

Healthy lifestyle habits and knowledge about access to social welfare services in officials of the National Police University of Honduras

Darío Manfredo Mejía Díaz¹[0009-0003-3133-680X], Digna Azucena Aguilera³[0000-0002-0903-8529], Leoncio Obed Díaz³ [0009-0000-4218-4440], Andrea Paola Zelaya² [0009-0009-0491- 4911], Reina Gertrudis Aguilar²[0009-0009-5471-3958], Luis Gerardo Reyes Flores⁴[0000-0002-5399-2766]

¹ Faculty of Legal and Social Sciences, Universidad Nacional de la Policía de Honduras, da-
rio.mejia020@unph.sep.edu.hn

² Academic Vice Rectorate, Universidad Nacional de la Policía de Honduras,
andrea.zelaya562@unph.sep.edu.hn y reina.agui-
lar016@unph.sep.edu.hn

³Vice-rectory of Liaison and Citizen Culture, Universidad Nacional de la Policía de Honduras,
digna.aguilera247@unph.sep.edu.hn, leon-
cio.diaz191@unph.sep.edu.hn

⁴Office of Scientific Research and Communication, Universidad Nacional de la Policía de Hon-
duras
luis.reyes067@unph.sep.edu.hn

Abstract. Healthy lifestyle habits are closely linked to the quality of life in several fields, even more in university students. The objective of this study was to diagnose the level of knowledge and interest in social welfare services and healthy lifestyle habits in officials of the National Police University of Honduras (UNPH). Methodologically, a quantitative approach was used at a descriptive level and a convenience sample of 78 participants was considered, to which two instruments were applied, the first related to anthropometric measurement, based on BMI, ICC and PA, followed by a self-report of 13 items about knowledge related to social welfare services and 17 items of knowledge about healthy lifestyles. The results reached a Cronbach's Alpha of 0.83, likewise an average of 1.8 was obtained in terms of knowledge of social welfare services and an average of 2.3 in interest in healthy lifestyles. It is concluded that the participants have a medium level of knowledge about social welfare services, surpassed by interest in healthy lifestyle habits, a favorable scenario to implement programs of this nature.

Keywords: habits, health, personal and social well-being

1 Introduction

The officials who currently conform the UNPH team work carry out both academic and administrative tasks, that, like any activity, carry multiple risks since injuries can result from physical training or even some inherent to patrolling, when required in case of police officers, such as risks of cardiovascular diseases or other related to life styles.

2 Theoretical framework

Police work due to nature presents a greater risk of musculoskeletal injuries (Violante et al., 2017), traumatic injuries, such as fractures or gunshot wounds, as well as risks associated with mental health (anxiety disorders and depression) due to the stress that causes such labor (Shi et al., 2019) Police officers are exposed to a variety of toxic substances, such as lead and mercury, which can have long-term negative effects on their health (Randoja et al., 2019), as well as to substances such as exhaust fumes from vehicles, which can affect their respiratory health. Night work also implies a higher risk of suffering from sleep disorders and related problems, such as obesity and diabetes (Randoja et al, 2019).

On the other hand, Teaching personnel have a higher risk for suffering anxiety and depression disorders due to workload (Garcia-Izquierdo et al., 2019) and pressure to fulfill academic expectations. Moreover, they are exposed to a variety of toxic substances (Gómez et al., 2018), such as dust and chemicals products in laboratories, which might have negative effects on their respiratory health and skin. As well as cardiovascular diseases (López-García and collaborators, 2018) related to sedentary lifestyle (obesity and diabetes).

3 Method

A quantitative approach was applied, at a descriptive level, for this purpose a convenience sample of 78 participants was taken, to whom two instruments were applied, one of them of anthropometric measurement, consigning three aspects: a) BMI, b) ICC and c) BP, in a second approach, a conventional self-reporting instrument was used to consult people which is made of 30 items, of which 13 items are oriented to knowledge and 17 to interest, thought a Likert scale from 1 to 3. Previous to the instrumental application, a respective consent was requested from consulted people for the subsequent publication of the results.

