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# DETECTION AND CARE OF NON-COMMUNICABLE DISEASES (NCDS) IN ELDERLY ADULTS IN A HEALTHCARE INSTITUTION IN MEXICO CITY: PRESENCE OF EMOTIONAL SYMPTOMS, INTERVENTION OF TWO MODELS OF CARE FOR NCDS, CONTRIBUTIONS OF PSYCHOGERIATRICS TO MENTAL HEALTH IN THIS POPULATION

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**ABSTRACT: Objectives**: To analyze and describe information on NCDs in people aged 60 and over who attend a Health Center (HC) in Mexico City, captured in the study "Living Conditions and Mental Health in Older Adults (COVYSMAM-LJ, Phase II), which includes procedures in two models of care for this population by the responsible health personnel and NCDs in the context of psychogeriatrics. **Methods:** A random record was obtained from the population of older adults who attend the HC. From this record, a convenience sample was taken by applying the questionnaire "Living Conditions and Mental Health in Older Adults" through face-to-face interviews. **Results:** The main reasons why people aged 60 and over attend the Health Center are the "control" of hypertension, diabetes, or both conditions (43.9%), with emotional symptoms detected in 52.6%, in contrast to two other identified causes of attendance. The main demographic characteristics are presented, including data from sections and items specifically selected from the instrument that inquire about self-reported living conditions and perception of health status in the context of NCDs. **Discussion:** In accordance with reports issued by international organizations and sources of information such as the Pan American Health Organization and the World Health Organization, among others, which indicate that noncommunicable diseases are important causes of morbidity, mortality, and disability in various populations worldwide, being most prevalent in the elderly population. In the present study, we found that among the main conditions for which older adults visit the health center are chronic degenerative and disabling problems, notably hypertension and diabetes, which are referred to in the self-report as visiting the institution to carry out the "control" of their chronic conditions, a fact that implies a position of "self-care and concern for their health status," which entail emotional symptoms and the implication of two models of care for their health conditions and the relationship between mental health and NCDs, from the point of view of psychogeriatrics.

**KEYWORDS:** Non-communicable diseases (NCDs), older adults, Study on Living Conditions and Mental Health in Older Adults (COVYSMAM-LJ), Health Center in Mexico City, Obesity Care Model-Module (MAO), Medical Specialties Unit Model for Chronic Diseases (UNEME EC), Mental Health, NCDs, and Psychogeriatrics.

## INTRODUCTION

The World Health Organization (WHO, 2024a) reports that noncommunicable diseases (NCDs) are currently among the leading causes of morbidity, mortality, and disability in various regions of the world. These diseases are often long-lasting

and slow-progressing, and are associated with genetic, physiological, environmental, and behavioral factors. Among the main NCDs internationally are cardiovascular problems, cancer, chronic respiratory diseases, and diabetes mellitus; overweight and obesity are identified as metabolic risk factors. This organization points out that 73% of mortality is caused by NCDs, concentrated in low- and middle-income countries. In Mexico, a recent report by the National Institute for Older Adults (INAPAM, 2024) indicates that deaths from NCDs in the general population were 80%. For the year 2023, the National Institute of Statistics and Geography (INEGI, 2023) reports that the leading causes of mortality included heart disease, diabetes mellitus, and malignant tumors.

NCDs in older age groups and the increase in the population aged 60 and over and their living and health conditions are associated with three closely interrelated indicators that provide insight into the implications of population and individual aging at the national and international levels. Information for Mexico shows an increase in the population aged 60 and over and their living conditions associated with demographic transition, where the older adult group shows sustained and constant increases in absolute and percentage terms (National Institute of Geography and Statistics-National Survey of Demographic Dynamics (INEGI-ENADID, 2023). The epidemiological transition indicates that in the case of Mexico (INAPAM, 2022), the changes observed over time have been in stages. The first stage saw high mortality, fertility, and low life expectancy, with infectious and communicable diseases as the leading cause of death. In the next stage, there was a decrease in mortality and fertility, as well as an increase in life expectancy, with the predominance of chronic degenerative and disabling diseases, currently referred to as non-communicable diseases (NCDs), being the main causes of morbidity and mortality, and the increase in life expectancy, which according to the WHO (2024b), is the average number of years an individual can expect to live from birth. With regard to life expectancy for the Mexican population, it has been estimated (INEGI, 2025) that the overall life expectancy is 75.7 years, with men living to 72.6 years and women reaching 79 years, giving rise to the feminization of aging.

