



Rev Mex Med Forense, 2019, 4(2):34-51

ISSN: 2448-8011

## Association between the Labor Regime and the Burnout Syndrome in Physicians of the Public Ministry of Peru

### Original Article

Quito Santos, César <sup>1</sup>; Guzmán Ávalos, Eliana <sup>2</sup>; Quiroz Mejía, Juan Víctor <sup>3</sup>

Received: 22 Oct 2018, Accepted: 20 November 2018, Published: 15 May 2019

1 Forensic Physician, National University of Trujillo, Peru

2 UTEs n06 Peripheral Services Trujillo, Peru

3 Forensic Physician and Psychiatrist, Lima, Peru

Corresponding author: Cesar Quito Santos, cequisaunt@hotmail.com

### SUMMARY

**Introduction:** Our research was carried out in order to determine the association between the labor regime and the Burnout Syndrome in physicians of the Public Ministry of Peru during the 2014-2015 period.

**Methods:** A descriptive correlational design was used. A total of 384 physicians who worked in the Public Ministry during the period 2014-2015 were surveyed; the MBI questionnaire (Malasch Burnout Inventory) was applied to identify the Burnout Syndrome as well as a simple

*survey to know their working condition. The Chi-square test was used to establish the association of variables.*

**Results:** *The Burnout Syndrome affects 22.7% of physicians of the Public Ministry of Peru, including those with permanent and temporary work.. It was found that 16.37% of the permanent regime physicians had Burnout Syndrome, while*

*39.81% of temporary regime physicians had said Syndrome.*

*Conclusion: There is a statistically significant association between the Labor Regime and the Burnout Syndrome in physicians of the Public Ministry of Peru during the 2014-2015 period.*

*Keywords: Burnout syndrome, work regime, physicians, Public Ministry*

## INTRODUCTION

Physicians who work directly with justice operators in the world suffer strong social pressure because they are directly linked to the freedom of a person; they are part of the evidentiary means with which people who commit criminal acts are punished by the respective penal codes; in addition, they are in close contact with the victims of violence at the time of the legal medical examination and with the relatives of those killed by violence at the moment of the delivery of the corpse; all of them constitute factors that contribute to professional exhaustion; work environment of these professionals must be optimal for them to carry out scientific work of criminal interest, as required by the New Code of Criminal Procedure [1].

In Spain, coroners depended exclusively on the Ministry of Justice; the majority are of permanent contracting, but from the year 1996 the transfer to the Autonomous Communities began; currently only some of the states of Spain need to complete the transfer of legal physicians. In Portugal, the National Institute of Legal Medicine, an institution where coroners work, has been consolidated since 2001 as an autonomous institution subject to oversight and supervision by the Ministry of Justice [2].

In Peru, physicians who work in the Public Ministry have increased in the last five years, reaching more than 500 at present; the number is increasing, semiannually, especially in the Fiscal Districts where the New Code of Criminal Procedure is being implemented; however, they have to wait several years for permanent hiring. There are no scientific studies that analyze the labor characteristics in which the physicians of the Public Ministry work, who are the scientific support of the Fiscal and Judicial System of Peru.

Although the selection contests are strict and rigorous with the endorsement of the Office of the Public Prosecutor, physicians face daily situations of violence and death suffered by the users of services offered in both the Forensic Clinic and Forensic Medical Fields; they perform a job of great legal responsibility and emotionally exhausting, which generates the development of behavioral work stress problems such as Burnout Syndrome.

According to studies conducted by Escribá in 2008, it was evident that professionals who are in contact with the suffering of people due to violence, crime and / or death are more likely to have high emotional exhaustion and greater

depersonalization; all this leads to a negative impact on work and family life [3].

On the other hand, physicians of the Public Ministry of Peru have different labor regimes: permanent hiring and temporary hiring; all have the same social responsibility, because they are linked to Justice; they must be objective in their professional performance with a high level of scientific and legal knowledge; they must also prevent an innocent person from going to jail or a guilty person being released; they have a high load of work wear, since they have to perform legal medical examinations to users who are victims of injuries, medical visits, body surveys, necropsies, oral trials and expert debates [4].

No scientific studies have been published regarding the Burnout Syndrome in medical examiners, perhaps because the tax systems are discretionary in subjects related to their human resources; for that reason it is important to know how this Syndrome affects physicians who work in the Public Ministry. Due to their great legal medical responsibility with the Judicial System, despite having different labor regime, they have to fulfill the same functions, so it is necessary to know what is the association that exists between the labor regime and the Burnout Syndrome.

