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Full Length Research Paper

Epidemiological profile of a Community of the marginal area of the State of Guerrero, Mexico.

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Introduction: In the area of primary health care, the analysis of the situation is known as a community health diagnosis, understood as "the process of data collection and its subsequent transformation into information, which allows assessing the problems and needs Health of the population and the factors that determine them". Health is a dynamic process in which various factors intervene. Man is part of a community with defined social and cultural patterns, whose life in common influences his health. The objective of the research was to: Identify the needs and / or problems in the population, through the application of the integral health diagnosis methodology, to propose viable and feasible alternatives in the care of the identified situation. **Material and Methods:** Cross - sectional, observational and descriptive study, carried out by population census of the marginal area of the city of Chilpancingo de los Bravo, in the state of Guerrero. **Instrument:** Microdiagnostic card from the Health Department modified for this study. **Results:** the female population was predominantly female (52.4%). The most frequent social problems found were: in adolescents unwanted pregnancies, consumption of legal and illegal substances. In adults, chronic degenerative diseases, such as diabetes mellitus and hypertension, which correspond to the first causes of national morbidity. The population lacks social security health services, and highlights the lack of organized social response to the disease.

Keywords: diagnosis, health, problems.

INTRODUCCION

The analysis of the health situation is based on an ecological concept based on the epidemiological model of

multicausality, so that the level of health of a community like a person will be determined by the intervention of different factors that vary in intensity and for varying periods of time They exercise their action on the population. It has been identified that three possible

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alternatives can be used to measure health: measure it positively trying to directly quantify the degree of well-being for the people; negatively assessing their loss (morbidity and mortality); or indirectly through the study of all those factors that determine the level of health (Ramos, 2001). The World Health Organization (World Health Organization [WHO], 2013) states that there are 1.7 million cases of diarrheal diseases every year in the world, which is one of the main causes of malnutrition in children under five years. Acute Diarrheal Disease (EDAS) is the second leading cause of death in children under the age of five, resulting in the death of 760,000 children, but is preventable through access to safe drinking water and adequate sanitation and hygiene services. In Mexico, Acute Respiratory Infections (ARAS) represent an important public health problem and are the highest cause of morbidity in the country, as well as the first cause of consultation in health centers (Secretary of Health [SSA], 2013). In 2013, the incidence by IRAS and EDAS mainly affected the group of children under one year of age (110 743 and 16 519 new cases per 100 thousand people of the same age group, respectively). The mortality rate by IRAS was 78 deaths for every one hundred thousand children under one year, against 28 for every 100 thousand children by EDAS for the same year (National Institute of Geography Statistics [INEGI], 2015).

With regard to the adult population there are several problems, some reports indicate that one in three adults have high blood pressure, 17.7 million people died in 2008 from cardiovascular diseases. 80% of deaths due to noncommunicable diseases occur in low and middle income countries (World Health Organization [WHO], 2017). The worldwide prevalence of Diabetes Mellitus in adults increased to 8.5% in 2014; being faster in the middle and lower income countries. DM is one of the main causes of blindness, kidney failure, myocardial infarction, stroke and amputation of the lower limbs. It is estimated that in 2012 it was the direct cause of 1.5 million deaths, and another 2.2 million deaths were attributable to hyperglycemia. Approximately half of the deaths attributable to hyperglycemia occur before 70 years of age, according to projections by WHO, diabetes will be the seventh cause of mortality by 2030. Healthy diet, regular physical activity, maintenance of a normal body weight and avoidance of tobacco use, prevent type 2 diabetes or delay its onset (Organization World Health Organization [WHO], 2017)

Mexico has the most obese population in the world, and the general population ranks 2nd in obesity, only after the United States (United Nations Fund for Children [UNICEF], 2012). Diseases related to obesity pose a growing threat to the second Latin American economy. Diabetes alone, the disease most commonly associated with excess weight, as a direct cost in Mexico of two billion dollars annually, a figure that increases every year (World Health Organization [WHO], 2014). Diabetes is currently the first

cause of death and the current health system will not be enough, it would even be threatened with bankruptcy if the diabetes problem continues to progress (Acad mia Mexicana de Ciencias, 2012).

