Professional Burnout Syndrome and Workplace Violence Harassment in Medical Residents at a Third Level Care Unit in the State of Mexico

Síndrome de desgaste profesional y acoso laboral en médicos residentes en una unidad de tercer nivel del Estado de México

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Summary
Objective: To identify the frequency of professional burnout syndrome and workplace harassment in medical residents of a health care center in the State of Mexico. Methods: cross-sectional study, 82 medical residents from eleven specialties from first to third year residency participated. The Maslach instrument designed to measure professional burnout and the Workplace Violence Scale (WVS) were applied. Results: 43.9% presented professional burnout syndrome, harassment at work, sexual harassment with excessive violence in 14.6% and the presence of excessive physical violence in 18.3%. Conclusions: a high frequency of burnout syndrome was found, and sexual harassment and physical violence were the highest in terms of workplace harassment.

Keywords: Burnout Syndrome, Workplace Violence, Medical Residencies

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**Resumen**

**Objetivo:** identificar la frecuencia del síndrome de desgaste profesional y de acoso laboral en médicos residentes de un centro médico en el Estado de México. 

**Métodos:** estudio transversal, participaron 82 médicos residentes de once especialidades de primer a tercer año. Se aplicó el instrumento de Maslach, diseñado para medir el desgaste profesional y la Escala de Violencia en el Trabajo (evt). 

**Resultados:** el síndrome de desgaste profesional, estuvo presente en 43.9%, respecto al acoso laboral, existió hostigamiento sexual con exceso de violencia en 14.6% y la presencia de exceso de violencia física en 18.3%. **Conclusiones:** se encontró frecuencia alta de síndrome de desgaste profesional, en cuanto al acoso laboral los rubros más altos fueron hostigamiento sexual y violencia física.

**Palabras clave:** síndrome de desgaste profesional, violencia en el trabajo, residencia médica

**Introduction**

During their training, medical residents must develop specific skills to be performed in their future medical practice; however, this can be affected by lack of sleep, high workload and unsatisfactory economic remuneration, which are predisposing factors for two major problems to occur during residency: burnout syndrome and harassment at work.

The prevalence of burnout syndrome among physicians is close to or higher than 50% and it has been shown that women are more vulnerable to suffer it\(^{1,2}\), which can lead to psychiatric problems and medical errors, affecting not only the physician but also the patient\(^1\).

This syndrome causes high absenteeism in professionals who suffer from it, due to physical and psychological disorders, as well as the emergence of mental illnesses, self-medication and drug abuse\(^3\). This syndrome begins during medical school, continues in medical residency and is maintained in permanent hospital physicians\(^3\). For years, in Latin America the welfare of health workers has taken a back seat in the planning of actions for health that will lead to improvements in the workplace in order to provide better quality care\(^4,5\).

In Mexico, with regard to workplace harassment a prevalence of 14% has been reported in administrative workers and women are the most affected\(^6\). The factors that cause workplace harassment are work overload, deficiencies in leadership style, task design, role conflict and lack of internal communication\(^7\). Also, it has been found, that main perpetrators are inter-consulting physicians and tenured professors, in Mexico\(^8\). In recent years, an increase in the presence of workplace harassment has been reported\(^9\). It has even been reported that nearly 90% of resident physicians have suffered some type of aggression during their training\(^10\), with women, as in other scenarios already mentioned, being the most susceptible to this type of harassment\(^11\).

Given the aforementioned context, the objective of this study was to identify the frequency of burnout syndrome and workplace harassment in medical residents at a health care center in the State of Mexico.

**Methods**

Cross-sectional study. Eighty-two medical residents from the Medical Center of the Social Security Institute of the State of Mexico and Municipalities (issemym) in Ecatepec participated, during the month of August 2019. A non-random sample by convenience was used, and the Maslach test and the Workplace Violence Scale (wpvs) were applied\(^12\). The Maslach test is divided into three subscales: emotional exhaustion, depersonalization and low personal accomplishment; the interpretation of the test is as follows: high scores in emotional exhaustion and depersonalization and low scores in personal accomplishment are indicative of high stress, which defines professional burnout syndrome; and low scores in the first two concepts, with high scores in the last one, are indicative of low stress; regarding the scores, they are considered low when they are less than 34.