Ploeg V et al (2003), studied a sample of 84 forensic physicians from the Netherlands, to whom they provided a survey. These physicians carry out the study of bodily harm due to violent causes; for this reason they are exposed to traumatic events, which generate chronic work stress, which are associated with Burnout Syndrome [5]. Rodríguez M et al (2010) studied a sample of 184 health workers in Bogotá, Colombia, to whom

the Malasch Burnout Inventory (MBI) was applied and a questionnaire of sociodemographic variables in which the contract modality was included: temporary or definite hiring. It was found that 75.5% were women and 24.5% were men. 26.6% were temporary contracts for the provision of services, 11.9% for fixed term and 61.4% for an indefinite term, there being no significant association with Burnout Syndrome; a prevalence of 2.2% had Burnout Syndrome and 5.4% had medium risk for Burnout [6].

Álvarez FJ et al (2015) studied a sample of 155 physicians from the Hospital of Guayaquil, Ecuador, to whom the MBI questionnaire was applied; of the sample, only 11 physicians were permanent and 144 were temporary hiring. 53.5% presented a high level of Burnout and 20.6% a medium level. It was found that permanent hiring physicians have greater professional efficacy than temporary hiring physicians, with job stability being a factor that allows self-confidence and self-efficacy to be developed, and therefore to have a better job performance and a low Burnout level [7]. Vásquez J et al (2014) studied 54 health workers who work in the Emergency Service of Hospital Cayetano Heredia in Lima, to whom the MBI questionnaire and a survey of sociodemographic and work variables were applied; of the total number of respondents, 25 were physicians. 81.49% were temporary staff and 18.51% permanent. It was found that the frequency of Burnout Syndrome was 3.76%, and that the degree of personal fulfillment (one of the components of Burnout) has a statistically significant association with the work regime [8].

Apaza E et al (2009) applied the MBI questionnaire to 36 psychiatric physicians of the Hermilio Valdizan

Hospital. 83.3% were permanent physicians and only 16.67% were temporary contracting; they had an average age of 47.3 +/- 8.1 years, with a service time of 14 +/- 8.1 years. It was concluded that the majority of psychiatrists had low levels of Burnout syndrome; only high grade of Burnout with emotional exhaustion was 13.9%, depersonalization 8.3% and low personal achievement 11.1% [9]. Castañeda E et al (2010) studied a sample of 240 family physicians from the government health system, who found that 41.6% had Burnout Syndrome. In addition, 45% of permanent contracts and 27% of temporary contracts had Burnout Syndrome, being a statistically significant difference; there was also an association with the female sex, age over 40 years, having children and having longer service [10].

Valenzuela A (2009) studied a population of 826 workers who work in 25 facilities of the Health Network of Barranco Chorrillos; a sample of 180 workers was selected to whom the MBI questionnaire and 10 questions related to sociodemographic variables were applied. 16% were physicians, 24% were non-medical professionals, 43% were technicians and 16% were auxiliaries. 42% were temporary staff. It is concluded that the prevalence of Burnout Syndrome was 12%; the risk factor of greatest statistical significance was the temporary hiring status; other risk factors with statistical significance were: the age group between 41 to 50 years, single marital status, type of care work, service time of 6 to 15 years and having only one job [11]. Quiroz R et al (2009) applied the MBI questionnaire and structured self-report questionnaires to 64 physicians and 73 nurses from the Hospital Nacional Sur Este of ESSALUD of Cusco. 54% had a permanent

employment contract regime, 43.75% in physicians and 63.01% in nurses. It was concluded that medical professionals and nurses of the Hospital Nacional Sur Este of ESSALUD presented a low degree of Burnout in its majority; a significant association was also shown for high risk of Burnout with single or separated marital status, the profession of physician, the temporary hiring regime and the professional exercise time of more than 12 years [12].

Ponce M (2005) randomly selected 274 teachers from different faculties of the National University of San Marcos to whom the MBI questionnaire was applied. The majority were teachers of Medicine (10.2%), Education (7.7%) and Psychology (7.3%), while the minority of Electronics (2.9%) and Letters (2.6%). With respect to the labor regime, 53% were temporary contracts. It was concluded that 46.3% of teachers had Burnout Syndrome, being higher in teachers in the health area (59%) than in teachers of letters (25%). A significant difference was found between permanent and temporary hiring teachers with respect to the depersonalization variable; those of temporary hiring are more depersonalized than those of permanent hiring [13].