Population aging in the Americas greatly increases the burden of multimorbidity, which means that a large number of adults require greater long-term care due to the possible presence of more than one chronic condition. Multimorbidity is considered a priority issue in Latin America, as evidence shows the presence of this problem in most people with chronic conditions, particularly among people aged 60 and over (Iunes; Lara; Bonilla, 2024). NCDs and mental health disorders are particularly relevant in the specific case of the AM population. Recent data from the Institute of Health Metrics and Evaluation (GHDx, cited in WHO, 2023) indicate that nearly 14% of this population group, people aged 60 and over, have a mental disorder, with depression and anxiety being the most prevalent, among other disorders, in addition to the presence of chronic diseases or conditions (mainly heart disease, cancer, and diabetes). However, they indicate that emotional disorders are commonly underestimated, unidentified, and/or untreated. They also emphasize the benefits to mental health of integration and participation in community and support groups.

In light of the above, the study "Living Conditions and Mental Health in Older Adults (COVYSMAM-LJ, Phase II)," conducted at a health center (HC) in Mexico City, recorded the reasons why people aged 60 and over attended the HC, based on self-reports. The results of the research are presented, considering as a central condition the reason why they attend and selected variables from the questionnaire used, as well as information on two models of the HC where care is provided to older adults and the relationship between mental health and NCDs from the point of view of psychogeriatrics, as shown in Figure 1.

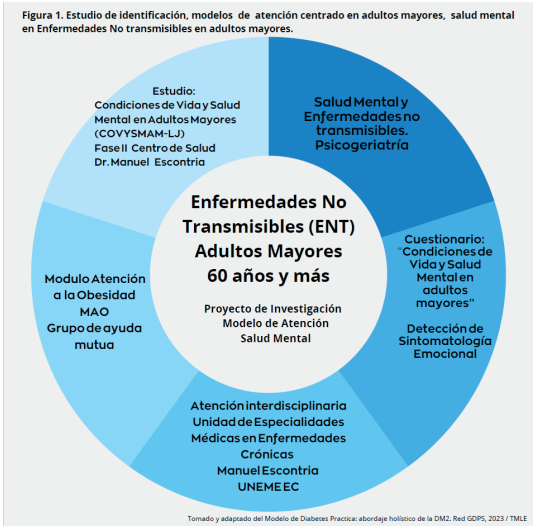


Figure 1. Identification study, models of care focused on older adults, mental health in non-communicable diseases in older adults.

For the treatment of NCDs, Dr. Manuel Escontría Health Center has two areas/models that provide, on the one hand, health promotion in the Obesity Care Module (MAO) through the activities that are implemented and, on the other hand, comprehensive care in the Chronic Disease Medical Specialties Unit (UNEME-EC), which includes care for MA who attend that health center.

In the operational programs of the Mexico City Public Health Services, Primary Health Care actions were carried out (Almedia et al., 2018) in the first-level health unit "Dr. Manuel Escontria Health Center," located in the south of the city, where the Obesity Care Model-Module (MAO) emerged and took shape. This model brought together a self-help group of people aged 60 and over who came to participate in various health promotion activities and receive care for chronic conditions between 2018 and 2020. A fundamental part of the group's objectives was to promote and influence the reduction of complications from existing NCDs in older adults, creating an environment conducive to recreation, socializing, and avoiding social isolation, preventing addiction and falls, malnutrition, oral disease, visual and hearing health, preventing communicable diseases through an immunization program focused on this population, and preventing and detecting urinary tract infections in a timely manner. After raising awareness and introducing the MAO group, and according to its characteristics, interventions were carried out by health personnel from different disciplines, with the aim of improving patient health outcomes, dentistry, nutrition, psychology, social work, UNEME EC, clinical laboratory, mammography service, nursing, and epidemiology, each of which was scheduled with a health education activity. Systematically, over a two-month period, records were taken of weight, height, arm circumference, waist-to-hip ratio, blood pressure, random glucose, detection of dental plaque, and the application of instruments to assess the existence of cognitive impairment, depression (Folstein et al., 1975), and frailty syndrome through the Guidelines: Quick Reference Guide of the Mexican Social Security Ins-

