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ORIGINAL

Characterization of the Health Status of 49 Families from the "Luis Carbó" Polyclinic, Havana

Caracterización del estado de salud de 49 familias de la Policlínica "Luis Carbó", La Habana

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ABSTRACT

Introduction: among the fundamental activities carried out by family physicians and nurses are health registration and the analysis of the health situation (AHS), which aims to identify health problems along with their causes and consequences for individuals, families, and the community as a whole, in order to develop actions that contribute to their solution.
Objective: to characterize the health status of 150 individuals belonging to Family Doctor's Office #13 of the "Luis Carbó" Teaching Polyclinic.
Method: an observational, analytical, and retrospective study with an epidemiological approach was conducted at Family Doctor's Office No. 13 (FDO #13), "Luis Carbó" Polyclinic, in the municipality of San Miguel de Padrón, Havana, during the period between March and April 2025.
Results: an aging population was found, with morbidity primarily due to non-communicable chronic diseases. Risk factors and the influences of socioeconomic conditions predominated. Strengths were identified in the compliance with some health programs.
Conclusions: the AHS constitutes an example of the highest degree of community participation to improve population health. This approach is an important instrument in the work of the basic health team.

Keywords: Health Registration; Health Status; Health Situation.

RESUMEN

Introducción: entre las actividades fundamentales que realizan los médicos de familia y las enfermeras se encuentran el registro sanitario y el análisis de la situación sanitaria (AHS), cuyo objetivo es identificar los problemas de salud junto con sus causas y consecuencias para las personas, las familias y la comunidad en su conjunto, con el fin de desarrollar acciones que contribuyan a su solución.
Objetivo: caracterizar el estado de salud de 150 personas pertenecientes al Consultorio Familiar n.º 13 de la Policlínica Docente «Luis Carbó».
Método: se realizó un estudio observacional, analítico y retrospectivo con enfoque epidemiológico en el Consultorio Familiar n.º 13 (CF n.º 13) de la Policlínica «Luis Carbó», en el municipio de San Miguel de Padrón, La Habana, durante el período comprendido entre marzo y abril de 2025.

Resultados: se observó un envejecimiento de la población, con una morbilidad debida principalmente a enfermedades crónicas no transmisibles. Predominaron los factores de riesgo y las influencias de las condiciones socioeconómicas. Se identificaron puntos fuertes en el cumplimiento de algunos programas de salud.
Conclusiones: la AHS constituye un ejemplo del más alto grado de participación comunitaria para mejorar la salud de la población. Este enfoque es un instrumento importante en la labor del equipo básico de salud.

Palabras clave: Registro de salud; Estado de Salud; Situación de Salud.

INTRODUCTION

Health is a state of complete physical, mental, and social well-being in harmony with the environment. This concept links humans as biopsychosocial beings with their own potentialities and with the environment.[1]

On the other hand, Public Health is the science and art of preventing disease, prolonging life, and promoting health through the organized efforts of the community for: environmental sanitation, control of communicable infections, and the education of individuals. Its main functions are to assess, adopt, coordinate the execution, and evaluate strategies for health promotion and quality of life, and for the prevention and control of communicable and non-communicable diseases.[1,2]

Among the fundamental activities carried out by family physicians and nurses are health registration and the analysis of the health situation (AHS), which aims to identify health problems along with their causes and consequences for individuals, families, and the community as a whole, in order to develop actions that contribute to their solution. This model develops a clinical, epidemiological, and social approach to the health problems of the individual, the family, and the community as a whole.[3]

METHOD

An observational, analytical and retrospective study with an epidemiological approach was conducted at Family Doctor's Office No. 13 (FDO #13), "Luis Carbó" Polyclinic, in the municipality of San Miguel de Padrón, Havana, during the period between March and April 2025.

The universe consisted of 829 people, distributed and grouped into 255 family nuclei, from which a sample of 150 people was taken.

Inclusion Criteria:

All inhabitants belonging to FDO#13 of the "Luis Carbó" Polyclinic.

Selection Criteria:

The 150 individuals from FDO#13 were selected intentionally and conveniently.

Exclusion Criteria:

The remainder of the population not selected.

National and international documents and literature reviews of interest were used to aid in the analysis of the obtained data. Documentary observation of individual medical records, family files, census sheets, and health action programming and control cards was also conducted. Surveys were administered to the studied population to determine the community's satisfaction with health services and to identify prevailing problems, as well as to plan educational talks addressing the main issues found. Additionally, the Health Situation Report of FDO #13 for the year 2024 was utilized.

All subjects involved in the research were asked orally for their informed consent to be interviewed and surveyed, after a prior explanation of the content and the freedom to choose their participation or withdraw if they wished. All doubts were addressed, and basic commitments to security and confidentiality were provided. The consent of the FDO #13 physician was also obtained for the application of the survey. The data obtained in the study were not used for purposes other than those declared in this research.