The medical regime of physicians in Latin America is very similar; In a study conducted in Colombia, including 24 thousand physicians, only 11 thousand were employed, but of those who were employed only 16.6% was permanent, while the vast majority was temporary hiring, generating a high degree of dissatisfaction labor [14].

The Burnout Syndrome was originally created by Freudenberger in 1974, but it is in 1976 that Cristina Malasch publicly uses it to explain an

increasingly common problem among workers who have direct and continuous contact with the user population, suffering professional burnout after a few years in job performance [12]. The Burnout Syndrome is a cause of discomfort, due to personal consequences: behavioral, emotional or psychosomatic; the social and family consequences also influence, as well as the impact in the organizational or labor field, such as faults and delays in the work, decrease in the degree of satisfaction of professionals and users and detriment of productivity [15].

Burnout syndrome is the emotional and biological response to the permanent stress of the inadequate work environment, but it is also complemented by the chronic adaptive disorder associated with work demands; this ultimately damages the quality of life and mental health of the professionals who suffer from it and influences the quality of the care offered to users. The Burnout Syndrome is evident in those professionals whose object of work are people and consists of three dimensions: emotional exhaustion, depersonalization and personal fulfillment [16].

Emotional fatigue is characterized by the gradual decrease of energy, exhaustion, fatigue and weariness. The depersonalization is evidenced by a negative alteration in the attitudes and forms of attention with the users that are evident with bad treatment to the user and decrease in the motivation towards work and professional incompetence. Personal fulfillment is affected by harmful behavior towards oneself and work [6]. All professions generate work stress, some more than others; for example, divers, police who deactivate bombs and those in charge of air traffic are the most stressful professions, but health professionals also

suffer from work stress, mainly because in their hands is the life and health of those who come to request its services; Burnout syndrome is responsible for demotivation in health professionals [17]. The emotional exhaustion produced by the exercise of the medical profession is becoming particularly important and interesting due to the social pressures that physicians endure through the media and organized civil society. [18]

There are sociodemographic factors associated with Burnout Syndrome described in the scientific literature; there is no solid consensus among the various authors, but it has been possible to determine some level of agreement for some factors such as age, sex and marital status; there is still no consensus regarding the labor regime [19]. Age does not contribute to the appearance of Burnout Syndrome; it is considered that there is likely to be an awareness stage in the first years of professional life [20]. Marital status is associated more frequently in single individuals, as it is linked to less personal fulfillment and greater depersonalization [21]. The female sex is considered as the most defenseless population, perhaps because professional woman has a double work load: work and home [22].

Highly specialized care in the various professions of health services also constitutes a risk to medium or high values of Burnout [6]; in this sense, physicians who work in the Public Prosecutor's Office of Peru perform highly specialized work, to determine the assessment of corporal damage, the basic causes of death and to assess the professional responsibility of the medical act.

The labor regime differs in the public or state sector with respect to the

private regime; in addition, in the public sector there are better opportunities to form unions and claim for better working conditions. In workers of the private and public labor regime, the classification of permanent hiring and temporary hiring is common. In Peru, the hiring of personnel in the public sector is of two types: public regime regulated by Legislative Decree 276; and the private regime established by Legislative Decree 728. The hiring regime 276 provides greater job stability compared to the hiring regime 728, but in some cases the remuneration is higher in the 728 regime because they receive 14 annual salaries, in comparison to the 276 regime that only receive 12 annual payments [23].

The hiring regime 276 provides greater job stability compared to the 728 regime, but the remunerative benefits are better in the 728 regime because they receive a full salary as a bonus, while the regime 276 only a percentage of their salary; in addition, the workers of the 728 regime can accumulate their holidays and receive a monthly payment for holidays; this situation can not be carried out by the workers in the labor regime 276. In Peru, the majority of professionals working in the public sector belong to the hiring regime 728, being approximately 51%, while only 12% of the workers in the hiring regime 276 are professionals [24].

The hiring regime of public servants in Peru is of several types; there is a great disorder of the remunerative levels of the workers, but the type of labor regime is classified as permanent hiring and temporary hiring. Supreme Decree 05-90-PCM defines the public servant as the citizen who provides services to the various state institutions, whether permanent or with a contract of employment, but the permanent public

servant enjoys the benefit of job stability. Temporary hiring constitutes a labor demand that hinders the performance and the well-being of the worker as well as the quality of the service that is offered to the user; being a temporary hiring worker has a greater risk of suffering an unstable working environment that affects the worker's health [25].

