EE) corresponding to items 1, 2, 3, 6, 8, 13, 14, 16, 20; and self-fulfillment (SF) corresponding to items 4, 7, 9, 12, 17, 18, 19, 21. Every item has 7 response options following a Likert scale, from 0 meaning "never" until 6 meaning "every day" [16]. Scores obtained measure disturbance rates, including the three previously mentioned components. Depersonalization, suggesting a low DP (0-5 marks),

moderate DP (6-9 marks) and severe DP (10-30 marks); emotional exhaustion, suggesting a low EE (0-18 marks), moderate EE (19-26 marks) and severe EE (27-54 marks); and self-fulfillment, suggesting a low SF (0-33 marks), moderate SF (34-39 marks) and severe SF (40-48 marks)[16]. Finally, those who met criteria were considered, such as, severe EE or DP, and/or a low SF[17]. Throughout our study, the cut-off point was the presence of two or more criteria.

PREMEPA scale, instrument whose internal consistency through Kuder-Richardson Formula was of 0.83, and a 91.3% reliability index18. It consists of 14 items: item 1 identifies if the patient sought help before; items 2-9 with options following Likert scale, whose values range from 0 to 3, measuring the professional characteristics to his/her patients; items 10-13 possess a dichotomous scale whose values range from 0 (negative answer) until 3 (positive answer). Total score measures three categories, consisting of: a proper physician-patient relationship (≥ 15 marks); a moderate proper physician-patient relationship (from 14 until 9 marks) and an improper physician-patient relationship (≤ 8 marks). Similarly, item 14 measured patient satisfaction with medical care, through a vigesimal scale, suggesting they were very satisfied (greater than 15 marks), not very satisfied (less than 10 marks) and moderately satisfied with a mid-range score[18].

Moreover, six dimensions were designated. These were responsible of measuring empathy dimensions employed by items 3 and 4 from PREMEPA questionnaire (value from 0 until 6 marks); courtesy dimension, item 2 (value from 0 until 3 marks); dimension of humanity, item 5 (value from 0 until 3 marks); dimension of confidence, item 6 (value from 0 until 3 marks); dimension of participation, items 7, 8, 10, 11 (value from 0 until 10 marks); and dimension of intention to return, item 12 (value from 0 until 3 marks)[19].

In addition, physician's general characteristics were measured, taking into account sex, specialty, weekly working hours, and years of experience. The latter section measured patient's general characteristics, considering sex, age, type of patient (new, continued), level of education, monthly household income, occupation and civil status.

After that the sample of physicians and outpatients was collected, it was determined who met criteria with BOS. Afterwards, it was obtained the score of physician-patient relationship and satisfaction levels, measured from patient's perception. Their average was calculated in order to analyze them. Later, data were analyzed using the statistical package STATA 15.0, where qualitative variables were presented in frequencies and percentages; and quantitative variables, in mean and standard deviation, if they showed a normal distribution. Poisson generalized linear models were employed for inferential statistics through crude (cPR) and adjusted prevalence ratios (aPR), according to main characteristics, considering a p-value of <0.05 as statistically significant.

RESULTS

The studied sample of physicians consisted of 30 physicians, of which 76.7% were male (23), median age was 44 years old, with interquartile ranges of 41-52. 83.3% was married, and only 13.4% was single. 53.3% of physicians were from the coast (Trujillo, Ica and Lima), 26.7% from sierra (Junín, Arequipa, Cusco and Huánuco) and only 20% from the Amazon (Ucayali).

Concerning their professional work, 33.3% (10) of physicians did not have an specialty; only 6.7% (2) of physicians did not have a private practice. Only 46.7% (14) of respondents worked less than 7 hours weekly. Median of years practicing their professions as physicians was 18 years, with interquartile ranges of 9-27.

Among medical specialists, 16.7% (5) were obstetricians; 10% (3), orthopedists; 6.7% (2), pediatricians, neurologists and general practitioners; other specialties were taking into account, such as cardiology, infectious disease, anesthesiology, general surgery, urology and ophthalmology.

Regarding BOS, emotional exhaustion subscale pointed out 6.7%, 86.6% and 6.7% showed a low, moderate and severe emotional exhaustion, in that order. Levels of depersonalization pointed out only 3.3% and 96.7% showed a moderate and severe degree, respectively. When it comes to self-fulfillment, 76.7% and 23.3% showed low and medium degrees. Thus, this research work considered physicians with BOS those who met two out of three components, determining only 20% (6) did not suffer from professional burnout (Table 1).