titute (IMSS, n.d., a) and Clinical Practice (IMSS, n.d., b). The practical component of the health education interventions consisted of various activities: mainly gymnastics, Zumba, and recreational activities, as well as cultural outings, thus providing a space for training in self-care. One session per week consisted of age-focused neurological coordination exercises and theoretical guidance, an informative-educational talk on a health topic, risk anticipation, and self-care, without omitting the importance of community participation.

The Manuel Escontria Medical Specialties Unit for Chronic Diseases (UNEME EC) is part of the Integrated Health Care Model in Mexico City, which has seven units located near a health center. Since 2009, they have been providing specialized medical care to adults with diabetes mellitus, systemic arterial hypertension, dyslipidemia, overweight, obesity, or metabolic syndrome. These patients are referred from primary care units or the community when they are un r uncontrolled and do not meet established therapeutic goals, providing them with comprehensive, interdisciplinary, person-centered care. The care that patients receive is through referrals from different health disciplines: Integrated Medicine, Nursing, Nutrition, Psychology, and Social Work. Care is provided by monthly scheduled appointment, including comprehensive assessment, patient education about their health, identification of barriers to therapeutic adherence, family involvement, establishment of pharmacological treatment, timely detection of acute and chronic complications of these pathologies, and cardiovascular risk assessment. In the nursing area, vital signs and somatometry are taken. A podiatric assessment is performed using instruments (nylon monofilament, tuning fork, and reflex hammer), establishing a nursing diagnosis and care plan based on the findings. The nutrition service provides individualized dietary guidance and works with the patient to determine goals and strategies for changing habits. Psychological care is based on four cognitive-behavioral aspects: self-knowledge, self-care, self-efficacy, and self-esteem, which are developed through three axes: knowing, doing, and evaluating different levels of motivation for change. A targeted search is conducted for depression, anxiety, alcoholism, smoking, eating disorders, and personality disorders. In addition, a functional assessment is performed with basic and instrumental activities of daily living, cognitive assessment, and the existence of caregiver overload. The stages of grief in which the person finds themselves are identified. During their stay in the unit, individuals attend six workshops and educational sessions on a monthly basis, which promote education about NCDs and encourage the adoption of healthy lifestyles. At the end of their therapeutic process, they are referred back to the health unit closest to their home to continue treatment. These actions are based on the manuals: implementation (SS, 2011a) and procedures of the Mexico City Health Secretariat (SS, 2011b).

In the relationship between mental health, NCDs, and psychogeriatrics, it is indicated that there is no age group in which the association between mental disorders and physical illnesses is as closely related as in old age. This seems obvious, yet even today, despite the evidence that exists in this regard, it continues to be a principle that is forgotten in everyday clinical practice, both in the private and public spheres. Thus, as a general rule, the study, management, and