Medical personnel belonging to the permanent hiring regime have to comply with certain minimum requirements established by the current legal regulations. In Peru, the appointment of medical personnel is in accordance with the Regulation of Law No. 28220 of the Ministry of Health, which governs the entire Health Sector; although it is true that the physicians of the Public Ministry belong to an autonomous body of the State different from the Ministry of Health, they adapt to the standards emanating from the Ministry of Health in their capacity as governing body. In the Public Ministry, physicians are subject to the hiring regime established in Legislative Decree 276, but in the majority labor regime is permanent, with a significant percentage of physicians who are temporary hiring, who do not enjoy work benefits that they have permanent contracting physicians; even their remunerations are lower than those of permanent hiring.

Hence our research question: Is there an association between the labor regime and the Burnout Syndrome in physicians of the Public Ministry of Peru during the period 2014-2015? Coroners are exposed to complaints from users of services, who often are not satisfied with the medical legal assessment of bodily harm, determining the presence of Burnout in one in 10 physicians surveyed [26]. In Peru there have been no studies in coroners to determine the existence of Burnout

Syndrome, as well as the variables that are related to their presence, especially the type of work regime; this study would allow us to know the epidemiological characteristics of the risk profile in forensic medical personnel to propose strategies for solutions that contribute to the prevention and treatment of Burnout Syndrome, and finally to strengthen a healthy work environment associated with better work performance .

Physicians who work in the Public Ministry are in direct contact with people who are victims of anguish due to various types of violence in their work. Forensic Clinician, while in their Forensic Tanatological work, are in contact with deceased persons; they are health professionals who are daily exposed to the anguish and death of people.

The convenience of this research is due to the collection of official national information from the physicians of the Public Ministry, which was authorized by the National Headquarters of the Institute of Legal Medicine and Forensic Sciences; this will allow knowing important data that affect their human resources, specifically physicians; this will help the officials of the Public Prosecutor's Office and the National Headquarters of the Institute of Legal Medicine and Forensic Sciences of Peru to adopt the appropriate managerial and administrative measures so that the medical examiners continue to provide a quality scientific service to the users of the Judicial System of Peru; all this would be within the framework of an adequate labor regime that covers their life expectancies and provides a job stability that implies the economic security of the family physicians of the Public Ministry of Peru.

The social significance of the study lies in the fact that it is intended to know a work and health reality that affects

physicians who assess bodily harm and violence; his legal medical reports are means of proof for the conviction of any crime under investigation by the fiscal or judicial authorities; this study will not only benefit public officials of the Public Prosecutor's Office, who will adopt continuous improvement measures, but also the final user of legal medicine services, who will be the main beneficiary with objective, scientific and impartial attention by medical professionals of the Public ministry.

## METHODS

It is a descriptive and correlational study [27]; as an independent variable, we include the labor regime, defined as the title of labor link that remains as the employer; it is possible to classify it at two nominal rates: permanent hiring and temporary hiring. The dependent variable was the presence or absence of Burnout Syndrome, assessed through the MBI Questionnaire, which establishes scores for Depersonalization, Emotional Fatigue and Personal Realization.

The study population was made up of 598 physicians who work in the Public Prosecutor's Office of Peru: the inclusion criteria were: being a physician of the Public Ministry of Peru, signature of the informed consent of participation and a minimum of 1 year of work experience; those who incompletely answered the MBI questionnaire were excluded.

The MBI questionnaire consists of 22 questions and was designed to assess the Burnout Syndrome in its three fundamental dimensions: depersonalization (DP), emotional fatigue (CE) and personal fulfillment (RP). High scores on DP ( $DP > 20$ ) and CE ( $CE > 33$ ); and low RP ( $RP < 33$ ) correlate with the

presence of Burnout Syndrome. A questionnaire of variables, of own elaboration, was also used, where the type of labor regime was recorded, in addition to other data such as age, sex, marital status, time of services and parenthood. The data was collected, consolidated and then analyzed with the SPSS Software version 21.0. The results are presented in double entry tables at absolute frequency and relative percentage level. To clarify that there is a statistically significant relationship between the work regime and the Burnout Syndrome in the physicians of the Public Ministry of Peru, the chi-

squared test was applied; if  $p < 0.05$  the significant association was determined.