Table 1. Prevalence of professional burnout and its components' characteristics.

	N (%)
Emotional Exhaustion	
Low	2 (6,7%)
Moderate	26 (86,6%)
Severe	2 (6,7%)
Depersonalization	
Moderate	1 (3,3%)
Severe	29 (96,7%)
Self-fulfillment	
Bajo	23 (76,7%)
Medio	7 (23,3%)
Burnout Syndorme	
Without professional burnout	6 (20%)
With professional burnout	24 (80%)

Regarding outpatients, 69.1% (145) were female. Only 48.6% (102) were married and 35.2% (74) had a monthly income lower than 900 soles, while only 19.1% (40) earned an income greater than 1 500 soles. When it comes to level of education, 3.8% (8) did not had education, 5.2% (11) only had primary education and 48.6% (102) had higher education.

Regarding level of satisfaction of consultation, 20% (42) expressed they were very satisfied, only 1% (2) were not very satisfied. In addition, 83.3% (175) had a proper physician-patient relationship, and 16.7% (35) had a moderate proper physician-patient. Despite this, there was no evidence about a low or improper physician-patient relationship.

According to the average about dimensions from PREMEPA questionnaire, results closer to maximum score were obtained in terms of Empathy, Courtesy, Humanity, Confidence, Participation and Intention to Return. Every dimension of questionnaire showed a coefficient of variation (CV) lower than 50%, displaying a homogeneous distribution of data (Table 2).

Table 2. Dimensions of perception about physician-patient relationship from the patients' perspective at Regional Hospital of Pucallpa.

Perception	X	S.D.	C.V.	95% of confidence of the difference	
				Lower	Higher
Empathy	4.55	0.84	18.46	4.44	4.66
Courtesy	2.80	0.40	14.29	2.75	2.85
Humanity	2.80	0.40	14.29	2.75	2.85
Confidence	2.22	0.43	19.37	2.16	2.28
Participation	7.46	0.85	11.39	7.34	7.58
Return	2.90	0.54	18.62	2.83	2.97

X: Average
S.D.: Standard Deviation
C.V.: Coefficient of variation

Regarding crude analysis, there was no association found between BOS, age and sex; thus, it was not taken into account in our research. However, medical residence and service did have statistically significant relationship with BOS. Concerning adjusted analysis, it could be determined that doctors who carried out medical residence were 38% less likely to suffer from BOS (aPR: 0.62; CI 95%: 0.62 – 0.77), in comparison with those who worked without having carried out any residence. Working on surgery practices predispose physicians to be 1.46 (aPR: 1.46; CI 95%: 1.20 – 1.76) more likely to have professional burnout, as well as those who worked on gynecology service, being 69% more likely to suffer from burnout syndrome (aPR: 1.69; CI 95%: 1.41 – 2.03), in comparison with those who worked on medical service (Table 3).

Table 3. Crude and adjusted analysis about burnout syndrome and its associated factors.

	Crude analysis			Adjusted analysis		
	cPR*	CI 95 %	p	aPR**	CI 95%	p
Medical residence	0.70	0.62 – 0.78	<0.001	0.62	0.62 – 0.77	<0.001
Service						
Medicine	Ref.			Ref.		
Pediatrics	1.25	0.94 – 1.66	0.128	1.15	0.89 – 1.48	0.261
Surgery	1.48	1.19 – 1.82	<0.001	1.46	1.20 – 1.76	<0.001
Gynecology	1.66	1.37 – 2.01	<0.001	1.69	1.41 – 2.03	<0.001

***cPR:** Crude prevalence ratio
****aPR:** Adjusted prevalence ratio

Finally, it was found out physicians with BOS were 59% (aPR: 1.59; IC 95%: 1.22 - 2.07) more likely to perform an improper consultation and/or that the patient feels not very satisfied with the consultation (Table 4).

Table 4. Burnout syndrome and quality of hospital care at a hospital in the Peruvian Amazon.