rehabilitation of psychogeriatric disorders cannot be addressed without first addressing the underlying physical pathology. In other words ( ), it should be routine in the clinical study of any mental disorder to begin by inquiring about existing or newly emerging physical illnesses, as well as conducting the corresponding clinical laboratory and office studies, regardless of whether a basic physical examination should be performed, since, for example, depression or anxiety may be associated with thyroid disorders, infections, and delirium, where hypertension and diabetes emerge as risk factors for major neurocognitive disorder, among other disorders (Yahya et al., 2019; Kloppenborg et al., 2008). Special mention should also be made of the association between mental disorders in old age and the side effects of drugs which, for reasons of emerging, temporary, or prolonged treatment of NCDs, which are generally chronic, can induce psychiatric symptoms, beta-blockers and their relationship with depression, bronchodilators with anxiety, or, in general, the association between delirium secondary to the undesirable effects of biological treatments, whatever they may be. In this regard, it is important to assess the effects of psychotropic drugs for the treatment of depression, anxiety, or insomnia, three of the most common psychosyndromes in older adults, and the inevitable polypharmacy to which they are exposed due to multiple pathologies. Polypharmacy, as a premise, should always be considered and avoided as much as possible, given the side effects and drug interactions that are responsible, mainly for confusion and accidents, especially falls, with the temporary and permanent consequences that these can have (Eddin et al., 2025).

In the case of secondary psychogeriatric disorders, sometimes the only treatment required is to discontinue the drug that caused the disorder. Although a psychotropic drug may be clinically appropriate, it may appear that the dose needs to be increased. However, there are many examples where this increase is masked by the presence of symptoms that suggest a higher dose is required, when in fact what is needed is to reduce the dose or withdraw the drug altogether. An example of this is haloperidol, whose main effect is akathisia (which suggests that the agitation that justified its use is not being controlled, when in fact it is due to the side effect of the neuroleptic, so increasing the dose will only worsen the secondary response with the consequences and complications that are already imaginable). NCDs, which are so prevalent in old age, apart from having a close physiological relationship with the pathophysiology of psychogeriatric disorders, also have implications for biological treatments and are sometimes the cause and/or consequence of geriatric psychosyndromes, namely anxiety, depression, dementia, hypochondria, sleep disorders , dementia, and delirium. Therefore, the management of these disorders must include, first and foremost, the assessment of physical diseases, in this case the so-called NCDs. It should be added that treatment, and not just assessment, should include other primary (such as falls) and/or secondary prevention measures, without neglecting aspects related to rehabilitation and psychosocial intervention for both physical and mental conditions. (Anwar; Kuppili; Balhara, 2017). In the future, it will be necessary to delve deeper into the psychophysiological and psychopathological phenomena involved in the mind-body association, which permeates clinical practice, in integrating the fundamental role

that NCDs play in mental health and vice versa. In the particular case of older adults, NCDs must be discussed in the context of geriatric syndromes, which are conditions that affect older adults, often characterized by the presence of multiple interrelated health problems. Syndromes are not diseases in themselves, but rather clusters of signs and symptoms that occur together and can lead to disability and loss of independence. Definitely, NCDs in the context of geriatric syndromes and geriatric psychosyndromes can no longer and should not be excluded from comprehensive study, treatment, prevention, and rehabilitation, regardless of the fact that in recent times the idea of integrating psychiatric disorders into the same group as NCDs has begun to emerge, which is a discussion that is just beginning, but which undoubtedly seems to be a very reductionist proposal if we start from the premise that human beings are much more than matter (Stein et al., 2019).

## MATERIALS AND METHODS

The research project "Living Conditions and Mental Health in Older Adults" (COVYSMAM-LJ), now in its second phase, is part of a series of cross-sectional and descriptive-analytical studies. It should be noted that approval was obtained from the ethics and research committees of the Ramón de la Fuente National Institute of Psychiatry. Approval was also obtained from the Mexico City (CDMX) Health Secretariat for the development of fieldwork and the application of interviews at the Health Center (CS). The CDMX Public Health Services provide health care to the general population or those without social security and are organized into three strata; the first level includes Health Centers with different levels of complexity (SS, 1995).

The study population consisted of AM, people aged 60 and over who attended the Dr. Manuel Escontria (TIII) HC, located in the south of CDMX, between November 21, 2019, and March 20, 2020. From this population, a random sample of 111 older adults was obtained, who were asked and recorded the reason for attending the health center, and their basic sociodemographic data, sex, age, marital status, and education level were obtained. From the study population, a convenience sample of 82 older adults was selected and asked to participate. They were provided with general information about the objectives of the study, as well as the confidentiality and anonymity of their collaboration, clarifying that the information they provided would only be used for research purposes. Once they agreed to participate freely and voluntarily, they signed the informed consent form, were given a copy, and proceeded to the direct, face-to-face interview using the COVYSMAM-LJ instrument (López-Jiménez et al., 2024). During the application of the instrument, nursing and psychology staff with extensive experience in research, as well as in the management of methods, procedures, and the application of the questionnaire, participated.