4 Results

Following The main results obtained by means of the instrumental application are detailed, being in the first instance those referring to the anthropometric measurement and subsequently the self-report:

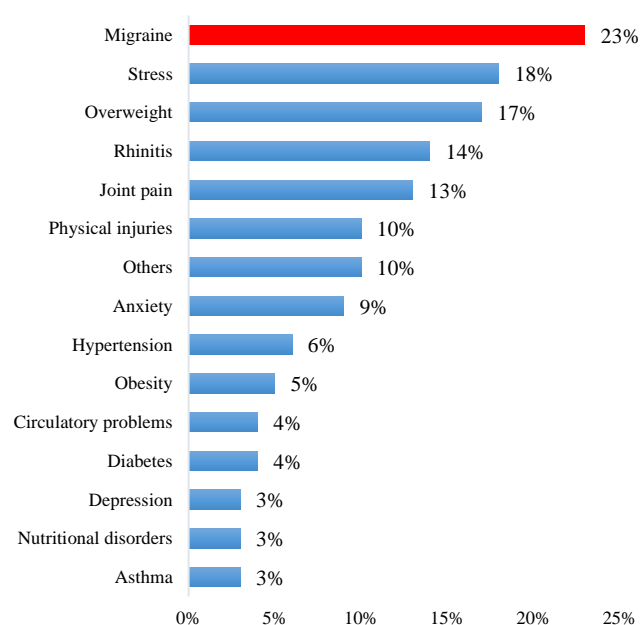
Table 1

Anthropometric measurement according to gender and category of official

Gender	Propension		
	Obesity (BMI)	Waist hip Index (WHI)	Hypertension (BP)
Female	60%	57%	55%
Male	40%	43%	45%

Category	Propension		
	Obesity (BMI)	Waist hip Index (WHI)	Hypertension (BP)
Female	44%	45%	55%
Male	65%	55%	45%

According to the anthropometric measurements, the female population presents a higher tendency towards obesity and a slight difference related to the Waist-Hip Index (WHI) and a moderate difference regarding to Blood Pressure (BP). At the level of officials' category, a tendency towards obesity is observed and the WC is more accentuated in the auxiliary staff as opposed to the police personnel, moreover BP levels are higher in the police staff.

**Figure1**

Main ailments self-reported by UNPH officials

Trough The self-report is observed that three conditions stand out in the population which are migraine, stress and overweight, possibly due to the work dynamics related to academic or administrative activities and the absence of healthy lifestyles.

Table 2

Mean and percentage score of knowledge and interest dimensions

Dimension		Knowledge level			\bar{x}	%
		Low	Moderate	High		
Knowledge about health services	Health services provided by the Police Health Department	37%	0%	63%	1.63	54%
	Health services provided by the Police Education Directorate	13%	44%	43%		
	Health services provided by in the Honduran Institute of Social Security	25%	55%	21%		
	Health services provided at the Military Hospital	64%	27%	8%		
Knowledge about pension services	IPM loans for housing and land acquisition	35%	54%	11%	1.74	58%
	IPM Loans for Debt Consolidation and Relief	37%	51%	12%		
	IPM loans for vehicles and other automobiles	55%	35%	10%		
	Retirements and pensions provided by the IPM according to age and years of service	37%	47%	16%		
	Personal loans for various purposes depending on the labor reserve	31%	45%	24%		
Permitting Knowledge	Leaving without paying for academic purposes	56%	31%	13%	2.16	72%
	Permits for the concept of study ceding without detriment to the service	53%	32%	15%		
	Permits of two hours a week to carry out physical activity and sport	53%	29%	17%		
	Permission for breastfeeding for civil servants in their postnatal period	40%	29%	31%		
		Interest level			\bar{x}	%
		Low	Moderate	High		
Interest for access to Social Security Systems	IPM credit access system for housing and/or land	21%	32%	47%	23	78%
	IPM credit access system for debt consolidation	19%	43%	38%		
	Financial education and counseling program to avoid indebtedness	31%	23%	46%		
	Delve into the type of permits granted by the institution according to law	11%	28%	61%		
	Retirement and pension system and the calculation according to seniority	8%	22%	70%		
Interest in mental and occupational health services	Personal counseling program focused on mental health	18%	31%	51%	2.26	76%
	Personal counseling program focused on health, physical culture	15%	32%	53%		
	Personal nutritional and nutritional counseling program	15%	31%	54%		
	Counseling program for sports activity and personal defense	19%	28%	53%		
	Oral health, hygiene programs and dental services	14%	24%	62%		
	Access physical rehabilitation programs for bone injuries	18%	30%	53%		
	Emotional and/or family psychological approach programs	23%	35%	42%		
	Program for managing addictions to smoking and/or alcoholism	30%	24%	26%		
	Addiction management program and healthy lifestyles	30%	36%	34%		
	Family and/or personal counseling programs for personal well-being	24%	38%	38%		
	Legal Assistance Programs for Police Officers and Auxiliar Staff	19%	32%	49%		
	Work incentive programs based on professional merits	14%	23%	64%		