Since 1980, obesity has increased worldwide; in 2014, more than 1,900 million adults aged 18 years and over were overweight, of which more than 600 million were obese. In 2014, 39% of adults 18 years of age and over were overweight, and 13% were obese. The majority of the world's population lives in countries where overweight and obesity claim more lives than people who are underweight. In 2014, 41 million children under the age of five were overweight or obese. Obesity can be prevented. About 13% of the adult population were obese (World Health Organization [WHO], 2017). More than 70% of the population is overweight or obese. These data contrast with the percentage that presents low weight. The figures show that only 3 out of 10 Mexicans have a weight considered normal.

The emphasis in studying and preventing overweight and obesity in Mexico, has focused on promoting measures to improve the nutrition of the population despite the fact that a "decrease in the population" has been detected (Federal Commission for Better Regulatory [COFEMER], 2012)

The appearance of chronic degenerative diseases is also associated with the consumption of alcoholic beverages in large quantities over several years, in addition to the consumption of this substance can have negative health and social consequences related to its toxic properties and the dependence that can produce; it is also associated with an increased risk of suffering from acute conditions, such as injuries, and in particular those caused by traffic accidents (National Council for the Evaluation of the Social Development Policy [CONEVAL], 2012). Each year there are 3.3 million deaths in the world due to the harmful consumption of alcohol, which represents 5.9% of all deaths. The harmful use of alcohol is a causative factor in more than 200 diseases and disorders. In general, 5.1% of the global burden of morbidity and injuries is attributable to alcohol consumption, calculated in terms of life expectancy adjusted to disability function (EVAD). The consumption of alcohol causes death and disability at a relatively early age. In the age group of 20 to 39 years, 25% of deaths are attributable to alcohol consumption. There is a causal relationship between the harmful consumption of alcohol and a series of mental and behavioral disorders, in addition to non-communicable diseases and injuries (World Health Organization [WHO], Alcohol, 2015).

According to the National Survey of Addictions (National Admissions Survey [ENA], 2011), 71.3% of the total population aged 12 to 65 has consumed alcohol at some time in their lives (80.6% men and 62.6% women).

In the last year, the prevalence of consumption is 51.4% (62.7% men and 40.8% women).

The Central region (57%) (Puebla, Tlaxcala, Morelos, State of Mexico, Hidalgo, Queretaro and Guanajuato) the

North Central region (55.9%) (Coahuila, Chihuahua and Durango), are the regions that represent a prevalence in the last year above the national average. In contrast, the South region (37.3%) (Yucatán, Quintan Roo, Campeche, Chiapas and Tabasco) and Centro Sur (Veracruz, Oaxaca, Guerrero and Michoacán) are the least affected. The dependency was 7.8% in Mexico City and 15% in the South Central region (Veracruz, Oaxaca, Guerrero and Michoacán). The consumption of alcohol is the main problem of addiction in our country, which especially affects adolescents. Although men consume more, women show significant consumption. The difference in the dependency ratio between male and female adolescents is lower than that found among the adult population. For every three adolescent men who show possible dependence, there is a woman; while in the adult population for every six men there is a woman (National Survey of Additions [ENA], 2011).

So also the consumption of snuff is one of the main risk factors of several chronic diseases, such as cancer, lung and cardiovascular diseases. Every year, tobacco kills almost 6 million people, of whom more than 5 million are consumers and more than 600,000 are non-smokers exposed to second-hand smoke. Almost 80% of the one billion smokers in the world live in low- or middle-income countries. Tobacco consumers who die prematurely deprive their families of income, increase the cost of health care and hinder economic development (World Health Organization [WHO], Tobacco, 2017). In 2011 the National Survey of Additions found 21.7% of active smokers (17.3 million), 15.9% (around 10.9 million adults) are current smokers in Mexico, the average age of beginning of daily consumption was 16.3 years in the men and 16.8 years for women (National Survey of Additions [ENA], 2011).

