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# La intervención gerontológica en un establecimiento de asistencia social permanente privado: identificación de los beneficios que aporta a las personas mayores residentes

## *The gerontological intervention in a private permanent social assistance establishment: identification of the benefits it brings to the elderly residents*

## *A intervenção gerontológica em um estabelecimento de assistência social permanente privada: identificação dos benefícios que traz para os idosos residentes*

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## Resumen

**Introducción**: México se encuentra en el camino hacia la toma de conciencia del reto que implica el envejecimiento de la población para las familias, la sociedad y los establecimientos de asistencia social permanente. **Objetivo:** Identificar los beneficios que aporta la intervención gerontológica en la salud de los residentes de un establecimiento privado de asistencia social permanente. Para ello, se ha planteado la siguiente hipótesis: después de una intervención gerontológica, los residentes se encuentran motivados para realizar actividad

física, mejorar su postura y socializar sus experiencias. **Método**: El presente es un estudio con enfoque cuantitativo, de alcance descriptivo longitudinal, con un diseño experimental y de tipo cuasiexperimento. En concreto, se realizaron diez sesiones, cada una con dos horas de duración. Se tuvo una participación de ocho residentes de un establecimiento privado, con cierto nivel de dependencia. **Resultados**: La hipótesis planteada es aceptada, ya que todos los participantes demostraron mejoría en la flexibilidad, movilidad, socialización y aspecto cognitivo en los aspectos de atención y concentración. **Conclusiones**: Los beneficios que aporta la intervención gerontológica son satisfactorios para las personas residentes y para el establecimiento que ofrece sus servicios de asistencia social.

**Palabras clave:** establecimiento de asistencia social permanente, intervención gerontológica, persona mayor residente.

## Abstract

Introduction Mexico is on the way to becoming aware of the challenge that the aging of the population implies for families, society and permanent social assistance establishments. Objective: Identify the benefits of gerontological intervention in the health of residents of a private permanent social assistance establishment. For this, the following hypothesis has been proposed: after a gerontological intervention, the residents are motivated to perform physical activity, improve their position and socialize their experiences. Method: The present is a study with a quantitative approach, of longitudinal descriptive scope, with an experimental design and of the quasi-experimental type. Specifically, ten sessions were held, each lasting two hours. There was participation of eight residents of a private establishment, with a certain level of dependency. Results: The proposed hypothesis is accepted, since all the participants demonstrated improvement in flexibility, mobility, socialization and cognitive aspect in attention and concentration aspects. Conclusions: The benefits provided by the gerontological intervention are satisfactory for the residents and for the establishment that offers its temporary social assistance services.

**Keywords:** establishment of permanent social assistance, gerontological intervention, elderly person resident.

## Resumo

Introdução: O México está a caminho de tomar consciência do desafio que o envelhecimento da população implica para as famílias, a sociedade e os estabelecimentos permanentes de assistência social. Objetivo: Identificar os benefícios da intervenção gerontológica na saúde de residentes de um estabelecimento privado de assistência social permanente. Para tanto, propôs-se a seguinte hipótese: após uma intervenção gerontológica, os moradores são motivados a realizar atividades físicas, melhorar sua posição e socializar suas experiências. Método: Trata-se de um estudo com abordagem quantitativa, com escopo descritivo longitudinal, com delineamento experimental e tipo quase-experimental. Especificamente, dez sessões foram realizadas, cada uma com duração de duas horas. Houve participação de oito moradores de um estabelecimento privado, com certo nível de dependência. Resultados: A hipótese proposta é aceita, uma vez que todos os participantes demonstraram melhora na flexibilidade, mobilidade, socialização e aspecto cognitivo nos aspectos atenção e concentração. Conclusões: Os benefícios proporcionados pela intervenção gerontológica são satisfatórios para os residentes e para o estabelecimento que oferece seus serviços de assistência social.

**Palavras-chave:** estabelecimento de assistência social permanente, intervenção gerontológica, idoso residente.

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## Introduction

Thanks to advances in medical science, life expectancy in the 21st century has increased considerably, which has forced us to plan occupation and distraction activities for an aging and growing society. In fact, according to estimates by the World Health Organization (WHO, 2015), it is expected that by 2050 one in five people will be over 60 years of age, of which 80% will live in low and middle income countries , among which Mexico can be located.