RESULTS

Demographic components

Age groups were structured in five-year intervals and divided by sex: male and female. The female sex predominated with 89 individuals (59,3 %). The age group with the highest number of individuals was ≥ 65 years with 23 people (15,3 %). (table 1)

Table 1. Distribution of the population by sex and age

Age groups (years)	Male		Female		Total	
	No	%	No	%	No	%
0 - 4	2	3,28	2	2,25	4	2,67
5 - 9	2	3,28	4	4,49	6	4,00
10 - 14	3	4,91	7	7,87	10	6,67
15 - 19	5	8,20	6	6,74	11	7,33
20 - 24	3	4,91	5	5,62	8	5,33
25 - 29	2	3,28	7	7,87	9	6,00
30 - 34	2	3,28	4	4,49	6	4,00
35 - 39	5	8,20	5	5,62	10	6,67
40 - 44	3	4,91	4	4,49	7	4,67
45 - 49	5	8,20	10	10,2	15	10,0
50 - 54	6	9,84	8	8,99	14	9,33
55 - 59	5	8,20	9	10,11	14	9,33
60 - 64	7	11,5	6	6,74	13	8,67
≥ 65	9	14,8	14	15,7	23	15,3
Total	61	40,7	89	59,3	150	100

The population pyramid graphically represents the population. It is a pyramid with a narrow base and a wide apex, indicating that the majority of the population is over 50 years old and falls within the 65 and over age range; therefore, it depicts a population that is progressing towards aging. (figure 1)

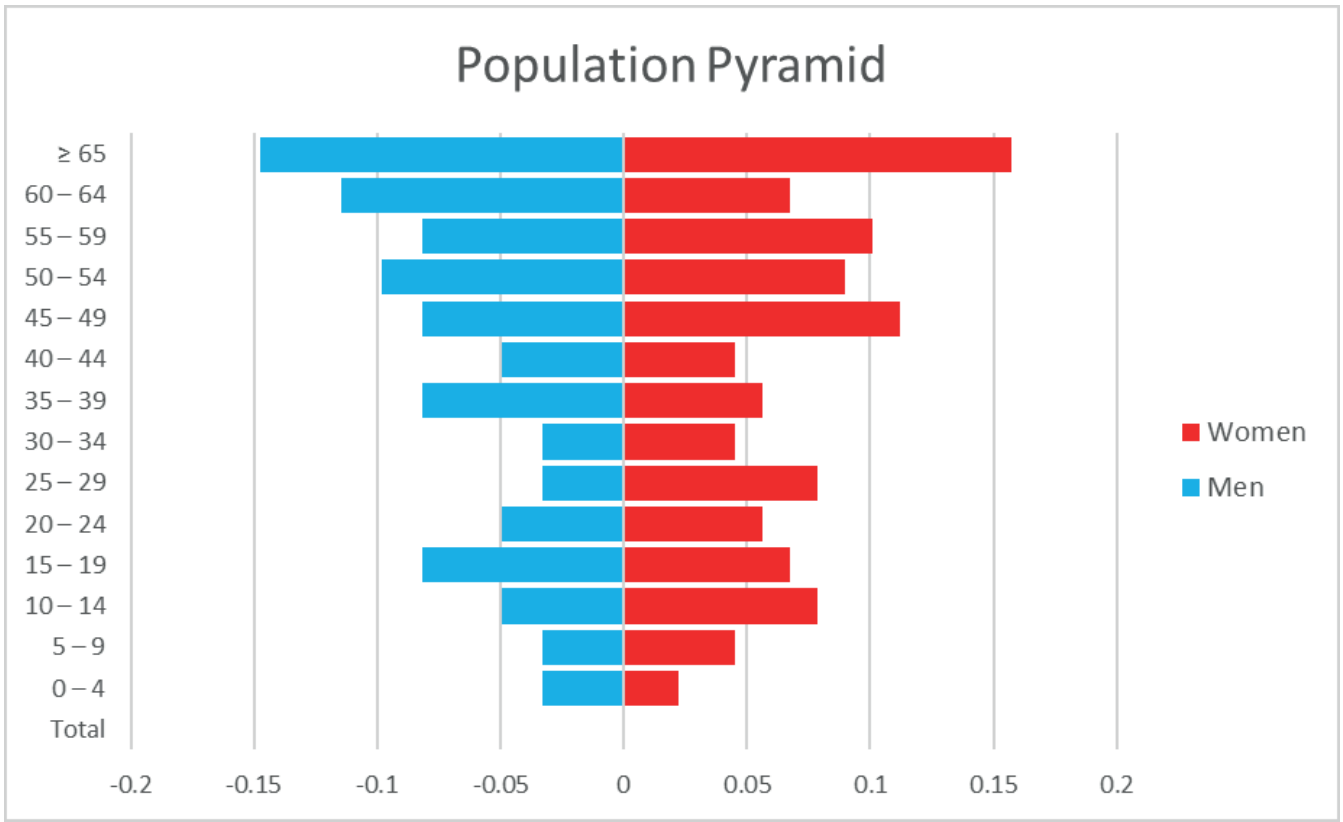

Figure 1. Population Pyramid

There were 3 international migrations, constituting 2,00 % of the studied population, predominating in the 20 to 34 age group, with 2 females and 1 male. No national migrations were recorded.