The present study met the requirements set for its type of research according to the standards of the Code of Ethics of the Medical College of Peru and international standards that apply to the collection of data through questionnaires, focusing on respect for privacy, confidentiality and voluntariness of the people who participated; for which they signed the informed consent form, which was attached to each questionnaire.

## RESULTS

RÉGIMEN LABORAL	SÍNDROME DE BURNOUT				TOTAL	
	Si		No			
	N°	%	N°	%	N°	%
De contratación temporal	46	12	235	61.2	281	73.2
De contratación permanente	41	10.7	62	16.1	103	26.8
<b>TOTAL</b>	87	22.7	297	77.3	384	100

Table 1: Labor regime associated with the Burnout Syndrome in physicians of the Public Ministry of Peru during the 2014-2015 period. Source: applied survey. Chi square: 23.62, Value  $p < 0.01$

<i>Síndrome de Burnout</i>	N°	%
<i>Si</i>	87	22.7
<i>No</i>	297	77.3
<i>TOTAL</i>	384	100

Table 2: Burnout Syndrome in Physicians of the Public Ministry of Peru, during the period 2014-2015. Source: Survey applied

<i>Síndrome de burnout</i>	<b>De contratación temporal</b>	
	N°	%
<i>Si</i>	46	16.37
<i>No</i>	235	83.63
<i>Total</i>	281	100

Table 3: Burnout Syndrome in Physicians of temporary contracts of the Public Ministry of Peru, during the period 2014-2015.

<i>Síndrome de burnout</i>	<b>De contratación permanente</b>	
	N°	%
<i>Si</i>	41	39.81
<i>No</i>	62	60.19
<i>Total</i>	103	100

Table 4: Burnout Syndrome in Physicians of permanent hiring of the Public Ministry of Peru, during the period 2014-2015.

## DISCUSSION

The Burnout Syndrome is a social problem that affects the quality of life and the performance of health professionals; such Syndrome has 3 components and is determined by high values in the components: emotional exhaustion and depersonalization and low value in personal fulfillment. The type of work regime of temporary hiring or permanent hiring is one of the factors that affects the Burnout Syndrome; there are also other factors that influence the presence of said Syndrome.

In Table 1, it was shown that 87 physicians surveyed by the Public Ministry of Peru, during the period 2014-2015, presented Burnout Syndrome, which represents 22.7% of the sample. These health professionals presented high depersonalization, high emotional

exhaustion and low personal fulfillment; the results obtained show the high negative emotional burden to which the physicians of the Public Ministry are exposed when having direct contact with users of the legal medical services that are victims of violence and criminality; these results represent a lower figure than the one reported by Castañeda E et al, who determined that 41.6% had Burnout Syndrome. The statistical analysis that was carried out in this study coincides with that described by several reviewed research papers, which showed the variable "work modality" has a significant influence on the development of Burnout Syndrome.

According to the review of studies carried out both in Peru and in other parts of the world, it is corroborated, as in the results of this study, the importance of the factor related to the permanent hiring labor regime and the development of Burnout

syndrome; this syndrome corresponds to the presence of chronic stress due to pressures of services characterized by intense and prolonged attention with people who are in a situation of need or dependency.

The temporary contract work condition makes the health personnel even more vulnerable to develop the syndrome of professional exhaustion, because they do not have the necessary job stability; in relation to this, the factor that is relevant to consider and that is closely related is the degree of controllability that the stressful event has. It has been shown that the perceived controllability of the stressor element affects the type of strategy used and the effectiveness of it to reduce the degree of stress. The greater the perceived threat and the lower the degree of control, as in the case of job instability in which having the temporary hiring regime does not ensure an indefinite job and there is a risk of reaching unemployment, less elaborated and rationalized will tend to be the modes of confrontation directed to the emotion and avoidance, and more limited the repertoire of the ways of confronting directed to the problem.

Temporary contract physicians not only have lower labor rights than permanent physicians; they also have a very high risk of presenting the Burnout Syndrome, as evidenced by Quispe et al in a study applied to physicians in the city of Cuzco; all this generates a climate of job dissatisfaction that affects their professional performance and therefore a deficient quality of attention to the user [12].

The development of Burnout Syndrome is directly related to the perception of job stability experienced by a worker because of the temporary hiring

regime, because it is legally linked with a public or private institution, as well as the feeling of self-realization that he experiences in effecting his job. This labor regime factor becomes a source of risk when the feeling of pride in being linked to the institution is deficient or non-existent; this is generated when the workers do not feel identified with the institution to which they belong as there is a real risk of unemployment.

