



ISSN: 0976-3376

Available Online at <http://www.journalajst.com>

ASIAN JOURNAL OF
SCIENCE AND TECHNOLOGY

Asian Journal of Science and Technology
Vol. 08, Issue, 03, pp.4443-4446, March, 2017

RESEARCH ARTICLE

INCIDENCE OF FRAGILITY IN ELDERLY PEOPLE IN THE CITY OF SAN FRANCISCO DE CAMPECHE

*Ana Rosa Can Valle, M.P.E., Jaqueline Guadalupe Guerrero Ceh, D.C.E., María de la Luz Romero Orozco, T.E.O., Mónica del Rosario Cruz Uc, L.F., Fátima Lira Huchim, L.F., Daniel Antonio Muñoz Gonzales, L.G., Wendy Concepción Hau Dzul, L.G.

Faculty of Nursing at the Autonomous University of Campeche, Av. Agustín Melgar s/n Col. Buenavista C.P. 24039 Campeche, Camp., México

ARTICLE INFO

Article History:

Received 18th December, 2016
Received in revised form
12th January, 2017
Accepted 14th February, 2017
Published online 31st March, 2017

Key words:

Incidence,
Fragility,
Elderly people.

ABSTRACT

In the last 25 years there has been a great explosion of knowledge in all areas and specialties of medicine. Some of this knowledge has focused on diseases that affect the elderly as a priority, allowing, on the one hand, to understand the specific ways in which the disease manifests itself in them, and above all, allowing us to know how the elderly organism defends itself and reacts to the disease. To identify the incidence of fragility in the Elderly. This research has a qualitative approach, with descriptive scope, with a non-experimental design. The sample consists of 76 Elderly Persons, 36 of whom attend the Gerontological Module, 24 of the ISSSTE and 16 who attend the Club of Lerma with an age range of 60 years and over. The Barber Test: Test of the Fragile Elder was applied.

Results: The elderly people of the Gerontological Module e answered 11 of them who did. He needs someone to help him often. Of the variable: Do you have difficulties with your eyesight to carry out your usual tasks?, of the ISSSTE 22 commented that no (91.67) Of the variable: Have you been admitted to the hospital in the last year? The Club of Lerma only three answered yes (18.75).

Conclusions: Based on the obtained result, it is concluded that of the 76 study subjects, 34.2% did not present fragility risk, whereas 65.8% presented a fragility risk. In the support group for follow-up and Risk reduction.

Copyright©2017, Ana Rosa Can Valle et al., This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

In the last 25 years there has been a great explosion of knowledge in all areas and specialties of medicine. Some of this knowledge has focused on diseases that affect the elderly as a priority, allowing, on the one hand, to understand the specific ways in which the disease manifests itself in them, and above all, allowing us to know how the elderly organism defends itself and reacts to the disease. The impact of the disease on the functional situation of the elderly arises from this, being this the fundamental characteristic that marks the difference with respect to other patients and situations of illness (Guillen *et al.*, 2010). The term fragility appears in the decade of the '80, in these years it has been evolving, covering different aspects. Campbell and Buchner (1997) considered that fragility was born of a decline in the reserves of multiple systems, which places the subject at risk of incapacity or death in the face of the least stress. The identification and treatment of the frail older person is the cornerstone of daily geriatric practice.

The fragile person is one that requires mostly medical services and long-term care. These individuals are at increased risk of adverse effects from both diseases and treatments, as well as an increased risk of developing dependence, falls, injury, longer convalescence with higher mortality (Guillen *et al.*, 2010). The concept of "fragility" originated some decades ago when it was first used to describe older adults who presented characteristics of increased vulnerability, greater functional impairment, and reduced risk response. The important components of this syndrome are: the reduction of lean body mass, muscular endurance, balance or balance, coordination, flexibility, posture, gait and physical activity, which brings As a consequence: disability, damages, falls and fractures, dependence, increase of general morbi-mortality, institutionalization and frequent hospitalizations (Penny, E. and Melgar, 2012). According to Rodríguez (2011). Define fragility represents a clinical syndrome, is an intermediate stage between independence and the premature state; While the failure to progress is considered the most extreme stage, associated with a low recovery and death presage. Fragility is also described as a secondary condition to a constellation of situations, rather than a clinically defined entity, so it does not yet have a precise scientific meaning. Fragility is characterized

*Corresponding author: Ana Rosa Can Valle, M.P.E.,
Faculty of Nursing at the Autonomous University of Campeche, Av. Agustín Melgar s/n Col. Buenavista C.P. 24039 Campeche, Camp., México.

as the extreme age greater than 85 years, disability and the presence of multiple co morbidities and geriatric syndromes. According to Guillen (2010), fragility and failure to progress represent a continuum of the same clinical syndrome, where fragility is an intermediate stage between independence and premortal state; While the failure to progress is considered the most extreme stage, associated with a downward recovery and death presage. Fragility is also described as a secondary condition to a constellation of situations, rather than a clinically defined entity, so it does not yet have a precise scientific meaning; In addition to the lack of consensus in the definition, some characteristics such as extreme age (85 years), disability and the presence of multiple comorbidities and / or geriatric syndromes are used as a synonym for fragility. This has the drawback of making the definition extremely broad and perhaps including too many individuals.