* IPM (Institute of Military Forecast)

A high interest in the adoption of healthy lifestyles was identified versus a moderate knowledge of the health services offered in the institution. However, there is average knowledge about the of loan system, retirements, licenses and paid permits. A mean of 1.8 was obtained related to knowledge of social welfare services and a mean of 2.3 in interest in healthy lifestyles, equivalent to 61% and 77% respectively, which can be seen disintegrated into subscales in the previous table.

5 Discussion

Health problems are linked to sedentary lifestyles or overwork, which also in the academic field is a constant among police and academic teachers. In this case, stress (Coletti and collaborators, 2013) is one of the most predisposing risk factors, underlying

other factors related to personality, family history, childhood events and unpleasant experiences in daily life (Rodrigues and collaborators, 2020), it is not rejected that in the case of migraine and obesity it is also due to hereditary factors and lifestyles of the officers in this case.

A study carried out on police officers by Vargas (1985), reveals that the consumption of certain foods might increase blood pressure levels (salt, tobacco and coffee) which contrasts with this study, especially since police officers denote a high interest in personal nutritional advice and the adoption of healthy lifestyles.

6 Conclusion

There is a contrast between the anthropometric measurement and the self-report of ailments that demonstrate an unhealthy lifestyle among police officers and assistants (both academic and administrative) that require of applying dissemination mechanisms and approach to the problem, which allow revision of eating patterns and physical exercise as a measure of health. In the same way, stress can contribute negatively to the increase in BP and other ailments, therefore the organizational culture must contribute to it.

As a Conclusion the body mass index (BMI), waist-to-hip circumference (WHI) and blood pressure (BP) are measures related to physical health and may be influenced by healthy lifestyles, exercise and social welfare.

7 Limitations and Future Research

No limitation was faced, however, it is recommendable a second stage with a qualitative approach also with a clinical evaluation.

References

- Coletti Escobar, GL, (2013). The stress of university professors at the National University Hermilio Valdizan - Huanuco. *Investigation Valdizana*, 7(1), 70-75
- Garcia-Izquierdo, M., et al. (2019). Prevalence of anxiety and depression among university professors: a systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, 16(16), 1-14.
- Gomez, M., et al. (2018). Occupational exposure to hazardous substances in university laboratories: a systematic review. *Occupational Health Journal*, 60(1), 1-12.
- López-García, E. (2018). Sedentary lifestyle and cardiovascular risk in university professors: a cross-sectional study. *BMC Public Health*, 18(1), 1-9.
- Randoja, J., et al. (2019). Occupational exposure to toxic substances among police officers: a systematic review and meta-analysis. *Occupational Health Journal*, 61(1), 1-13.
- Rodrigues, Louise Tatiana Mendes, Lago, Eliana Campelo, Landim Almeida, Camila Aparecida Pinheiro, Ribeiro, Ivonizete Pires, & Mesquita, Gerardo Vasconcelos.

- (2020). Stress and depression in teachers of a public educational institution. *Global Nursing*, 19(57), 209-242. Epub Mar 16, 2020.<https://dx.doi.org/eglobal.19.1.383201>
- Shi, J., et al. (2019). Prevalence of depression and anxiety symptoms among police officers in China: a systematic review and meta-analysis. *PLOS ONE*, 14(8), e0221155.
- Vargas (1985) Incidence of arterial hypertension in active police personnel nationwide. *Police Force Health Services Magazine*, 46(2) 142-148.<https://pesquisa.bvsalud.org/portal/resource/pt/lil-27503>
- Vila, B., et al. (2017). Shift work and sleep quality among urban police officers. *Journal of Occupational and Environmental Medicine*, 59(10), 967-972.
- Violanti, JM, et al. (2017). Police work and health outcomes: an integrative review. *Journal of Criminal and Police Psychology*, 32(1), 1-14.