These data are coherent with what was reported in the 2015 Intercensal Survey of the National Institute of Statistics and Geography (Inegi) (2015), which states that 38% of the population of our country are older adults, a figure that according to the projections of said The institution could multiply exponentially in the next population and housing census that will take place in the year 2020. In addition to this forecast, it should be taken into account that the number of single-person households also tends to rise in all the states of Mexico (Inegi , 2003, 2017), so it is essential that the different institutions responsible for dealing with this situation are prepared to offer the best care service for seniors who require it.

In this sense, the National System for the Integral Development of the Family (SNDIF) launched in 2015 four gerontological centers in the country with an intervention model based on four foundations: prevention, comprehensive care, training and research. The first one (prevention) has as a specific objective "informed social groups in preventive measures on the aging process through the strategy of the promotion of geroprophylaxis" (Institute for the Elderly and Social Services [Imserso], 2015, page 42) ; This purpose is essential to work from an early age to prevent or delay the occurrence of noncommunicable diseases in the elderly.

The second foundation (comprehensive care) seeks to encourage older adults "a physical, mental, social, emotional and spiritual optimized according to their aging process" (Imserso, 2015, p 42), because it is considered that the Balance of the dimensions of the human being is fundamental for the enjoyment of life.

The third foundation (training) focuses on the training of a "human capital with knowledge and gerontological updating" (Imserso, 2015, p.43); to do so, they try to promote knowledge that serves as a support to improve the welfare of both staff and guests, as it works not only in better training for those who care for the elderly, but also provides the opportunity for adults so that they acquire new knowledge, increase their culture and develop a certain skill in order to promote a metacognitive occupation.

Finally, the fourth foundation (research) focuses on "achieving gerontological centers and homes that generate scientific knowledge through the strategy of coordinating actions aimed at the development and production of both information and knowledge about the target population" (Imserso, 2015, P. 43). This generation of knowledge is fundamental for the advancement of the actions carried out because it allows to evaluate and design strategies so that the processes improve continuously in benefit of quality care for the elderly. However, it is worth noting that this situation is difficult to materialize, since in order to develop an investigation, it is necessary to enter the institution to observe the phenomenon under study, which could leave in evidence the treatment offered to the guests, as well as the real conditions of the establishment's infrastructure.

The United Nations (UN) in 2015, proposed seventeen objectives for sustainable development (ODS), the Deputy Secretary-General of the United Nations, Amina J. Mohammed, states that: "The SDGs are appropriate mechanisms that will allow the population and its leaders in a joint manner, participate in the search for social consensus and reduce the gaps. "(UN, 2015, paragraph 1). This research has been motivated by two of the 17 objectives of sustainable development, No. 3 and 10, which correspond to the axes of: health and well-being and reduction of inequalities, respectively; all the work done with vulnerable groups is favorable to influence the reduction of social gaps.

Explained all the above, it can be indicated that the objective of this work was to describe the benefits that gerontological intervention contributes to the health of the residents of a permanent establishment of permanent social assistance. Before that, however, the following is a sketch around the activities that a gerontologist must perform, which were taken into account in the development of this proposal.

**Activities of the gerontologist**

The gerontologist is a specialist who is responsible for studying the aging process and provide comprehensive care to the elderly through the development of gerontological intervention programs. In this regard, Mena et al. (2012) limits the following:

> The importance of gerontological interventions lies in making effective the comprehensive approach of the elderly person by reducing and preventing situations of health risks in their bio-psycho-social context. In order to develop the interventions, the gerontologist must use a series of specialized instruments that provide the necessary data to analyze and plan such interventions for the multidimensional attention of the elderly person (p. 8).

In effect, the gerontologist is in charge of carrying out the integral evaluation of the elderly person through a clinical history that is composed of the following elements: identification card, reason for care, familiogram, comprehensive assessment and clinimetry, which constitutes the first part. Then thirteen assessment scales are integrated (twelve focused on the elderly person and one on the family member to identify the presence of caregiver overload), which are mentioned below:

1. Family Apgar
2. Perceived social support questionnaire (DUKE-UNC)
3. Miniexamen of the mental state (minimental of Folstein).
4. Informant Questionnaire on Cognitive Impairment in Elderly (IQCODE).
5. Geriatric depression scale (GDS).
6. Index of independence in the basic activities of Katz's daily life.
7. Index of instrumental activities of the daily life of Lawton and Brody.
8. Minigoutritional assessment scale of Guigoz and Velas (MNA).
9. Assessment of stability of the gait and balance (Tinetti).
10. Try get up and go.
11. Questionnaire of physical activities of Nagi.
12. Gerontological investigation of the risk for the development of the syndrome of falls.
13. Questionnaire for the detection of caregiver overload (Zarit y Zarit).