In the Fragility Cycle, although many models have been proposed to explain the fragility, the most recent ones propose to present it as a cycle that has characteristics of spiral, since there are other factors, besides the key components of the fragility, Which exacerbate the basic cycle of chronic malnutrition, sarcopenia, decreased strength and exercise tolerance, and decreased activity and total energy expenditure (Guillen *et al.* 2010). In the Pathophysiology of Fragility, three disorders related to aging are mentioned: Sarcopenia, Neuroendocrine Dysfunction and Immune Dysfunction. Sarcopenia, a decrease in age-related muscle mass, appears to be the main component of the syndrome, and is related to the impoverishment of walking speed, decreased hand grip, increased falls and decreased Ability to maintain body temperature (Guido, 2004). Neuroendocrine dysfunction. It has been shown that aging occurs in the hypothalamic-pituitary gland-adrenal gland axis, expressed by:

- Increase in cortisol: Cortisol secretion increases with age in both sexes. High levels of cortisol are associated with sarcopenia and with decreased resistance to infectious diseases. Women tend to have higher levels than men, so they are more likely to suffer from frailty.
- Decreased growth hormone: This hormone plays an important role in the development and maintenance of muscle mass at all ages. In both sexes, their secretion decreases as we age (although men maintain higher levels), thus favoring the development of sarcopenia.
- Decreased testosterone: In men, there is a gradual decline in testosterone secretion as the age progresses, due to hypothalamic-pituitary axis dysfunction and testicular failure. Testosterone helps maintain muscle mass and decreased secretion contributes to sarcopenia.
- Decreased estrogen: Estrogen levels decrease abruptly with menopause by accelerating the loss of muscle mass (Guido, 2004).

Immune Dysfunction. Aging is associated with increased levels of catabolic cytokines (such as interleukins and tumor necrosis factor) and the decline of humoral immunity. Testosterone in men limits the production of catabolic cytokines, while estrogens can increase them, contributing to a higher incidence of fragility in women. There is evidence that dimorphism of the immune system, which is partly responsible for sexosteroids, makes men more susceptible to sepsis and women more susceptible to chronic inflammatory processes and loss of muscle mass (Guido, 2004).

The main risk factors of fragility would be a compendium of the problems derived from: biological aging, alterations of the balance and march by multiple disabilities such as the sensorial ones, muscular, balance. Other risk factors are exacerbated acute or chronic diseases; Risk factors for abuse: lifestyles, social and economic factors; Risk factors for disuse: inactivity, immobility, nutritional deficit (Guillen *et al.*, 2010). It is important to identify the incidence of fragility in the Elderly, which is frequently found in these, with the intention of knowing and preventing this problem, which affects the majority of older people, arises interest in this research topic .

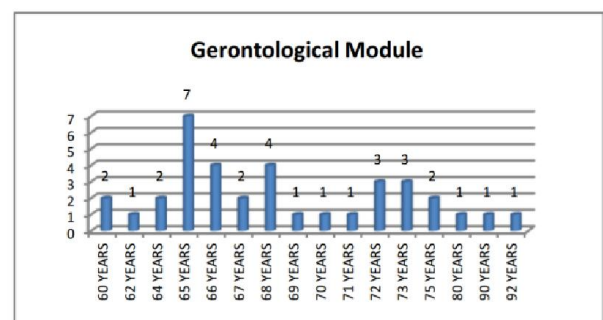
Objective: To identify the incidence of fragility in the Elderly People of the City of San Francisco de Campeche.

MATERIALS AND METHODS

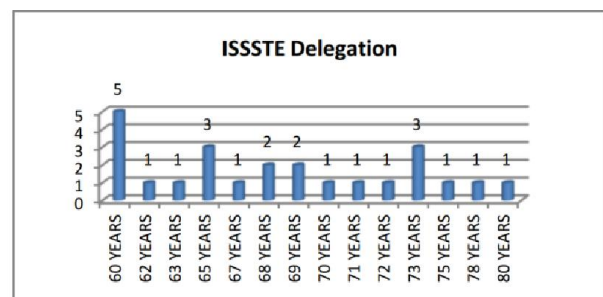
This research has a qualitative approach, with descriptive scope, with a non-experimental design. The sample is made up of 76 Elderly Persons, who attend three gerontological centers: 36 attend the Gerontological Module of the Autonomous University of Campeche, 24 attend the ISSSTE Delegation and 16 attend the INAPAM Club of Lerma. The study subjects present an age range of 60 and over. The instrument called Barber Test was applied, which consists of the Fragile Elder Detection, which is composed of nine items. Data analysis was performed through the Microsoft Excel Program.