## RESULTS

Population and sample demographic characteristics: the analysis found that both in the registered population (N= 111) and in the sample interviewed (n= 82), there was a higher representation of females, 67.6% and 74.4%, respectively. The average age was 70.1 and 70.4, with the highest percen-





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tage in both cases (28.8% and 29.3%) concentrated in the 65-69 age group. By marital status and with respect to the population, 48.6% reported being married or living in a common-law relationship, while in the sample, 39.0% reported being single, divorced, or separated. According to educational level, the population average was 7.3 and 6.6 years in the sample. In both cases, having completed nine years of schooling stood out, with 48.6% and 61.0%, respectively. It should be noted that no significant differences were found between the two situations when applying the $X^{(2)}$statistical significance test to the demographic variables included.

Of the 14 sections that make up the questionnaire, the demographic data section and those that inquired about their living conditions related to their health status through self-reporting were chosen. Thus, items were selected that explore the perception of older adults regarding their overall health, including reports of emotional symptoms, cognitive impairment, concerns, perception of health status, and how they view their health condition. The data are presented according to the questions and the most relevant percentage distribution for each response category. The information corresponds to older adults aged 60 and over who were interviewed (N=82) and its distribution with respect to the reasons or causes for which they visit the health center. In this regard, and as shown in the first table, in order of importance, the following stand out: the "control" of hypertension, diabetes, or both causes, followed by other reasons for general medical consultation and those who attend the Obesity Care Module (MAO). In this regard, it should be noted that the analyses were carried out within each of the three reasons identified, describing the most relevant category in percentage terms in each response option, which allowed us to determine the main reasons why they attend depending on their situation, as well as their associated living and health conditions.

## REASONS WHY PEOPLE AGED 60 AND OVER VISIT THE "DR MANUEL ESCONTRÍA" HEALTH CENTER (CSDME)

| REASON FOR ATTENDANCE TO THE CSDME | SAMPLE INTERVIEWED N= 82 | |
|---|---|---|
| | n | % |
| Control of hypertension, diabetes, both causes | 36 | 43.9 |
| Model-Module Care for Obesity and Overweight: MAO group activities | 22 | 26.8 |
| Other reasons for general medical consultation: pain, medical certificate, mammogram, fall, COPD, dental service, flu, triglyceride control, cholesterol, patient companion | 24 | 29.3 |

Table 1

The demographic information section (second table) includes four questions, which record the main characteristics of the respondents. With regard to gender, women predominate in each case, with percentages above 63%, and in the MAO module, all attendees were female. The estimated average "age" was 70.4 , with similar percentages for chronic conditions and the MAO module, according to the associated five-year period. In terms of "marital status," we found higher percentages among married individuals for chronic conditions and single individuals for the MAO module, in contrast to the other reason for care. Regarding "educa-

tion," the average was 6.6 years of schooling, with most having reached secondary school level in the first two cases. However, in the other reasons for consultation, a higher level of education was obtained. When considering being a "beneficiary" of a health institution, the same CS prevails mainly, and in other reasons, unlike the MAO module, those who report mainly being beneficiaries of the IMSS and where the CS emerges as the second option (22.7%).