As can be seen, it is evident that gerontological intervention requires time, since each elderly person is unique, hence it is essential to consider their particularities; Coupled with this, an environment of trust must also be cultivated so that the older person cooperates in the activities that are being developed.

The gerontology intervention, therefore, is composed of four phases: the first is called gerontological clinical history, and is a valuable space in which the gerontologist interacts with the patient to gain their trust; the second is the application of the thirteen rating scales mentioned; The third is the gerontological diagnosis, in which the data obtained are analyzed using semiology as a tool; The fourth stage is the gerontological intervention according to the protocol established for each case detected in the diagnosis. In this regard, Sanjoaquín, Fernández, Mesa and García (2004) specify the following:

> The integral geriatric assessment (VGI) arises, in addition, as a response to the high prevalence in the elderly of undiagnosed needs and problems, dysfunctions and unrecognized reversible dependencies, which escape the traditional clinical assessment (anamnesis and physical examination) (p. 59).

This means that there are two types of assessments: the traditional clinic performed by the doctor and the nurse, and the integral geriatric performed by the gerontologists, who know the scales of assessment and can have a better approach to the diagnosis and determine the treatment as a result of the work with a multidisciplinary team from the health area.

In this sense, Mena et al. (2012) suggests twenty-one interventions that can be adjusted to each situation diagnosed:

1. Self-help groups or behavioral cognitive therapy.
2. Education for health.
3. Sensory stimulation.
4. Interventions indicated for learning.
5. Interventions indicated for language.
6. Interventions indicated for orientation.
7. Interventions indicated for memory.

8. Interventions indicated for evocation.
9. Interventions indicated for calculation.
10. Interventions indicated for visuospatial construction.
11. Interventions indicated for trial.
12. Interventions indicated for intelligence.
13. Occupational therapy and physical stimulation.
14. Warm up exercises.
15. Interventions indicated for alterations of flexibility and elasticity.
16. Interventions indicated for coordination.
17. Interventions indicated for muscular strength and endurance.
18. Interventions indicated for aerobic exercises.
19. Interventions indicated to be done on the floor or in bed.
20. Interventions indicated in sitting
21. Interventions indicated in primary caregivers.

In each of these intervention proposals are mentioned the actions that the gerontologist must perform in coordination with the multidisciplinary group. It should also be noted that a significant part of a gerontological intervention program is composed of six special factors: promotion of physical activity, massage therapy, music therapy, rehabilitation, play activities and aromatherapy, which are explained below.

**Promotion of physical activity**

This is defined as "any intentional bodily movement made with the skeletal muscles, which results in an expenditure of energy and a personal experience, and allows us to interact with the beings and the environment that surrounds us" (Devís, 2000, cited by Ceballos , Álvarez and Medina, nd, p.3). However, in the case of older adults, Gil, Ramos, Marín and López (2012) comment that these, when they remain inactive, lose their fundamental abilities of resistance, strengthening, balance and flexibility, which could be avoided with some type of physical activation that allows to maintain independence and reduce the possibility of acquiring a noncommunicable disease. In this regard, Ceballos et al. (sf) explain that the benefits of physical activation are immovable, since it can increase general well-being,

improve general physical and psychological health, maintain an independent life, help control specific disorders (eg, stress, obesity) ) and some diseases (eg, diabetes, osteoporosis), as well as helping to minimize the consequences of certain disabilities or changing the stereotyped perspective of old age.

**Massage therapy**

Masotherapy is defined by Chavez and d'Hyder (cited in d'Hyder, C. and Gutiérrez, L. 2014) as: "Treatment by massage, considered as any manual or mechanical technique that methodically mobilizes tissues for therapeutic, preventive, hygienic, aesthetic or sporting "(page 743). This is an activity that pleases the elderly much, since it stimulates the relaxation of muscles that lack physical activity due to sedentary lifestyle. The geriatric massage is an effective and specific complement in the process of old age, and is generated through sensitive and subtle contact, with techniques and manipulations that stimulate the physiological and organic processes to improve its functioning, which improves the quality of life of the user (González, González, Chacón and Torres, 2013). This is based on technical and systematic manipulations, based on scientific concepts that seek to stimulate the soft tissue of the organs, especially through the application of rhythmic stretching and compressions in a relaxing and therapeutic way (Rodríguez, Bustos, Amariles and Rodríguez, 2002).