	Crude analysis			Adjusted analysis		
	cPR*	IC 95 %	p	aPR**	IC 95%	p
Physician-patient relationship						
Moderate physician-patient relationship	Ref.			Ref.		
Proper physician-patient relationship	0.87	0.70 – 1.09	0.234	0.92	0.76 – 1.11	0.398
Satisfaction of consultation						
Very satisfied	Ref.			Ref.		
Moderately satisfied	1.10	0.91 – 1.33	0.329	1.14	0.96 – 1.35	0.125
Not very satisfied	1.35	1.13 – 1.62	0.001	1.59	1.22 – 2.07	<0.001

***cPR:** Crude prevalence ratio
****aPR:** Adjusted prevalence ratio

DISCUSSION

Nowadays, there are multiple research which define Burnout prevalence in different populations, such as medical undergraduate[20], in-terns[21], residents[22] and assistants[23]. In our study, 8 out of 10 physicians had BOS. There are lower registered frequencies which ranged from 5% until 45% in Tacna[24], Colombia[25], Mexico[26,27] and Argentina[28]. However, similar numbers to ours were found in Mexico[29].

All this research shows us a high rate of professional burnout at a very early stage, in which physicians found themselves submitted to many stressful situations, not only during their education, but also while performing in the workforce. There has been demonstrated that professional burnout is often increased by many adverse event in providing medical services, in both learning impairments and depressive disorders increase[21].

In the same way, provided care by surgery, and gynecology and obstetrics services, predisposed physicians to suffer from professional burnout. Similar to those found in Brazil[23] and Mexico[30], which suggest surgical fields in Peru also lead our physicians to suffer from high levels of emotional exhaustion, depersonalization and/or possibly, low levels of self-fulfillment. Thus, various interventions had been carried out in order to reduce working hours of physicians with BOS. However, only interventions had been effective so far, but it could not have been possible to reduce completely the incidence of BOS[31].

Having a medical residency or a specialty represented a 38% less likelihood to suffer from BOS, a hard-to-contrast reality due to contradictory results found which reaffirm that medical specialties are the ones who suffer most this syndrome[32-37]. In spite of this, a study carried out at a Peruvian hospital determined that only 27.8% of its specialist physicians had BOS[38]. This protective factor may be due to years of experience and/or to a big number of hours of hospital practice which give physicians more confidence and a higher level of self-fulfillment (one of BOS' components). Moreover, having higher education would explain the reason why they have more confidence in comparison to their outpatient colleagues, representing a protective factor to BOS development.

Our study found that physicians with BOS provide a not very satisfactory care from patient's perception. Few studies have been carried out about the relationship between medical practice and BOS. Some studies suggest that an increase in BOS levels causes a tense physician-patient relationship, which leads to a little

satisfaction regarding consultation. Nevertheless, there are other measures, such as improving level of knowledge or self-learning, self-assessment and BOS levels; providing psychological counselling in order to provide means of relief to physicians, reduction measures to control both production and worsening of professional burnout in physicians, as a crucial measure to improve patient's satisfaction regarding consultation[39,40].

Physician-patient relationship is the basis of medical clinical practice. In the last decades, changes such as technological development and a higher degree of specialization, have influenced within this relationship. Physicians' degree of satisfaction regarding their hospital practice have been also considered a main determinant towards this relationship. Most of the studies carried out have little focused in how physicians experience and face these changes in their profession[41]. Our research could identify patients' perception regarding physician-patient relationship and each of its components. However, we did not identified quality of physician-patient relationship from physicians' perception. It in consequently recommended to study as bi-directional this latter in further research.

This research presented certain limitations, such as rejection rate of physicians to participate and survey their patients after medical practice, besides not carrying out a case-control study or longitudinal case study to be able to determine its causality. Our research recommends to improve health care system, by a proper distribution of patients to physicians, to increase consultation time and to be able to improve both patient's perception and satisfaction in proportion, in order to provide physicians a psychological assistance and to further determine their professional burnout by proper advice services.

CONCLUSION

In conclusion, our research states that 8 out of 10 physicians developed BOS. Patients expressed to have a proper physician-patient relationship despite the high rate of BOS. Surgical specialties predispose physicians to develop BOS.

Authorship Contributions: The authors participated in the genesis of the idea, project design, data collection and interpretation, analysis of results and preparation of the manuscript of this research paper.

Financing: Self-financed.

Interest conflict: This research was part of the pre-graduate thesis of the medical surgeon Mario Milton Marchand Gonzales. However, the authors of the present investigation declare not to present any type of conflict of interest.