## CHARACTERISTICS OF THE ELDERLY PEOPLE INTERVIEWED ACCORDING TO THE REASON FOR WHICH THEY ATTEND THE HEALTH CENTER)

Among the associated living conditions, the survey also explores who cares for/attends to the patient and what support they receive. Being cared for by family, spouse, children, and self-care is common among those who visit the HC for chronic problems, unlike the MAO module and other reasons for general medical consultation, where in some cases living alone is reported, so self-care predominates as a form of care both in the MAO module and in other reasons for consultation. Most of those who make up the module MAO and chronic conditions report receiving some type of support, mostly from the federal government through the welfare card. In contrast, in other reasons for care, not receiving this support prevails and is specified as not yet being of the required age to receive it (65 and over). However, of those who do receive it, 41.7% reported receiving support from the welfare card. According to the section of the General Health Questionnaire (CGS-12), which allows the presence of emotional symptoms to be established through a cutoff point of 2/3 using the No Case criterion (0-2)-Case (3 and over), it was possible to determine, based on the score obtained and in order of importance, that just over 50% of those who attend for chronic health problems presented emotional symptoms, followed by other reasons for consultation. For the MAO module, the lowest proportion of emotional symptoms was detected (Table 3). The presence of cognitive impairment assessed in the Brief Mental Examination Scale section showed that "mild" impairment was mostly found in chronic conditions, followed by the MAO module and, to a lesser extent, other reasons for medical care. It should be noted that in just over 80% of cases, no cognitive disorders were detected for the three reasons for visiting the HC.

The exploration of the Concerns Report section was based on the question: What worries you most about life, what problems do you have? It should be noted that seven areas were investigated: economic, health, housing, food, family, social, and other concerns. The total number of chronic conditions (Table 4) reported some concern, followed by other reasons for consultation, and in the MAO module, there was a decrease in the percentage of concerns reported. Of the concerns reported, family concerns were most relevant in hypertension, diabetes, both conditions, and in the MAO module. Health concerns arise in other reasons for consultation as the most relevant, however, the main concern reported in any reason is health.

The section on self-perception of health status, specifically in the physical area, is explored in the following two questions: How do you consider your current health status? Although 79% or more report their

| *COVYSMAM-LJ Questionnaire, Phase II*<br>*Item*<br>*N= 82* | *Control for hypertension, diabetes, both*<br>*Chronic conditions*<br>*n= 36 (43.9%)* | | **Obesity and Overweight Care Module, MAO**<br>**n= 22 (26.8%)** | | *Other reasons for general medical consultation*<br>*n= 24 (29.3%)* | |
|---|---|---|---|---|---|---|
| ***DATA ON INTERVIEWED PERSON*** | Category | % | Category | % | Category | % |
| **Gender**<br>How old are you?<br>**Age** (grouped in five--year increments)<br>X: 70.4 SD: 6.6 Range: 60-87 | Female<br>65-69 | 63.9<br>36.1 | Female<br>75-79 | 100.0<br>36.4 | Female<br>60-64 years<br>65-69 | 66.7<br>33.3 |
| What is your marital status? | Married | 41.7 | Single | 36.4 | Divorced, separated | 33.3 |
| **What was the last year you passed in school?**<br>X: 6.6 DS: 4.1 Rank: 1-18 | 9 years of schooling, Secondary level | 55.6 | 9 years completed, Secondary level | 48.0 | Bachelor's degree level (15 years of study) | 66.7 |
| **Are you entitled to healthcare from any institution?** | Health Center | 77.8 | IMSS | 40.9 | Health Center | 45.8 |