**Music therapy**

Music therapy, according to Bravo, Cabañas, Díez, Gamarra and Villarta (s.f.), can be defined from the scientific and therapeutic point of view:

> From the scientific point of view: music therapy is a scientific specialization that deals with the study and research of the complex sound-human being, whether the sound is musical or not, tending to look for the diagnostic elements and the therapeutic methods of it. (p.4)
>
> From the other point of view: it is a paramedical discipline, which uses sound, music and movement to produce regressive effects and open channels of

> communication with the aim of undertaking through them the process of training and recovery of the patient for the society (p. 5).

Music has been integrated into the activities of gerontology, given the healing power it can generate in the human being, which is why gerontologists consider it as part of the gerontological intervention. On this element, González, D. (2014) indicates that in the psychological field it has been determined that music is not only capable of facilitating the expression of feelings and emotions, but it can also reduce stress, calm pain and stabilize the state of mind For this reason, music has been used in the therapeutic field to treat anxiety, depression, stress, hypertension, psychosis, autism and behavioral disorders.

Chica (September 6, 2015) has identified three benefits that music therapy brings to people in terms of cognitive, physical and social-emotional aspects; The first is related to the help it can offer in learning, orientation in reality, attention and concentration capacity, as well as to maintain or optimize verbal and communication skills. Physical benefit is related to the contribution it provides to joint mobility, muscle strength, relaxation, as well as to reducing agitation and anxiety levels. Finally, the third benefit is linked to the impact it has on social interaction and communication, since it reduces and prevents isolation, and elevates social skills and self-esteem. In fact, listening to happy music improves the mood.

**Rehabilitation**

Feeling good contributes to a more optimistic perception of life and affects improving the quality of life of people; therefore, it is important to take care of health from the initial stages of human development, Chavez, D., y d'Hyder, C. (citado en d'Hyder, C. y Gutiérrez, L. 2014)

> La World Health Organization (WHO) has recommended a model to address the geriatric problems that develop limitations in the physical and psychological function and this has been adapted for the international classification of functionality, disability and health (ICF) that includes the physical, psychological, level of independence, social relations , environment and transcendental aspects. (p. 734)

This is precisely what is considered in a plan of gerontological intervention, comprehensive care of the elderly person, with the intention of maintaining their independence as long as possible in their lives.

**Playful activities**

The leisure activities are related to entertainment, fun and games that are played in free time. These allow to leave the daily routine, relax and avoid stress, among other physical and psychological benefits, which affects the quality of life of the elderly because it allows you to reduce your feelings of loneliness, improve mood and motivation , favor an adequate psychomotor functioning and increase the levels of self-esteem.

**Aromatherapy**

According to Sierra (2010), aromatherapy is the branch of the herbalist that uses the volatile components of plants to obtain therapeutic effects; This is considered as an alternative treatment to combat physical, mental and emotional disorders through oils of plant essences. In this sense, Palomo (2005) expresses that the aromas provide important effects in the life of the human being, since they help to achieve emotional and physical balance. This is an activity that pleases older people because it offers them moments of relaxation and peace.

## Method

The present work was based on the quantitative approach, with an exploratory scope and with an experimental design, since a pre-test and a post-test were used in a single group. The research question was the following: what are the benefits of gerontological intervention in the health of residents of a private establishment of permanent social assistance?

The initial conjectures were these: after a gerontological intervention, residents are motivated to perform physical activity, improve their posture and socialize their experiences.

In this sense, the objective established was to identify the benefits that the gerontological intervention contributes to the health of the residents of a private

establishment of permanent social assistance. To this end, a team of collaborators (volunteers) was formed, composed of eight students of the degree in Gerontology, who provided personalized attention to each of the elderly people of the aforementioned geriatric residence. The analysis of the data was done in a descriptive way by using histograms and line graphs.

**Place**

A private permanent social assistance establishment was chosen located in the city of San Francisco de Campeche, Campeche (Mexico). On these places, it should be noted that they are usually referred to as asylum, geriatric residence, home for the elderly or gerontological center; however, this research has used the expression establishment of permanent social assistance based on the Official Mexican Standard NOM-031-SSA3-2012, specifically in section 4.7 (Ministry of Health, 2012), which establishes the following:

> [It is called] establishment of permanent social assistance to all that place that independently of its denomination or juridical regime grants permanent integral attention for adults and older adults, who have special characteristics of attention, where services of prevention of risks are provided, attention and rehabilitation, including accommodation, food, clothing, medical, social and psychological care, cultural, recreational and occupational activities (párr. 21).