RESULTS

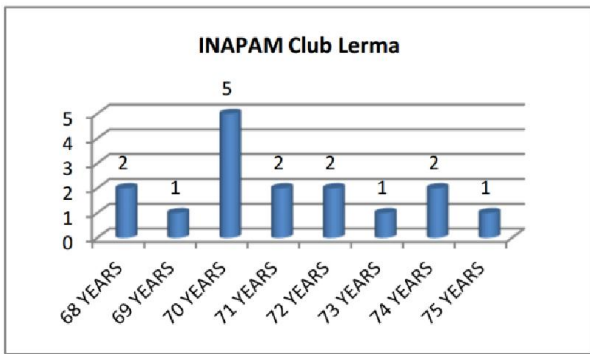
From the 76 Elderly people who participated in the study, the following results of the most significant variables are obtained: Do you need someone to help you often? Do you have difficulty with your eyesight to perform your usual tasks? Have you been admitted to the hospital in the past year? According to the age range graphs are shown. In the Gerontological Module the age range is 60 to 92 years (Graph 1). E The ISSSTE Delegation the age range is 60 to 80 years (Graph 2). In the Club of Lerma (Graph 3).



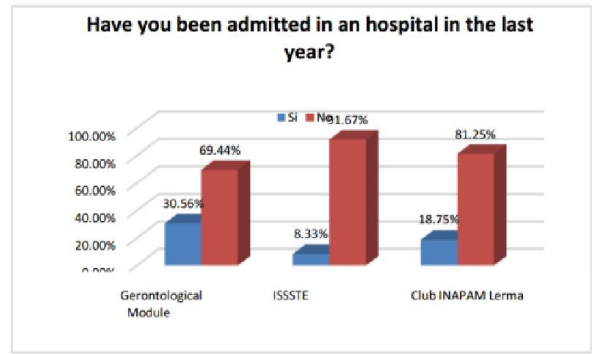
Graph 1. Gerontological Module



Graph 2. ISSSTE Delegation



Graph 3. INAPAM Club Lerma

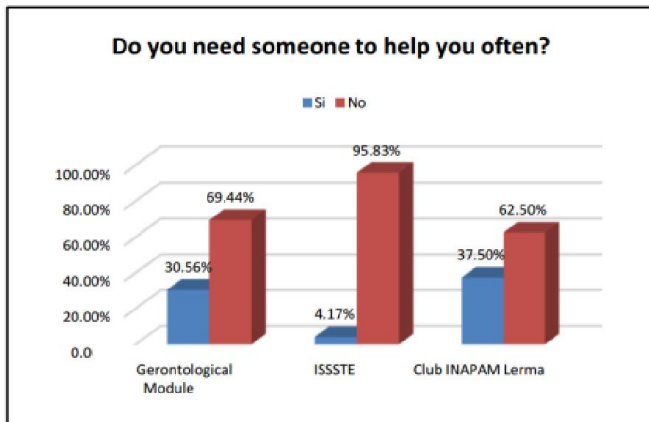


Graph 6. Have you been admitted in an hospital in the last year?

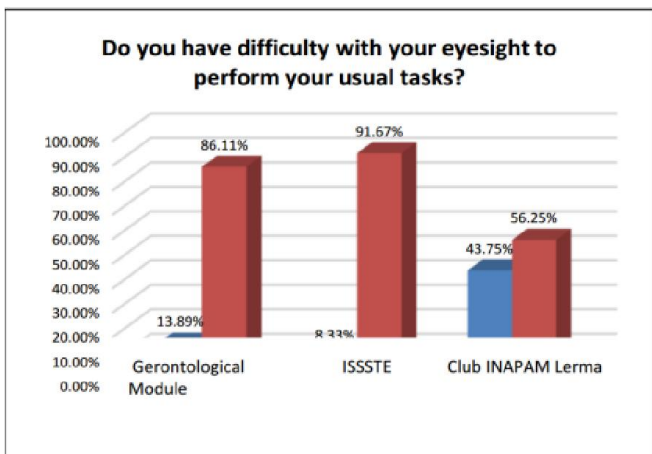
The Elderly People of the Gerontological Module of the Autonomous University of Campeche answered 11 of them yes (30.56). They need someone to help them often, those from the ISSSTE Delegation, 1 of them answered yes (4.17) and those from the Lerma Club, 6 Elderly answered yes (37.50) (Graph 4). From the variable: Do you have difficulties with your eyesight to carry out your usual tasks?, Elders of the Gerontological Module 31 replied that no (86.11), from the ISSSTE Delegation 22 commented that no (91.67) and Lerma Club 9 commented that no (56.25) (Figure 5). From the variable: Have you been admitted in the hospital in the last year? Those of the Gerontological Module 11 Elderly answered yes (30.56), those from the ISSSTE Delegation, 2 Elderly answered yes (8.33), and those from the Lerma Club only three answered yes (18.75) (Graph 6).