Received: July 22, 2019

Approved: September 11, 2019

Correspondence: *Jennifer Steffany Vilchez Cornejo*
Address: *Jr. Ramón Castilla 159 Mz E Lote 11*
Telephone: *0051 61 961 506 868*
E-mail: *j.vilchezcornejo@gmail.com*

BIBLIOGRAPHIC REFERENCES

1. Freudenberger HJ. Staff burn-out. J Soc Issues. 1974;30(1):159-165. Disponible en: http://doi:10.1111/j.1540-4560.1974.tb00706

2. Kim MH, Mazenga AC, Simon K, Yu X, Ahmed S, Nyasulu P, et al. Burnout and self-reported suboptimal patient care amongst health care workers providing HIV care in Malawi. PLoS One. 2018;13(2):e0192983. Disponible en: https://doi.org/10.1371/journal.pone.0192983 .

3. Saijo Y, Chiba S, Yoshioka E, Kawanishi Y, Nakagi Y, Ito, T et al. Job stress and burnout among urban and rural hospital physicians in Japan. Aust J Rural Health. 2013;21(4):225-231. Disponible en: https://doi.org/10.1111/ajr.12040 .

4. Maslach C, Jackson SE, Leiter MP. Maslach Burnout Inventory Manual. 4th ed Menlo Park, CA: Mind Garden Inc; 2016.

5. Carlin M. El síndrome de burnout: Evolución histórica desde el contexto laboral al ámbito deportivo. Anales de psicología, 2010; 26(1), 169. Disponible en:https://www.um.es/analesps/v26/v26_1/20-26_1.pdf

6. Dávila FA, Nevado N. Validación de Burnout screening inventory en personal de formación del área de la salud. Educación Médica, 2016; 17(4), 158-63. Disponible en: http://dx.doi.org/10.1016/j.edumed.2016.08.007

7. Stavroula Leka. La organización del trabajo y el estrés. OMS. 2014. Disponible en:https://www.who.int/occupational_health/publications/pwh3sp.pdf?ua=1

8. Rosende M, Kesque J, Romero MB, Rosende MC, Nelida-Severino M. Síndrome de Burnout: Padecimiento en instituciones públicas. 2009. Disponible en: http://psiqu.com/1-4129.

9. Arrogante Ó. Mediación de la resiliencia entre burnout y salud en el personal de Enfermería. Enfermería Clínica, 2014. 24(5): 283-9. Disponible en: https://doi.org/10.1016/j.enfcli.2014.06.003 .

10. Roldán, A. M. A., & Barriga, A. M. Q. Síndrome por quemarse en el trabajo y variables familiares y laborales de los médicos generales de Bogotá. Una estrategia de calidad laboral. Revista Colombiana de Psiquiatría, 44(4), 2015; 198-205. Disponible en: https://doi.org/10.1016/j.rcp.2015.05.017

11. Devi S. Doctors in distress. Lancet. 2011;377:454-5. Disponible en: https://doi.org/10.1016/S0140-6736(11)60145-1

12. Maticorena-Quevedo J, Beas R, Anduaga-Beramendi A, Mayta-Tristán P. Prevalencia del síndrome de burnout en médicos y enfermeras del Perú, Ensusalud 2014. Rev Peru Med Exp Salud Publica. 2016;33(2):241-7. Disponible en: http://dx.doi.org/10.17843/rpmesp.2016.332.2170

13. Kumar S. Burnout and Doctors: Prevalence, Prevention and Intervention. Healthcare 2016, 4(3), 37. Disponible en: https://doi.org/10.3390/healthcare4030037

14. Gil-Monte P. Validez factorial de la adaptación al español del Maslach

Burnout Inventory General Survey. Salud Publica Mex. 2002; 44: 33-40. Disponible en: http://www.insp.mx/salud/index.html

15. Cáceres-Mejía B, Roca-Quicaño R, Torres M, Pavic-Espinoza I, Mezones-Holguín E, Fiestas F. Análisis factorial del "Cuestionario para la evaluación del síndrome de quemarse por el trabajo" en estudiantes de medicina peruanos. Rev Psiquiatr Salud Ment (Barc.). 2013. Disponible en: http://dx.doi.org/10.1016/j. rpsm.2013.06.002.