Table 2

| *COVYSMAM-LJ Questionnaire, Phase II*<br>*Item*<br>*N= 82* | *Control for hypertension, diabetes, both*<br>*n= 36* | | **Obesity and Overweight Care Module, MAO**<br>**n= 22** | | *Other reasons for general medical consultation*<br>*n= 24* | |
|---|---|---|---|---|---|---|
| | Category | % | Category | % | Category | % |
| LIFE CONDITIONS ASSOCIATED | | | | | | |
| **Who is currently caring for you? (no one, lives alone)** | Spouse and children, self-care | 52.8 | Self-care, him/her, lives alone | 50.0 | Self-care, he/she, lives alone | 62.5 |
| **Do you currently receive any kind of support?** | Yes | 52.8 | Yes | 95.5 | No | 58.3 |
| **Which one and from whom?** | Government, Welfare Card | 84.2 | Government, Welfare Card | 76.2 | Government, Welfare Card | 80.0 |
| **Why? Specify** | Because of age | 54.3 | Because of age | 90.9 | Not old enough yet | 58.3 |
| GENERAL HEALTH QUESTIONNAIRE (GHQ-12), version 12 items, (Mari & Williams, 1985) | | | | | | |
| Emotional symptoms<br>Cut-off point of 2/3<br>Criteria for No case (0-2), Case (3 and above) | Meets case criteria, score of 3 or more | 52.6 | Meet case criteria, score of 3 or more | 15.8 | Meet case criteria, score of 3 or more | 31.6 |
| BRIEF MENTAL EXAMINATION SCALE, EBEM (Sosa, 1997) | | | | | | |
| **Cognitive impairment** | Mild impairment<br>No deterioration | 19.4<br>80.6 | Mild impairment<br>No deterioration | 18.2<br>81.8 | Slight deterioration<br>No deterioration | 12.5<br>87.5 |

Table 3

health as "good to very good," we also find reports of "very poor to poor," highlighting in this regard that, according to the percentage obtained, it stands out in other reasons for consultation, followed by the control of hypertension, diabetes, and both, and to a lesser extent, those who attend the MAO module. The next question investigates how often health problems prevent you from doing things you need or want to do. In the first two reasons, it stands out that "rarely" do health conditions prevent you from doing things; however, for the other reasons for care, it is "frequent to very frequent" that health problems prevent you from doing things you need or want to do. Finally, from the Quality of Life Questionnaire (WHOQOL-BRIEF, 1996) section, the first two questions are taken up again: Are you currently ill? In all three situations, 59% or more respond affirmatively. however, it is noteworthy that more than 40% of people in the MAO module report having no health problems, with similar percentages reported for other medical conditions and chronic ailments. Medical problems are mainly reported in the question: If something is wrong with your health, what do you attribute it to (an illness/problem)?

In general, the most relevant categories and percentages for each variable are shown in each case.

## DISCUSSION

The study of aging, old age, and older adults is currently a focus of interest in various scientific disciplines and fields of knowledge, given its impact on all areas of human life. In this context, the study "Living Conditions and Mental Health in Older Adults" is part of a line of quantitative research developed at the INPRFM. Its first phase was carried out in a social welfare institution for people aged 60 and over living in a nursing home (López-Jiménez et al., 2008). The purpose of the current phase was to include the non-institutionalized general population, specifically older adults who attend a health center in Mexico City. It should be noted that during the information gathering phase, when interviews were being conducted in the field, a national and international health emergency was declared due to the SARS-CoV-2 (COVID-19) virus epidemic. In the specific case of Mexico, the Ministry of Health and INPRFM authorities decreed a lockdown of the population, Fieldwork had to be suspended (March 20, 2020), which limited the completion of 150 interviews, achieving just over 50% (N= 82) of the proposed interviews at that time. This situation restricted the overall context of having enough interviews and conducting statistical analyses that were not only descriptive in nature.

Among the methodological considerations, it was determined in both phases that the pace of the interviews was slow and deliberate and that dichotomous response options (yes-no, presence-absence, among others) favored their choice, in contrast to the Likert-type format. With regard to demographic characteristics and in line with what is described in the literature, there is a predominance of females in the older adult population, regardless of the reason. The average age reported was 70.0, although younger populations (60 to 69 years old) were observed in the other reasons, and those attending the MAO module were older, aged 75-79 years, which may be related to the fact that the group has been in existence for several years and that older people con-