Organizational stressors, like the type of contract, generates in the worker a perceived stress such as the possibility of not renewing his contract and being fired; when coping strategies are not necessary and the worker does not have the possibility of modifying such factor as threatening, the Burnout Syndrome is generated, which would cause negative consequences not only to the individual but also to the organization.

The job insecurity of the temporary hiring worker is defined as the worker's constant concern about the existence of work in the future; it is also perceived as a perceived threat because of the different work characteristics to which it is subjected in comparison to a permanent hiring worker, such as the position within the structure or organizational chart of an organization or the opportunities for promotion in the workplace, rewarded with greater economic stimuli.

The economic and business processes related to globalization and generalized economic crises have notably reduced job stability in recent years. The variations and fluctuations of the economic market, difficult to avoid, have generated the need for a more flexible labor market. The convenience of responding at any time in a timely manner to the labor demands of the current

globalized market has led to encourage the temporary subcontracting of tasks and personnel for the duration of the demand, avoiding the appointment of temporary workers.

The type of temporary work regime is one of the most important indicators of job insecurity and instability. When the labor contract is less secure and covers a shorter time, the rates of job insecurity are higher. The temporary contract is the one that is associated with greater job instability and an oppressive work environment.

The fear to lose the job, the insecurity in the same, as well as the little control on elements and clauses of the own contract, have become characteristic of the current work. The uncertainty of the future work is one of the greatest sources of anxiety, work stress and fear, especially when they are not exclusively personal, but also include the family. This type of concern and its consequences have implications for both the physical and mental health of the workers, as well as their job performance.

The effects of the contractual insecurity of the labor regime come largely from the effect of generalized uncertainty towards one's future work; they also come from the fears that may appear in the face of economic insecurity for oneself and one's family, in a context in which the capacity for preventive action and anticipation of the problem are minimal. The problems arising from the contractual insecurity that affects workers in the temporary hiring regime are partly the product of the defenselessness and the inability to act in a generalized labor context. The worker who has the perception of job insecurity experiences stress in anticipation of the problems

associated with the loss of employment. The uncertainty to which the person is subjected makes some consider it as more stressful than the loss of the work itself; as a result, they tend to experience anxiety, loss of tolerance to frustration, increased irritability and increased sensitivity to determinations in the institution where they work and interpersonal relationships, therefore more susceptible to suffering from Burnout Syndrome.

Table 2 shows that 22.7% of physicians from the Public Prosecutor's Office have Burnout Syndrome; Vásquez et al found Burnout in 3.76% of the health personnel working in the Emergency Service of the Hospital Nacional Cayetano Heredia [8]; Paredes et al found Burnout in 12.6% of resident physicians of medical-surgical specialties of the Hospital of the Military University of Nueva Granada [28]. The percentage of involvement of the Burnout Syndrome depends on the medical specialty; in relation to this, Delgado et al [29] found that 72.6% of anesthesiologists in Paraguay had Burnout Syndrome.

Table 3 shows that 16.37% of permanent physicians had Burnout Syndrome, while Table 4 shows that 39.81% of temporary physicians had Burnout Syndrome, evidencing that it is greater the number of temporary contracting physicians who suffer from this syndrome. This shows the high work stress experienced by temporary physicians, because their working conditions are lower than those of permanent physicians; this creates a constant work wear that affects their professional performance and that is evidenced in a greater affectation of the Burnout Syndrome; it coincides with numerous studies carried out in temporary physicians; an example of this is the study

by Castañeda et al who found that 27% of Mexican family physicians with temporary contracts had Burnout Syndrome [10]. In addition, Valenzuela showed that the risk factor of greater statistical significance for the Burnout Syndrome was the temporary hiring status of the health workers of the health facilities of the Barranco Chorrillos-Surco Health Network.

From the results of the present study we can establish the following conclusions:

- There is a statistically significant association between the Labor Regime and the Burnout Syndrome in physicians of the Public Ministry of Peru during the period 2014-2015.
- 22.7% of the physicians of the Public Ministry of Peru presented Burnout Syndrome during the 2014-2015 period.
- The physicians of the Public Ministry of Peru, belonging to the permanent hiring regime, presented Burnout Syndrome in a 16.37%, during the period 2014-2015.
- The physicians of the Public Ministry of Peru, belonging to the temporary hiring regime, presented Burnout Syndrome in 39.81%, during the period 2014-2015.