Conclusions and Recommendations

Based on the results obtained, it is concluded that of the 76 study subjects, 26 have no risk of fragility, which is equivalent to 34.2% of the population, the difference of 65.8% presents a risk of fragility, due to which they must be maintained in the support group for the monitoring and reduction of risks. Only 16.67% live alone and 83.33% live with relatives. The thirteen people living alone should be motivated to continue assisting the support group for the timely follow-up of their health. 4.13% do not have anyone to go to if they need help, being important to identify their address to refer to colleagues in the help group and promote solidarity among the group, who fortunately have to go to in case of any situation, They represent 95.83% of the population. In the question related to food, 25% say that they do not eat their food hot and 75% refer that if they take it hot, which refers to surveys that are not being cared for by their relatives. Only 23.7% of the population report that they frequently need help, it is identified that the same percentage refers to their health as preventing them from going out into the street, it is inferred that they depend on another person frequently. 18.4% have health problems that prevent them from self-help, the same percentage report that they have visual problems that limit their usual tasks, also refer to hearing difficulties, which have an impact on achieving fluid communication. Twenty-one percent say that they have been hospitalized in the past year, which should be taken as people in observation, pending any relapse. It is suggested that those responsible for the headquarters of support groups for older people apply this type of instrument to detect the incidence of fragility in the people who come, having the results deepen the investigation to the details and be in conditions of Design a gerontological intervention plan that allows timely and individual follow-up, always keeping in mind that care must be person-centered. Fragility is triggered by other pathologies in the Elderly Person and may represent a risk of these, as it can cause functional depression.



Graph 4. Do you need someone to help you often?



Graph 5. Do you have difficulty with your eyesight to perform your usual task?

REFERENCES

Campbell, A. J., Buchner, D. M. 1997. Unstable disability and the fluctuations of frailty. *Age Ageing*, 26:315-8.
 D' Hyver; Gutiérrez, R, L. 2006. Geriatrics. Editorial Modern Manual. México, D.F.
 Dr. Guido Emilio Lluís Ramos, 2004, Finlay, Marianao municipality, City of Havana, Cuba..scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-21252004000400009.
 González, J. 2002. The elderly patient. Editorial Trillas. Mexico DF.

- Guillen, F. 2008. Syndromes and care in the geriatric patient. Editorial Masson. Spain 10. Marín, P. (2007). Geriatrics and Gerontology (3rd Ed.) Edit. Group Guide. Chile.
- Guillen, L. L. F., Pérez, M, J., Petidier, R. 2010. Fragility, Syndromes and Care in the Geriatric Patient. Editorial Elsevier Masson. Spain.
- Penny, Montenegro, E; Melgar, Cuellar, F. 2012. Geriatrics and Gerontology for the Internist, Fragility in the elderly. Editorial La Hoguera (p. 95- 102), Bolivia.
- Pimentel B., Morales J. *et al.*, 2011. Gerontology an interdisciplinary approach. Autonomous University of the State of Hidalgo, México.
- Rodríguez. R., Lazcano. G., Medina. H., et al. 2011. Fragility. Practice of Geriatrics. (pp.175-185), México, D.F: McGraw-Hill Interamericana Editores, S.A de C.V.

Appendix 1

BARBER'S QUESTIONNAIRE. (DETECTION OF ANTI-FRAGILE)

Do you live alone?	Yes	No
Do you find yourself with no one to go to without help?	Yes	No
Are there more than 2 days a week that do not eat hot?	Yes	No
Do you need someone to help you often?	Yes	No
Does your health prevent you from going out?	Yes	No
Do you often have health problems that prevent you from taking care of yourself?	Yes	No
Do you have difficulty with your eyesight to perform your usual tasks?	Yes	No
Is the conversation too difficult for you because you hear badly?	Yes	No
• Have you been admitted in an hospital in the last year?	Yes	No
• Each affirmative answer is worth 1 point. 1 point or more suggests a risk situation.	TOTAL	
• Result of the score Test result: 0 = not fragile or not at risk 1 or more = fragile or risky.		