| *COVYSMAM-LJ Questionnaire, Phase II* | *Control for hypertension, diabetes, both* | | **Obesity and Overweight Care Module, MAO** | | *Other reasons for general medical consultation* | |
|---|---|---|---|---|---|---|
| *N= 82* | *n= 36* | | **n= 22** | | *n= 24* | |
| | Category | % | Category | % | Category | % |
| ***CONCERN REPORT*** | | | | | | |
| **Reporting concerns** | Yes | 100 | Yes | 86.4 | Yes | 95.8 |
| **What worries you most about life? What problems do you have?** | Family | 75.8 | Family | 80.0 | Your health | 79.2 |
| **Main concern** | Your health | 33.3 | Your health | 47.4 | In their health | 60.9 |
| **SELF-PERCEPTION OF HEALTH STATUS** (Physical health). (CONAPO-DIF, 1994) | | | | | | |
| **How would you rate your *current* health status**? | Very poor/ Poor | 19.4 | Very poor/ Poor | 4.5 | Very poor/ Poor | 20.8 |
| | Good/ Very good | 80.6 | Good/ Very good | 95.5 | Good/ very good | 79.2 |
| How often do health problems prevent you from doing things **you need or want to do**? | Rarely | 72.2 | Rarely | 54.5 | Frequently/ very frequently | 50.0 |
| **QUALITY OF LIFE (WHOQOL-BRIEF).** (Program on Mental Health, WHO, 1996) | | | | | | |
| **Are you currently ill**? | Yes | 69.4 | Yes | 59.1 | Yes | 66.7 |
| | No | 30.6 | No | 40.9 | No | 33.3 |
| **If something is wrong with your health, what do you attribute it to (an illness/problem)**? | Medical Problems | 40.0 | Medical Problems | 84.6 | Medical Problems | 50.0 |

Table 4

sider it their own meeting place. In terms of marital status, the participants reported being divorced, separated, single, and married. Although the average level of education was 6.6 years, the first two reasons were found to have completed at least 9 years of schooling.

It is noteworthy that when asked about their reasons for attending the health center, people cited "management of chronic conditions," hypertension, diabetes, or both conditions, which are classified as NCDs and were reported as the main reasons for attendance (44%). The fact that they specifically referred to "control of their health condition" leads us to believe that they are concerned (100%) about their health and take care of themselves, as observed in the three reasons, as well as the care provided by the CS, since they consider themselves beneficiaries of that center, even though they also have health benefits at another institution (IMSS), which is reflected in the information collected in the questionnaire. Regarding the estimated presence of emotional symptoms, although there are percentage differences, chronic conditions have the gre-

atest impact on their health, as 52.6% were classified as "cases" with emotional symptoms. It is noteworthy that only 15.8% of those who attend the MAO module report emotional symptoms, and this could be due to the health promotion activities carried out in that module. With regard to multimorbidity, we can highlight, on the one hand, the reporting of chronic problems and, on the other, their association with mental disorders, as two conditions would be present in their health.

Among the benefits and impact of the UNEME-EC module in caring for the population, particularly the elderly, the comprehensive care provided stands out, which has a direct impact on their health and well-being in terms of NCD care.

The description of the profile of users of the Dr. Manuel Escontria Health Center, based on demographic and socioeconomic variables and their living and health conditions, shows the importance of taking these approaches in order to determine and implement care measures related to the reasons why the population uses primary health care services and the importance of considering mental health and community participation as a pillar of health. which contributes to the creation of a model of care for NCDs for AMs, with a comprehensive approach to care in its components: mental health, physical health, and social health. It is important to note that, through membership in the mutual aid group, MAO model, it was possible to facilitate the use of preventive and curative services by providing members with advice on how to use them, promoting participation in health care levels, specifically between the INPRFM (third level), the UNEME EC model, and the C.S. TIII Dr. Manuel Escontria (first level).

Based on the above, the study provided relevant information on health problems that impact and affect the AM population that attends a Health Center in Mexico City, in addition to contributions in the descriptions of activities and actions to promote their health that are implemented in the MAO module's self-care training, in the comprehensive care provided to the population through the UNEME EC model, and in mental health and noncommunicable diseases from a psychogeriatric perspective. It is important to emphasize that, from the analysis of data in the context of the living and health conditions of older adults in the framework of NCDs, the research provided relevant information on various aspects related to their demographic characteristics, the care and support they receive, emotional symptoms, cognitive impairment, reported concerns, self-perception of physical health status, and how they position themselves in the realm of their health.

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