Regarding natality and mortality, in the analyzed period there were no births. One death was reported due to Cerebrovascular Disease, with the place of death being the home. The infant mortality rate in the analyzed

period was 0. The crude mortality rate for the analyzed period was 0,6 per 100 inhabitants, and in the period for comparison, it was 1,7 per 1 000 inhabitants.

Crude Mortality Rate (CMR) = (Number of Deaths / Total Population) x 100
CMR = (1 / 150) x 100
CMR = 0,6

In the sample taken from the total population, there were no pregnant women or postpartum women during the study period; these data are indicative of the existing low birth rate.

It was found that there are a total of 41 women of childbearing age (15 to 49 years), representing 46,1 % of the total female population. Of these, 20 are in their peak fertility period (18 to 35 years), representing 48,8 % of women of childbearing age, who are under control and with whom health promotion activities and discussions on the primary care of a newborn are conducted, in addition to talks on the prevention of sexually transmitted diseases. Only 4,88 % of the total women of childbearing age are not under control, meaning 2 of them.

Based on the data provided by the physician and obtained from medical records, it was concluded that the majority of the population is of normal weight; there are some overweight individuals and only a few are obese due to their genetic constitution; despite this, satisfactory results are observed in the promotion and prevention of obesity.

In the studied population, it is concluded that most disabilities are a consequence of population aging, because a large number are over 60 years of age, and with this, changes such as decreased vision, slower gait begin to manifest, all consequences of degenerative changes typical of age. One disabled person was detected, a 61-year-old man with an amputation of the left lower limb, which was amputated as a result of a work accident more than 10 years ago. This patient receives periodic home visits and others at the clinic, and he maintains a good attitude and has always integrated very well into society and daily activities at home from his condition. Work with disabled individuals should continue, providing them with the necessary physical-mental health attention. No new cases of disability were registered during the current study period.

Social intermediary determinants of health

A total of 49 homes were visited. All were masonry houses, with bathrooms inside the home, a kitchen, mostly with more than 2 rooms, with good lighting and ventilation. Regarding the overcrowding index, it was observed that of the 49 homes visited, 4,08 % presented it, which translates to 2 houses, constituting a risk factor for the appearance and transmission of communicable diseases of digestive and respiratory origin. The rest, 95,9 %, translating to 47 homes, showed no signs of overcrowding.

100 % of the population receives water from the aqueduct and chlorinated, which is good because it protects the community from outbreaks of waterborne communicable diseases; they also have toilets within the home for the correct disposal of feces and urine. Liquid waste is disposed of through the sewer system. Garbage is collected at home in bags, containers, or nylon baskets to then be disposed of in the community trash bins. Vectors such as rodents, cockroaches, and mosquitoes exist, but not in significant quantities to cause a series of vector-borne diseases.

The predominant educational level of the studied population is the 12th grade, with 24 men and 37 women having completed studies up to this level, representing 39,3 % and 41,6 % respectively of the total sample; and, in second place, are university studies with 9 men and 18 women, translated to 14,8 % and 20,2 % of the total sample population according to their sex (table 2).

Table 2. Educational level

Educational level	Male sex	% of the male population	Female sex	% of the female population	Total	% of the total population
Primary	2	3,28	1	1,12	3	2,00
Secondary	7	11,5	8	8,99	21	14,0
12th Grade	24	39,3	37	41,6	65	43,3
Technical Training	11	18,03	7	7,87	21	14,0
University	9	14,8	18	20,2	30	20,0

Despite the work of the family physician in this community, as in all settlements, inhabitants always acquire unhealthy habits that tend to harm their health because these negatively modify their lifestyles and ways of living.