We consider the following recommendations:

1. Identify the physicians who suffer from Burnout Syndrome and provide specialized comprehensive treatment to reverse said emotional disturbance.
2. Transmit the results of this study to the National Prosecutor, the National Chief of the Institute of Legal Medicine and the principal officials of the Public

Prosecutor's Office so that the corrective measures of the case may be adopted.

3. To propose the execution of a training program of social skills, family integration and relaxation and motivation workshops among the physicians of the Public Ministry of Peru.
4. Implement a program of incentives and recognitions to the physicians of the Public Ministry for their professional performance.
5. Improve the work environment of the physicians of the Public Ministry, motivating the practice of healthy lifestyles and efficient use of time.
6. Promote the hiring of a social worker and a psychologist to develop monitoring programs of Burnout Syndrome in the physicians of the Public Ministry

Likewise, we propose to strengthen the Welfare and Human Development Welfare Management of the Public Prosecutor's Office to process in the short term the appointment of Physicians who work in the Public Ministry according to the current legal regulations; likewise, establish a program of incentives and rewards for good professional performance, generating a positive competitiveness among all the medical professionals who work in Lima and in the different regions of Peru, strengthening a healthy work environment that ensures the maximum stability of the physician's work that provides scientific support to the fiscal and judicial system of Peru.

It is necessary to state the need for the Welfare and Human Development Welfare Management of the Public Prosecutor's Office to consolidate a comprehensive social and psychological

support program for physicians with the aim of stimulating social skills; this will seek to establish integration and leisure activities for workers within the framework of a healthy work environment, improving the labor regime of the Physicians of the Public Ministry, making proposals for economic incentives for better professional performance.

All the proposals will contribute to improve the professional performance of the doctors and therefore a better quality of service to the users of the services provided by the doctors of the Public Ministry of Peru.

## REFERENCES

1. Díaz J, Navarro C, Carreño J, et al. Guía Médico Legal de Valoración Integral de lesiones corporales. Fiscalía de la Nación – Ministerio Público. Lima 2014
2. Nuno Vieira D, Muñoz-Baru J. El sistema médico-legal y forense portugués. Cuad Med Forense. 2009; 15(57):185-198.
3. Escriba V, Artazcoz L, Perez S. Efecto del ambiente psicosocial y de la satisfacción laboral en el síndrome de Burnout en médicos especialistas. Gaceta Sanitaria 2008; 22(4): 300-308.
4. Ponce M. Los retos de la Medicina Legal en el Perú. En III Congreso Internacional de Medicina Legal Ciencias Forenses y Criminalística. Lima; y Asociación Latinoamericana de Medicina Legal, Deontología Médica e Iberoamericana de Ciencias Forenses, 2011.
5. Ploeg V, Eleonore D, Sasja M, Kleber R. Critical incidents and chronic stressors at work: Their impact on forensic physicians. Journal of Occupational Health Psychology. 2003; 8(2): 157-166.
6. Rodríguez M, Rodríguez R, Riveros A, et. Síndrome de Burnout y Factores Asociados en Personal de Salud en tres instituciones de Bogotá en Diciembre de 2010. (Trabajo de especialización, Universidad del Rosario, Colombia). [Consultado 21 Agosto 2016]; 2(103). Disponible en: <http://repository.urosario.edu.co/bitstream/10336/2389/1/52931143-1.pdf>.
7. Flor J, AlvarezP, Honores M. Estudio del Síndrome de Burnout. [Tesis de maestría]. Guayaquil: Escuela Politécnica del Litoral. Escuela de Pos Grado de Administración de Empresas; 2015.
8. Vásquez-Manrique J, Maruy-Saito A, Verne-Martin 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., Lima 2014; 77 (3): 168-174.
9. Apaza E, Mendoza E, Zegarra R. Prevalencia y características sociodemográficas y laborales relacionadas al Síndrome de Burnout en Médicos Psiquiatras en un Hospital de salud Mental. Lima, Perú. 2009. Rev Psiquiatria y Salud Mental Hermilio Valdizam. Vol XII N° 2, Julio-Diciembre 2011: 27-36.
10. Castañeda E, Garcia de Alba J. Prevalencia del síndrome de agotamiento profesional (Burnout) en médicos familiares mexicanos: análisis de factores de riesgo. Rev.