This is the term that is considered in the official standard, however, in the empirical observation it is appreciated that it is little known by professionals and by society in general, the terms of: nursing home, nursing home are more common , geriatric center or geriatric residence, to name a few, being important the diffusion of the correct terminology.

**Population and sample**

The sample selected was non-probabilistic. The inclusion criteria were the following: indistinct sex, over 60 years of age, without serious psychiatric problems and wishing to participate in the project activities. The establishment had eleven guests; however, at the time of initiating the project, three of them were excluded for the following reasons: deceased person, person with a psychiatric diagnosis that was not available and a person with 45 years of age. The sample, therefore, was eight guests (four women and four men), of which three men and one woman used wheelchairs.

**Instruments**

In this study, the following five scales of assessment were applied: the Fumat scale for the objective evaluation of the quality of life of users of social services (Verdugo, Gómez and Arias, 2009); the miniexamen of the mental state (minimental of Folstein) to establish the presence of probable cognitive deterioration; the geriatric depression scale (GDS) to detect depressive symptomatology; the index of independence in the basic activities of daily life of Katz to establish the degree of dependence of individuals over 60 years of age in the basic activities of daily life, and the evaluation of stability of gait and balance (Tinetti) for determine the risk of falls through the analysis of the stability in the march and the balance of the elderly person.

**Treatment plan**

Eleven sessions were held: one for the presentation and application of the instruments and ten for the treatment. Each of these lasted approximately two hours (from 4 to 6 in the afternoon) (table 1). The activities were carried out in the framework of ethics and following at all times the principles of autonomy, beneficence, justice and respect for the person, for which an executive version of the protocol was prepared and handed over to the establishment where the He did the study.

The five instruments were applied in the diagnostic session (pretest) and in the last session (posttest). All sessions began with a 30-minute module of warm-up, strength, endurance and

relaxation exercises; subsequently, a second module was added from session 1 to session 7, as well as a third module in sessions 8, 9 and 10. The following is a description of what was worked on in each:

- The second module was worked in the following way: sessions 1 and 2, M2 (module two), attention exercises.
- Session 3, M2, music therapy.
- Session 4, M2, karaoke.
- Session 5 and 6, M2, rehabilitation exercises and massage therapy.
- Session 7, M2, coordination exercises with balloons.
- In this session 8 one more module was integrated, that is, we worked with three modules: Session 8, M2, rehabilitation exercises and massage therapy. M3 (module three), aromatherapy.
- Session 9, M2, rehabilitation exercises and massage therapy, M3, fine motor exercise: jenga.
- Session 10, M2, lottery, M3, bowling (in this last session the five scales were applied as posttest).

**Tabla 1.** Protocolo del tratamiento aplicado

| **Protocolo del tratamiento aplicado** | |
|---|---|
| Rehabilitación y masoterapia | Se realizaron movimientos pasivos forzados (manipulación de alguna parte del cuerpo, lo cual se realizó en parejas, llevando al máximo el límite de movilidad anatómica de alguna parte del cuerpo sin causar dolor ni violencia en el movimiento). Se inició la rehabilitación con la extensión y flexión de los miembros superiores, especialmente las manos y los dedos, ya que se observó que la mitad de los pacientes tenían empuñada la mano. Luego se pasó a los miembros inferiores, pues se apreció que la dorsiflexión y la flexión plantar se encontraban limitadas; además, los pies se hallaban edematizados por estar sentados la mayor parte del día en sus sillas de ruedas. Para finalizar la sesión se trabajó con la masoterapia en los músculos del cuello y la espalda. |
| Actividad con globo | Para trabajar la fuerza y los movimientos activos se desarrollaron actividades con un globo de la siguiente forma: se colocó a un lado de su cabeza para emplear toda la fuerza sosteniendo el globo. Después se colocó entre el antebrazo y el brazo, los cuales fueron usados para sostenerlo en su lugar. Luego, para trabajar las manos y las muñecas, se les pidió que con cada uno de sus dedos hundieran el globo, y después que lo tomaran con la muñeca para que también lo presionaran. Para ejercitar los miembros inferiores se les solicitó que colocaran el globo entre las piernas y luego que ejercieran presión. Posteriormente, se enfocó el trabajo en las rodillas y después en el área de las pantorrillas (en cada una de las posiciones ejercieron presión 10 veces). Finalmente, se les pidió que pisaran el globo con la mayor fuerza posible. Esta sesión concluyó con ejercicios de relajación, a través de respiraciones largas y profundas. Los participantes indicaron que no sintieron ninguna molestia durante los ejercicios y que les habían gustado las actividades. |
| Ejercicio de coordinación | Nuevamente se emplearon globos, los cuales debían pasar a sus compañeros en la dirección que se le indicaba (izquierda o derecha); después, con una mano, sostenían el globo y con la otra se tocaban alguna parte del cuerpo. Esta activad procuró fomentar la atención hacia las indicaciones señaladas. |
| Aromaterapia | Para esta se utilizaron bastones aromáticos. En concreto, se les pidió que cerraran los ojos y con un tono de voz suave y tranquila se les fue guiando para llevarlos mentalmente a un lugar de paz y tranquilidad. |
| Destreza y agilidad | Esta actividad fue útil para trabajar la motricidad fina. Para desarrollarla se empleó un juego conocido con el nombre de *jenga*, el cual consiste en acomodar rectángulos de madera para formar una torre, los cuales posteriormente se van extrayendo para seguir construyendo en la parte superior hasta que la estructura se derrumbe. |