Alcohol and tobacco registered uses of 80.2% (national: 86.5%) and 77.5% (national: 83.5%) respectively, the 2014 consumption ratio, including alcohol and tobacco was 3.8 men per one woman (AC Youth Integration Center, 2014).

The identification of existing health problems in a given population includes the study of social, economic, cultural and health services factors that are associated with the health-disease process, making a comprehensive analysis of health damage, present in the population under study, making it possible to establish general and specific estimators that allow quantifying health needs, to subsequently increase coverage, improve efficiency and optimize the effectiveness of health services.

This research provides recent data of the population studied, to implement actions focused on the prevention of risks and diseases, through health promotion and education activities; and if these are already present the timely action that allows to limit the damage and / or early death in individuals. Likewise, health professionals and specifically nursing professionals will allow them to identify the real needs of the population. The purpose of the study is to describe the epidemiological profile of the population

of the area of influence of the Ignacio Manuel Altamirano Health Center of the State of Guerrero, Mexico.

METHODOLOGY

Study design: cross-sectional because the variables were evaluated only once, at a specific moment without following up on their evolution in this first phase. Descriptive, because only one population was studied with its respective variables, of which there are no central hypotheses.

Population, sample and sample: The population was constituted by the area of influence of the Ignacio Manuel Altamirano Health Center, belonging to the services of the Guerrero Health Secretariat, which comprises four modules composed of 12 colonies. The type of sampling was census, that is, the participation of the inhabitants of the colony who agreed to participate in the study; The sample size for the study was $n = 4,109$ participants. Instruments: A microdiagnostic cell from the Ministry of Health adapted for this study was used to collect data. Which is composed of two sections corresponding to sociodemographic variables that includes indicators of family composition (age, sex, marital status, kinship, schooling, occupation) and epidemiological variables (morbidity, mortality and disability). Data Collection Procedure: A home visit was carried out in which it began with a verbal presentation by the interviewer and an invitation to users over 18 years of age to collaborate in the research by signing informed consent. Ethical Considerations: This study adhered to the provisions of the Regulations of the General Health Law on Health Research (Secretaria de Salud [SSA], 1987) in their respective chapters, articles and sections; This was also approved by the Directorate of the Nursing Academic Unit No. 1, which is dependent on the Autonomous University of Guerrero and the directors of the Health Center. Statistical analysis: The data were processed in the statistical program Statistical Package for the Social Sciences (SPSS) version 21.0 for Windows. Descriptive statistics were used to obtain frequencies, proportions, measures of central tendency and variability for the variables, as well as point estimates with 95% confidence intervals. Results Participants were 4,109 members belonging to the families of the area of influence of the IMA health center, the distribution by sex 47.6% are male and 52.4% female. 17.8% are from the group aged 16-24 years and 16.6% from 30-39 years old. 55% are single and 30% are married; 37% have a basic level of education and 22.8% have no schooling. The incidence of infectious diseases was 39.6% of IRAS and EDAS, 56.7% cases were presented once a year. The prevalence of chronic degenerative diseases was 9.7%, of which 42.4% have hypertension, 31.4% diabetes and 15.2% obesity (Table 1).

Tabla 1. Infectious and non-infectious diseases in the surveyed population

Variables	<i>f</i>	%
IRAS		
Once a year	391	39.6
2 times per year	317	32.1
3 times a year	146	14.8
4 or more times a year	133	13.5
EDAS		
Once a year	560	56.7
2 times per year	289	29.3
3 times a year	133	13.5
4 or more times a year	5	0.5
You have diseases		
Yes	191	9.7
No	1769	90.3
Type of diseases		
HAS	82	42.9
DM	60	31.4
Cancer	19	9.9
Obesity	29	15.2
TBP	1	0.5
Source: Health diagnosis 2015; UAGro		

The prevalence of illegal substance use was 3%, of which 65.5% consumed cocaine and 34.5% marijuana. Legal substances such as alcohol consumption was 12%, 75.6% do so once a week, while 16.4% daily. 18.8% consume tobacco, 64% of them do it once a week and 24% every third day (Table 2).