16. Nakandakari MD, De la Rosa DN, Failoc-Rojas VE, Huahuachampi KB, Nieto WC, Gutiérrez AI, et al. Síndrome de burnout en estudiantes de medicina pertenecientes a sociedades científicas peruanas: Un estudio multicéntrico. Rev Neuropsiquiatr. 2015;78(4): 203-210. Disponible en: http://www.scielo.org.pe/scielo.php?script=sci_arttext&pid=S0034-85972015000400003&lng=es.

17. Vásquez-Manrique JF, Maruy-Saito A, Verne-Martín E. Frecuencia del síndrome de burnout y niveles de sus dimensiones en el personal de salud del Servicio de Emergencia de Pediatría del Hospital Nacional Cayetano Heredia en el año 2014. Lima, Perú. Rev Neuropsiquiatr. 2014; 77 (3): 168-174. Disponible en: https://doi.org/10.20453/rnp.v77i3.2031

18. Ramos R. Percepción de las relaciones médico-paciente por parte de los usuarios externos del Departamento de Medicina del Hospital Carrión, Callao-Perú Lima; 2008. Disponible en: https://doi.org/10.15381/anales.v69i1.1173

19. Núñez-Morales R, Arias-Cornejo M, Sánchez-Sánchez N, Hernández-Porras T, Bustamante-Bravo V, Reupo-Vallejos M et al. Relación médico-paciente desde la perspectiva del paciente en el Hospital Nacional Almanzor Aguinaga Asenjo 2014. Rev. Exp. Med. 2015; 1 (1); 20-4. Disponible en: http://rem.hrlamb.gob.pe/index.php/REM/article/view/12

20. Vilchez-Cornejo J, Huamán-Gutiérrez R, Arce-Villalobos L, Morán-Mariños C, Mihashiro-Maguiña K, Melo-Mallma N et all. Síndrome de burnout en estudiantes de medicina: frecuencia, características y factores asociados. Act Med Per, 2016. 33(4):282-8. Disponible en: http://www.amp.cmp.org.pe/index.php/AMP/article/view/221/169

21. Reyes-Ticas A, Medina MT, Mesa X, Paredes Y, Barahona Y, Sierra M. Estudio de síndrome de Burnout, depresión y factores asociados en los practicantes internos del Hospital Escuela. Rev Fac Cienc Med. 2012; 9(1): 14-30. Disponible en: http://www.bvs.hn/RFCM/pdf/2012/pdf/RFCMVol9-1-2012-4.pdf.

22. Miyoshi R, Matsuo H, Takeda R, Komatsu H, Abe H, Ishida Y. Burnout in Japanese residents and its associations with temperament and character. Asian J Psy. 2016; 24: 5-9. Disponible en: https://doi.org/10.1016/j.ajp.2016.08.009

23. Nobre de Novais R, Rocha LM, Eloi RJ, Dos-Santos LM, Moura MV, Ribeiro R et all. Burnout síndrome prevalence of on-call surgeons in a trauma reference hospital and its correlation with weekly workload: cross-sectional study. Disponible en: https://doi.org/10.1590/0100-69912016005003

24. Dueñas M, Merma L. Prevalencia de Burnout en médicos de la ciudad de Tacna. CIMEL. 2003;8(1):34-8. Disponible en: http://www.redalyc.org/articulo.oa?id=71780107

25. Paredes G, Olga L; Sanabria-Ferrand, Pablo A. Prevalencia del síndrome de burnout en residentes de especialidades médico quirúrgicas, su relación con el bienestar psicológico y con variables sociodemográficas y laborales. Revista Med. 2008; 16 (1): 25-32. Disponible en: http://www.redalyc.org/articulo.oa?id=91016105

26. Aguilera EC, de Alba García JEG. Prevalencia del síndrome de agotamiento profesional (burnout) en médicos familiares mexicanos: análisis de factores de riesgo. Rev Col Psiq. 2010; 39(1): 67-84. Disponible en: https://10.1016/S0034-7450(14)60237-7

27. Sánchez-Cruz J, Mugártegui-Sánchez S. Síndrome de agotamiento profesional en los médicos familiares. Rev Med Inst Mex Seguro Soc. 2013; 51(4): 428-31. Disponible en: http://revistamedica.imss.gob.mx/editorial/index.php/revista_medica/article/viewFile/943/1530

28. Ponce LB, Gavotti GC, Ferreyra L, Flores M. Síndrome de Burnout en médicos residentes del Hospital Privado. Año 2013. Experiencia Médica. 2016; 33 (1): 08-11. Disponible en: https://experienciamedicahp.com.ar/uploads/articulo-original-2-6136.pdf