Fuente: Elaboración propia

**Material**

For the heating, strength and resistance exercise, ten 500 ml plastic bottles (one for each guest) were used, which were filled with sand. Likewise, a bowling game made with bottles painted by the team of volunteers was used. Likewise, we worked with the jenga and with a lottery game donated by the team. Disposable diapers, gloves, face masks and healing material were also provided.

## Results

Table 2 shows the progress obtained in the sessions as the intervention plan was developed.

**Tabla 2.** Principales resultados del tratamiento aplicado

| N.° de sesión | Número de PM | Actividad | Observaciones |
|---|---|---|---|
| Diagnóstico | 8 | 1. Se aplicaron las escalas de valoración (pretest) | Se observa a los huéspedes un poco desorientados y apáticos con nuestra presencia. |
| 1 | 6 | 1. Ejercicios de calentamiento, fuerza, resistencia y relajación.<br>2. Ejercicios de atención y concentración. | Debilidad, sin fuerza en brazos y poca coordinación en manos y pies.<br>Se observa a los huéspedes un poco desorientados y apáticos con nuestra presencia.<br>Colorear dibujos y números, identificar letras; algunos adultos mayores fueron capaces de realizar la actividad sin ayuda; otros sí necesitaron apoyo. |
| 2 | 5 | 1. Ejercicios de calentamiento, fuerza, resistencia y relajación<br>2. Ejercicios de atención y concentración | Se observa a los pacientes un poco incomodos; algunos comentan que lo sentían pesado, por lo que se disminuyen las repeticiones.<br>En el ejercicio de atención se observa diálogo entre los huéspedes y el equipo; incluso conversan un poco sobre su vida. |
| 3 | 6 | 1. Ejercicios de calentamiento, fuerza, resistencia y relajación.<br>2. Musicoterapia. | Los huéspedes se muestran un poco más accesibles a las indicaciones recibidas al realizar el ejercicio. |
| 4 | 6 | 1. Ejercicios de calentamiento, fuerza y resistencia, y relajación<br>2. Karaoke. | En el karaoke, al principio, se observaba desinterés hacia la actividad porque les daba pena cantar, pero después de que nos observaron cantar y poner canciones de su gusto, su interés creció y poco a poco comenzaron a cantar con nosotros. Algunos huéspedes cantaron solos.<br>Al final, se observó un gusto por la actividad, la cual les recordó bonitos momentos por las letras de las canciones. |