Mortality in the last year was 0.5%, of which 60% were male and 40% were female. The place of death was in the hospital with 80%, the age of death was R / N, 1 year, 85 years, 89 years and 95 years with 20% respectively (See table 3).

DISCUSSION

In the study population, the incidence of IRAS and EDAS was 39.6% and 56.7% respectively, higher than that reported to the Ministry of Health at the national level in 2013, which mainly affected the group of children under one year of age in 11.1% and 16.5%. % respectively (Secretary of Health [SSA], 2013). This could occur because the study population lives in urban settlement and are from rural areas, so practices for the prevention of infectious diseases are usually deficient. The prevalence of chronic degenerative diseases in this study population was 9.7%, of which 42.4% have hypertension, 31.4% diabetes and 15.2% obesity, higher than reported in 2014, with a global diabetes prevalence of 8.5 %, 39% of overweight,

13% of obesity (World Health Organization [WHO], 2017) and 31.5% of HTA reported in Mexico. The prevalence of diseases varies according to the regions, localities and socioeconomic level (National Nutrition Survey [ENSANUT], 2012). The behavior of chronic diseases shows an increase possibly due to the pattern of urbanization that modifies their current lifestyle (sedentary lifestyle, high carbohydrate diet, sugars and saturated fats). In the surveyed population, the consumption of these substances is above what is reported at the national level, since 3% of the respondents consume illegal drugs, 12% alcohol and 18.8% tobacco. However, the ENA reported a prevalence of drug abuse. illegal drugs of 1.5%. Alcohol abuse / dependence increased to 5.5% and a prevalence of active tobacco use of 21.7% (Secretary of Health [SSA], 2011). This could have relation with the academic level, the culture, the beliefs of the population, the social pressure, the publicity that favors the increase in the consumption of said substances; Therefore, it is necessary to carry out studies that show the factors associated with the consumption of these substances.

The data reported in this research allows to identify the existing situation in the population, as well as to detect the problems and / or needs and respond through interventions that improve the situation at the individual and collective level. It is necessary the continuous intervention of health professionals that allows to implement primary care strategies jointly. The success of these interventions can

Table 2. Consumption of Licit and Illicit Drugs in the Population

Variables	F	%
Addiction		
Yes	29	3
No	968	97
Type of addiction		
Cocaine	19	65.5
Marijuana	10	34.5
Alcoholic drinks		
Yes	492	12
No	3617	88
Frequency of alcohol consumption		
Daily	80	16.4
Every 3rd day	20	4
2 Times per week	20	4
1 Time a week	372	75.6
Tobacco use		
Yes	771	18.8
No	3338	81.2
Frequency of tobacco consumption		
Daily	30	3.8
Every 3rd day	192	24.7
2 Times per week	57	7.3
1 Time a week	498	64.2
Source: Health diagnosis 2015; UAGro		

Tabla 3. Mortalidad en la población encuestada

Variables	No.	(%)
Has any member of the family died in the last year?		
Yes	5	0.5
No	982	99.5
What was your sex?		
Man	3	60
Woman	2	40
Place of death?		
Household	1	20
Hospital	4	80
What was your age?		
R/N	1	20
1 Year	1	20
85 Years	1	20
89 Years	1	20
95 Years	1	20
Who was?		
Father	1	20
Mother	1	20
Younger child	2	40
Grandparent(s)	1	20
Source: Health diagnosis 2015; UAGro		

be mediated through monitoring or updating the health diagnosis. Thanks To health personnel working in the first level unit for the support provided and especially to the population for their participation in the survey.

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