- Colomb. Psiquiatr., Bogotá 2010; 39(1): 66-77
11. Valenzuela A. Síndrome de Burnout de identificación de los Factores de riesgo asociados en los trabajadores asistenciales de los establecimientos de salud de la Red de Salud Barranco Chorrillos-Surco [tesis]. Lima: Universidad Ricardo Palma. Facultad de Medicina. 2009.
  12. Quiroz R, Saco S. Factores asociados al Síndrome Burnout en Médicos y Enfermeras del Hospital Nacional Sur Este de Essalud del Cusco. SITUA. 2003; 12 (23): 11-22.
  13. Ponce CR, Bulnes MS, Aliaga JR, Atalaya MC, Huertas RE .El Síndrome del Quemado por estrés laboral asistencial en grupos de docentes universitarios. Rev IIPSSI. 2005; 8 (2): 87-112.
  14. Florez J, Atehortúa S, Arenas A. Las condiciones laborales de los profesionales de la salud a partir de la Ley 100 de 1993: evolución y un estudio de caso para Medellín. Rev. Gerenc. Polit. Salud, Bogotá (Colombia), 8 (16): 107-131.
  15. Martínez A. El Síndrome de Burnout: Evolución Conceptual y estado actual de la cuestión. Vivat Academia 2010;112(3):1-10.
  16. Guevara C, Heneo D, Herrera J. Síndrome de desgaste profesional en médicos internos y residentes. Hospital Universitario del Valle, Cali, 2002. Colomb Med 2004; 35(4): 173-178.
  17. Yusvisaret P, Gómez A, Cabrera C, Prince R, Searcy R. Factores de riesgo organizacionales asociados al Síndrome de Burnout en médicos anestesiólogos. Salud mental 2005; 28 (1); 82-91.
  18. Castañeda E, Garcia J. Prevalencia del síndrome de agotamiento profesional (Burnout) en médicos familiares mexicanos: análisis de factores de riesgo. Rev Colomb Psiquiatr 2010; 39(1): 67-84.
  19. Hernández C, Dickinon M, Fernández M. El Síndrome de desgaste profesional Burnout en médicos mexicanos. Rev Fac Med UNAM 2008; 51(1): 11-14.
  20. Fernández B, Roldan L, Guerra A, Roldan T, Gutierrez A, De las Mulas M. Prevalencia del síndrome de Burnout en los anestesiólogos del Hospital Universitario Virgen Macarena de Sevilla. Rev Esp Anestesiol Reanim 2006; 53(6): 359-362.
  21. Gonzalez P, Suberviola J. Prevalencia del síndrome de Burnout o desgaste profesional en los médicos de atención primaria. Aten Primaria 1998; 22(9): 580-584.
  22. Albaladejo R, Villanueva R, Ortega P, Astasio P, Calle M. Síndrome de Burnout en el personal de enfermería de un Hospital de Madrid. Rev Esp Salud Pública 2004; 78(4): 505-516.
  23. Beltrán L. Problemática de la existencia de distintos regímenes de contratación de personal en el estado [tesis]. Lima: Pontificia Universidad Católica del Perú. Escuela de Posgrado. 2013.
  24. Cieza N. Análisis de las remuneraciones de las personas que prestan servicios al Estado Peruano. Publicado en el portal del Congreso de la República del Perú [http://www2.congreso.gob.pe/sicr/cendocbib/con4\\_uibd.nsf/77E5707DE18AE4D305257E3B005B8FC2/\\$FILE/Analisis\\_de\\_las\\_remuneraciones.pdf](http://www2.congreso.gob.pe/sicr/cendocbib/con4_uibd.nsf/77E5707DE18AE4D305257E3B005B8FC2/$FILE/Analisis_de_las_remuneraciones.pdf)

25. Bakker A, Demerouti E. La teoría de las demandas y los recursos laborales. *Journal of Work and Organizational Psychology* 2013; 29, 107-115.
26. Ploeg Eleonore. *En Sociale Wetenschappen Proefschriften*; Universidad de Utercht, 2003.
27. Souza V, Driessnack M, Costa I. Revisión de diseños de investigación resaltantes para enfermería. parte 1: diseños de investigación cuantitativa. *Rev Latino-am Enfermagem* 2007; mayo-junio; 15(3).
28. Paredes O, Sanabria-Ferrand P. 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.
29. Delgado W, et al. Prevalencia del síndrome de Burnout en médicos anesthesiólogos del Paraguay durante el año 2010. *Inst. Investig. Cienc. Salud*, Vol. 9(1) Junio 2011: 13-20.



**Revista Mexicana de Medicina Forense  
y Ciencias de la Salud**