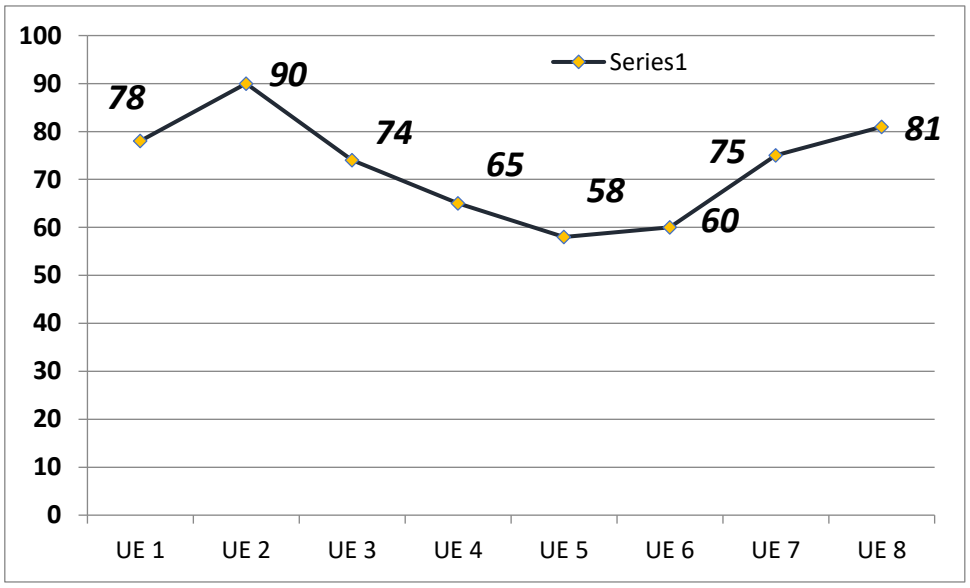
| | | | |
|---|---|---|---|
| 5 | 4 | 1. Ejercicios de calentamiento, fuerza y resistencia, y relajación.<br>2. Rehabilitación y masoterapia. | Se observa a los huéspedes más tranquilos, accesibles y de un mejor humor; se siente una sensación más agradable en la estancia. |
| 6 | 5 | 1. Ejercicios de calentamiento, fuerza y resistencia, y relajación.<br>2. Rehabilitación y masoterapia. | Los huéspedes ya nos esperaban; se observa un ambiente tranquilo y de confianza. |
| 7 | 7 | 1. Ejercicios de calentamiento, fuerza y resistencia, y relajación.<br>2. Ejercicios de coordinación: actividad con globos. | Los huéspedes refieren no sentir dolor o molestia, se muestran muy satisfechos y contentos con nuestra presencia y las actividades que llevamos realizando con ellos.<br>Se aprecian mejorías en los huéspedes en cuanto al estado de humor, la accesibilidad a las actividades, la relación con nosotros y la amplitud en su rango de movilidad. |
| 8 | 6 | 1. Ejercicios de calentamiento, fuerza y resistencia, y relajación.<br>2. Rehabilitación y masoterapia.<br>3. Aromaterapia. | Ya no se quejan por el peso de la botella, sus movimientos son más suaves, ha disminuido la rigidez en sus miembros superiores, así que ya van coordinados con los movimientos.<br>Durante la rehabilitación, se observa mayor rango de movimiento, sin presencia de dolor; se aprecia una mejor apariencia en cada uno de ellos, un aumento de ánimo y una mejor motricidad. |
| 9 | 6 | 1. Ejercicios de calentamiento, fuerza, resistencia y relajación.<br>2. Rehabilitación y masoterapia.<br>3. Jenga | El nivel de confianza y vínculo de amistad ha crecido.<br>Al utilizar las pesas se notan una mayor fuerza y resistencia; aumenta el número de movimientos, y se pasa de 8 a 10 repeticiones sin observar molestia.<br>En este juego, se puede observar que los huéspedes se divirtieron mucho y lo comprendieron con sus reglas; pasan una tarde muy agradable, aunque un poco angustiosa por la torre cuando observaban que su compañero corría el riesgo de tirarla. Su motricidad fina ha mejorado considerablemente, ya que al principio tenían las manos en forma de puño, pero con las sesiones esto ha disminuido y se observa mayor agilidad en sus movimientos. |
| 10 | 5 | 1. Ejercicios de calentamiento, fuerza y resistencia, y relajación.<br>2. Ejercicio de habilidad y destreza: boliche.<br>3. Ejercicio de atención y concentración: lotería.<br>4. Se aplicaron las escalas de valoración (postest). | Las repeticiones han aumentado de 10 a 13, sin observar ninguna molestia; el rango de movilidad y fuerza ha aumentado considerablemente.<br>Han dejado de sentir el peso, resisten todos los ejercicios.<br>Se divirtieron mucho y se observa que tienen una puntería considerable. |

Fuente: Elaboración propia

From what is indicated in Table 2, it can be affirmed that people improved aspects related to flexibility, mobility, attention, concentration and socialization. On the other hand, the main results obtained according to each of the scales applied were the following:

- *Folstein's Minimental:* It was determined that all participating men have cognitive impairment, while in all participating women there are signs of dementia.
- Katz: All men have a mild disability, while all women have moderate disability.
- Tinetti: All participants have gait and balance problems.
- GDS: All the participating population obtained normal values.
- Fumat: Of the 100 points that can be achieved with this scale, 62.5% of the participants consider the perception of the quality of life in the geriatric residence satisfactory (figure 1).