It was concluded that the majority of smokers are men, with a total of 33 representing 54,1 % of the total men, showing an increase in those over 45 years. Women, on the other hand, total 37 smokers, representing 41,6 % of the total women, with an increase starting from age 45. (table 3)

Table 3. Smoking habit

Age range	Male sex	%	Female sex	%	Total	%
15-19	2	3,28	1	1,12	3	2,00
20-24	4	6,56	2	2,25	6	4,00
25 - 29	3	4,92	4	4,49	7	4,67
30-34	2	3,28	1	1,12	3	2,00
35-39	3	4,92	4	4,49	7	4,67
40 - 44	1	1,64	2	2,25	3	2,00
≥ 45	18	29,5	12	13,5	30	20,0
Total	33	54,1	37	41,6	70	46,7

Coffee consumption has increased considerably worldwide in recent years. It is consumed at any time of the day. It constitutes a risk factor for the appearance of diseases due to its excessive consumption. Its behavior is determined by the following data: 22,0 % of the sample population does not consume coffee, equivalent to a total of 33 people, while 46,0 % of it does consume more than 3 cups per day.

Regarding non-communicable chronic diseases, the relation of Hypertension with the population shows that a total of 32 individuals are hypertensive, constituting 21,33 % of the total sample population. Regarding Diabetes Mellitus (DM), there are a total of 24, for 16,0 % of the total analyzed population, and the highest number with this pathology are men, accounting for 21,3 % of the total men, that is, a figure of 13 men.

The percentages were calculated as follows:

Percentage by age range= (Age sample / Total M/F hypertensives or diabetics) x 100
Horizontal total percentage= (M/F hypertensive or diabetic sample / Total men or women) x 100
Vertical total percentage= (Sample sum of both sexes / Total population) x 100

In general, the results obtained correspond with the AHS of the Doctor's Office for the year 2024.

DISCUSION

The analysis of 150 individuals attending a family medicine unit reveals a distinctive epidemiological profile when compared to national and international benchmarks. The prevalence of older adults (15,3 %) aligns with national estimates described by Domínguez-Alonso et al.[4], but stands out by exceeding the Latin American regional average (8,6 %) reported by ECLAC[5] by almost 80 %. This finding places this population in a more advanced stage of the demographic transition.[6,7,8,9,10,11]

Demographic Configuration and Morbidity Patterns

An overrepresentation of women (59,3 %) is observed compared to the national pattern (51,2 %),[12,13,14,15] which likely influences the higher recorded demand for services.[16,17] Within the morbidity profile, hypertension (21,33 %) appears below the national report (30,9 %),[18] a result warranting further investigation in pharmacoepidemiological context described by Machado-Alba et al.[19] Diabetes mellitus (16,0 %) shows an atypical sex distribution: the prevalence in men (21,3 %) doubles that in women (12,4 %),[6,7] contradicting the global trend towards a more balanced distribution reported by the International Diabetes Federation.[8]

Risk Factors and Structural Determinants

Smoking emerges as the primary modifiable risk factor, with a prevalence (46,7 %) that triples the national average (18,6 %) and doubles the regional average (16,5 %) reported by WHO.[9] This is a critical finding demanding immediate and specific interventions,[10] given its established cardiovascular risk as documented by Rodríguez-Suárez et al.[17] Combined with the high coffee consumption (>3 cups/day in 46 % of the population) and its dose-dependent cardiovascular implications noted by Kim et al.[11], it creates an elevated cardiovascular risk profile.

Housing conditions are favorable (overcrowding at 4,08 % vs. 11,2 % national), and the group's educational capital exceeds national averages.[21,22,23,24] These are valuable assets, particularly considering the role of health literacy in chronic disease management emphasized by Santana-López et al.[12], but evidence suggests they are

not being fully leveraged for self-care and chronic condition management strategies.

Implications: A System Under Pressure

The combination of accelerated aging, a high prevalence of modifiable risks, and complex morbidity patterns projects a scenario of growing and potentially unsustainable demand for primary care, consistent with the challenges for health systems described by Hevia-Pérez et al.[10] The overrepresentation of women and the specific patterns of chronic diseases compel a re-evaluation of health programs, incorporating differentiated approaches based on sex and gender.[25,26,27,28] International experience points to service-care integration as a solution,[39,30,31,32] but its implementation here must be critical, adapting to the particularities of a system with limited resources, as discussed by Santos-Moreno et al.[25] regarding primary care's role in chronic disease management. The alternative is the progressive saturation of services.

CONCLUSIONS

The Analysis of the Health Situation (AHS) is a fundamental tool for identifying the socioeconomic, psychological, historical, geographical, cultural, and environmental determinants impacting population health. It enables the systematic identification of health problems, their underlying causes, and their consequences for individuals, families, and the broader community, thereby facilitating the development of targeted interventions. This methodology serves as a critical instrument for the primary healthcare team, guiding its strategic planning and daily activities towards a comprehensive analysis of community health issues and the implementation of effective solutions.

In conclusion, this health situation analysis reveals a population experiencing advanced epidemiological transition, characterized by aging demographics and NBD predominance, yet supported by protective environmental conditions and robust primary care infrastructure. These findings highlight both challenges and opportunities for targeted public health intervention.

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CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

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