The wpvs evaluates aspects related to abuse of power, verbal violence, impaired communication, hostile work environment, among others. The present study was authorized by the issemym ethics committee. The inclusion criteria were to be medical residents of the issemym Medical Center in Ecatepec, who agreed to sign the informed consent form; the elimination criteria were incomplete, incorrectly filled out and illegible questionnaires. For the application of the questionnaires we had the support of the Education and Research Board, who summoned the medical residents to a session in which they proceeded to apply the aforementioned instruments. This study is classified as minimal risk, since it is a study that uses common methods and techniques in diagnostic psychological examinations.

Descriptive statistical analysis was performed using Excel 2016.

**Results**

Eighty-two medical residents participated; age ranged from 25 to 46 years, with a mean of 28 (sd ± 6.53). Regarding gender, 43.9% of the interviewees were male.
presence was observed in 46.3% of the medical residents (n=36), and the remaining 56.1% were female (n=46). Concerning academic degree, 41.5% corresponded to first-year residents (n=34), 51.2% to second-year residents (n=42), 1.2% to third-year residents (n=1) and 6.1% to residents of high specialty courses (n=5). The specialties results are shown in Table 1.

When asked about the time of discharge, 31.7% reported that they did not have a specific time (n=26), 26.8% indicated that they stayed at least eight hours in the hospital (n=22), 31.7% stayed more than twelve hours in the hospital, while 36.5% stayed between eight and twelve hours in the hospital. When the dimensions were analyzed separately, it was found that in the depersonalization category, 14.6% presented a low degree (n=12), 36.6% presented a medium degree (n=30) and 48.8%, a high degree (n=40). In personal fulfillment, 71.65% of physicians presented a mild degree (n=59), 22.15%, a medium degree (n=18) and 6.3% presented a high degree (n=5). Regarding emotional exhaustion, 17% had mild exhaustion (n=14), 32%, medium (n=26) and 51% had high exhaustion (n=42).

When analyzing the results of workplace harassment in terms of sexual harassment, this was present in 43.9% (n=36), a figure that ranged from little violence to dangerous violence, (Figure 1).

Another relevant result was the presence of physical violence, which was found in 48.8% of the medical residents (n=40); 18.3% reported receiving excessive violence (n=15) and 13.4%, dangerous violence (n=11), these results are detailed in Figure 2.

Other relevant aspects of workplace harassment are listed below. In relation to the frequency of verbal violence, its presence was observed in 46.3% of the medical residents; in 14.6% there was very little violence and in 12.2%, signs of violence. When questioned about the presence of threats, it was observed that they were present in 30.5% of the studied personnel; in 11% violence was observed in the threats and in 6.1% there was excessive violence in these threats. When studying the frequency of isolation, it was found that it also exists in 30.5% of the personnel surveyed. Similarly, in 11% there is violence in isolation and in 6.1% there is excessive violence. Regarding impaired communication, it was found that 29.3% of respondents report this problem. It was observed that there is violence in impaired communication in 11% and in 9.8% there is excess violence in impaired communication. In creating guilt, it was observed that 36.6% of the medical residents presented it. There is also evidence of violence in creating guilt in 8.5% of the cases.

The specialties with the highest rates of sexual harassment, dangerous violence and physical violence were Anesthesiology, Internal Medicine and Pediatrics. Regarding sexual harassment, nearly half of the Anesthesiology residents reported having suffered it and one resident reported dangerous violence; among the Pediatrics residents, half reported sexual harassment and two reported dangerous violence; as for physical violence, fourteen anesthesiology residents reported it and half had dangerous violence. In the case of internal medicine, all residents reported having suffered violence and two reported dangerous violence.