29. Terrones-Rodríguez JF, Cisneros-Pérez V, Arreola-Rocha JJ. Síndrome de burnout en médicos residentes del Hospital General de Durango, México. Rev Med Inst Mex Seguro Soc. 2016; 54(2): 242-8. Disponible en: https://www.medigraphic.com/pdfs/imss/im-2016/im162p.pdf

30. Balcázar-Rincón LE, Montejo-Fraga LF, Ramírez-Alcántara YL. Prevalencia del síndrome de desgaste profesional en médicos residentes de un hospital de Mérida, Yucatán, Mexico. Atencion Fam. 2015; 22(4): 111-4. Disponible en: https://doi.org/10.1016/S1405-8871(16)30064-5

31. Gelfrand DV, Podnos YD, Carmichael JC, Saltzman DJ, Wilson SE, Williams RA. Effect of the80-hour workweek on resident Burnout. Arch Surg. 2004;139(9):933-8;discussion 938-40. Disponible en: https://doi.org/10.1001/archsurg.139.9.933

32. Kuan-Yu Ch, Che-Ming Y, Che-Hui L, Hung-Yi Ch, Mau-Roung L,Hui-Ru Ch et al. Burnout, Job Satisfaction, and Medical Malpracice among physicians. Int J Med Sci 2013;10(11):1471-1478. Disponible en: https://dx.doi.org/10.7150%2Fijms.6743

33. Grau A, Flichtentrei D, Suñer R, Prats M, Braga F. Influencia de factores personales, profesionales y transnacionales en el síndrome de Burnout en personal sanitario hispanoamericano y español (2007). Rev Esp Salud Pública 2009;83:215-30. Disponible en: http://scielo.isciii.es/pdf/resp/v83n2/original1.pdf

34. Joffre-Velázquez VM, Peinado-Herreros JM, Gómez MC, Lin-Ochoa D, Vázquez-Nava F, Llanes-Castillo A. Síndrome de burnout en médicos de un hospital general en el noreste de México. Rev. Elec. Medicina, Salud y Sociedad. 2010; 1(1): 1-23. Disponible en: http://dx.doi.org/10.25009/remsys.2010.1.18

35. Aranda-Beltrán C, Zárate-Montero B, Pando-Moreno M, Sahún-Flores JE. Síndrome de Burnout, variable sociodemográficas del hospital Valentín Gómez Farias, México. Rev Col Sal Ocupacional 2011;1(1):13-17. Disponible en: https://revistas.unilibre.edu.co/index.php/rc_salud_ocupa/article/view/4794/4480

36. Castillo-Ávila I, Orozco CJ, Alvis ELR. Síndrome de burnout en el personal médico de una institución prestadora de servicios de salud de Cartagena de Indias. Rev Univ Ind Santander. Salud (Internet) 2015 [citado 4 setiembre 2019]; 47(2): 187 - 92. Disponible en: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0121-08072015000200010&lng=en

37. Radman S, Gopal K. Prevalence and associated factors of burnout among doctors in Yemen. J Occup Health 2010;52:58-65. Disponible en: http://dx.doi.org/10.1539/joh.o8030

38. Aldave Salazar MA. Síndrome de burnout y factores de riesgo en médicos Hospital Nacional Guillermo Almenara Irigoyen 2015. [Tesis doctoral].Lima: Universidad de San Martin de Porres, facultad de medicina humana; 2016. Disponible en: http://www.repositorioacademico.usmp.edu.pe/bitstream/usmp/2944/3/aldave_smr.pdf

39. Cohen D, Rhydderch M, Reading P, Williams S. Doctors' health: obstacles and enablers to returning to work. Occup Med (Lond) 2015; 65: 459–65. Disponible en: http://dx.doi.org/10.1093/occmed/kqv056

40. Merrett A, Jones D, Sein K, Green T, Macleod U. Attitudes of newly qualified doctors towards a career in general practice: a qualitative focus group study. Br J Gen Pract 2017; 67: e253–9. Disponible en: http://dx.doi.org/10.3399/bjgp17X690221

41. Zugar A. Dissatisfaction with medical practice. N engl J. Med 2004; 350: 69- 75. Disponible en: http://dx.doi.org/10.1056/NEJMsr031703