Discussion

In relation to the results of the professional burnout syndrome, it was found that the total prevalence was 43.9%, only 6% of the medical residents had a high personal fulfillment, about a quarter of them reported having a medium personal fulfillment, while about 70% reported having a low personal fulfillment. Studies carried out around the world show a frequency of professional burnout syndrome in health personnel of around 35%. Although the data presented in this study do not allow inferences to be drawn about a higher prevalence of professional burnout in the study sample, compared to other countries, it does put into context a problem of great interest in the medical field: the quality of academic preparation during medical residencies and how this is deteriorated by professional burnout, which significantly affects the provision of medical services in the short and medium term. Something that could explain the problems addressed in this study is that it was carried out in a third level medical unit, located in one of the most dangerous and violent municipalities in the country, a situation that could affect the mental health of the medical personnel in training and the permanent personnel who work there. As part of the strategies globally suggested for the management of this syndrome, a personal process of adaptation of expectations to reality and a balance of vital areas such as family and work is proposed.

As for workplace harassment, it has been pointed out that it occurs more frequently in medical students than in other careers and is “justified” due to the high degree of responsibility for the health and life of other people, of which a mistake is not even tolerable. Several studies show that mistreatment is a common practice, both in undergraduate as well as in the specialization period. This is worrying because if such mistreatment becomes normalized, it can have a significant impact on medical professionalism.
Table 1. Medical Residents Specialties

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Surgery</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>Spine Surgery</td>
<td>4</td>
<td>4.9</td>
</tr>
<tr>
<td>General Surgery</td>
<td>4</td>
<td>4.9</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>5</td>
<td>6.0</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>6</td>
<td>7.3</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>6</td>
<td>7.3</td>
</tr>
<tr>
<td>Gynecology and Obstetrics</td>
<td>7</td>
<td>8.5</td>
</tr>
<tr>
<td>Traumatology and Orthopedics</td>
<td>7</td>
<td>8.5</td>
</tr>
<tr>
<td>Imaging</td>
<td>9</td>
<td>11.0</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>16</td>
<td>19.6</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>16</td>
<td>19.6</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 1. Workplace Harassment. Sexual Harassment in Medical Residents

Figure 2. Workplace Harassment. Physical Violence in Medical Residents
Professional Burnout Syndrome and Workplace Violence Harassment in Medical Residents


It is important to point out that these two entities are sometimes not recognized; for example, burnout syndrome is not recognized by ICD-10 or DSM-V, despite having a high prevalence among healthcare personnel, as shown in the literature. It could be advisable for the damage and sequelae caused by workplace harassment to be considered as occupational accidents or occupational diseases, and to this end, the concept of occupational disease needs to be updated, as occurs in some European countries. These measures would reduce the frequency of workplace harassment in hospitals.

It is important to continue studying burnout syndrome and workplace harassment in our setting and among other health professionals, since the presence of these conditions affects the work environment. These types of problems are not confined to one region and are independent of the economic progress of the countries; for example, meta-analysis studies report prevalence rates of harassment of around 63% in different medical specialties around the world.

Workplace harassment can exist among members of the same sector and permeate to others, which leads to a vicious circle of workplace harassment regardless of the academic degree and health profession.

In several countries and institutions, efforts have been made to eliminate workplace harassment in medical training; however, they have come up against the obstacle of reproducing tacitly learned patterns and due to the “as I experienced it, now it is your turn”.

On the other hand, in Argentina, the legislation regulating medical residencies provides for a mandatory rest day after a 24-hour on-call day, known as “post-call rest”. In a study conducted by Burgos et al., it was found that the frequency of professional burnout syndrome decreased statistically significantly after the implementation of post-call rest.

Although the subject of this research has been extensively studied, unfortunately it is still current, hence the need to conduct studies that serve to generate policies focused on the eradication of this problem. The single-center nature of this research, the type of sampling and the dynamics of the application of the instruments are recognized as limitations, which can generate important biases and prevent its extrapolation to other study scenarios.

**Conclusion**

A high frequency of burnout syndrome was found, as well as of workplace harassment, with the highest frequency of sexual harassment and physical violence.

It is known that burnout syndrome and harassment in the medical field are frequent; however, there are few or no policies in this regard in universities and health institutions, so this problem should be addressed in greater depth in order to ensure successful medical training.

Dedicated to Doctor Daniel Godínez Roicas, physician, father, family man, and role model for future generations of Family Physicians. He has not died, he just left early.

*It was there where Alvargonzález, from the pride of his orchard and the love for his own, drew dreams of greatness.*

Antonio Machado

**References**