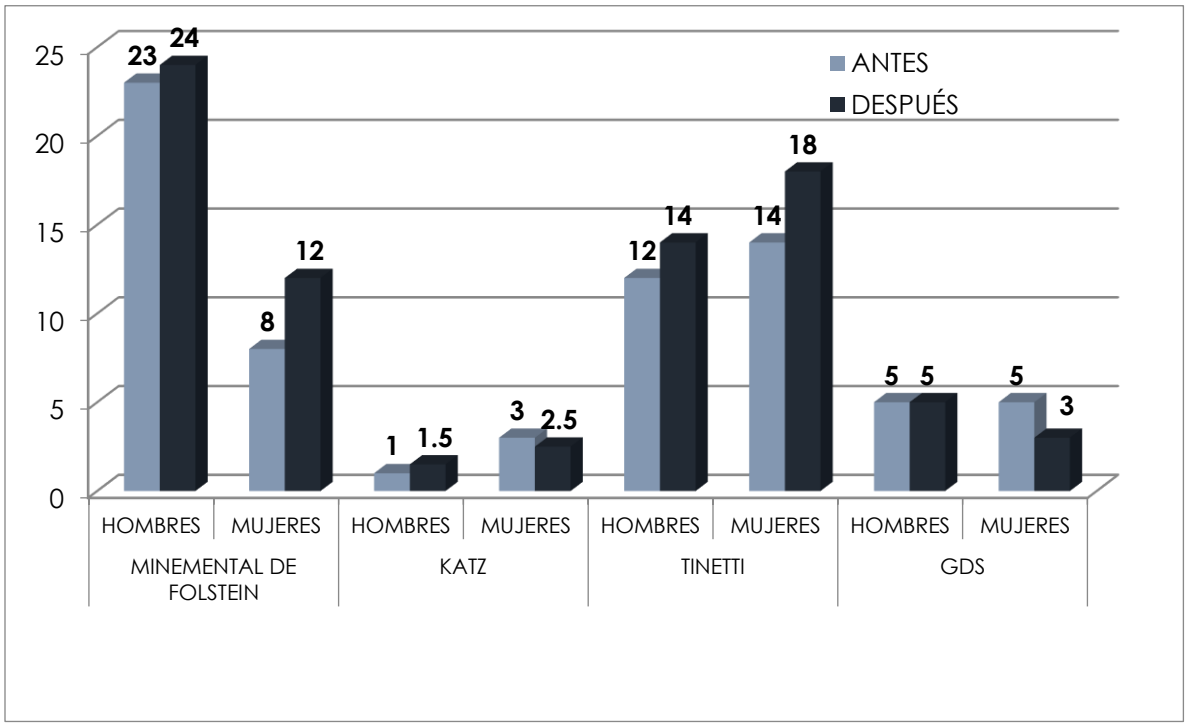
**Figura 1.** Resultados obtenidos en la escala Fumat




Fuente: Elaboración propia

However, it is worth noting that there is no significant difference in the scales applied before and after the treatment plan (Figure 2), although the empirical observation obtained in the sessions evidenced a favorable evolution of the participants.

**Figura 2.** Resultados obtenidos en el pretest y en el postest




Fuente: Elaboración propia

## Discussion

The main limitation found in this study was that it was not possible to maintain the number of eight participants in all the sessions due to their pluripathological characteristics (sometimes they felt unwell and stayed in their rooms); of the four men, only two participated in most of the activities, unlike the women, who stayed until the end.

The gerontological intervention, on the other hand, proved to favor the health of the elderly, since it represents the complementary non-pharmacological treatment they need to improve their condition.

Likewise, and after analyzing the results achieved, it can be affirmed that this study is coherent with two of the sustainable development objectives proposed by the United Nations (UN), that is, health and well-being, and reduction of inequalities, because

gerontological intervention seeks to promote the independence of the elderly through the improvement of their conditions.

Likewise, what is stated by the WHO is confirmed, since in order to maintain health in the elderly, both individual and environmental factors must be taken into account; the former, as already indicated, are linked to the health care that each person performs through their behavior and their adaptation to changes in their age; while the environmental factors are related to the responsibilities of the permanent social assistance establishments, which must attend and seek the socialization of the elderly people who reside there.

Finally, what is stated by Mena et al. (2012), who point out that "in order to develop the interventions, the gerontologist must use a series of specialized instruments that provide the necessary data to analyze and plan these interventions for the multidimensional attention of the elderly person" (p.8). In this sense, the treatment plan of this study followed the proposal of application of assessment scales and intervention protocols, and the benefits derived from them were verified.

## Conclusions

Private establishments of permanent social assistance need the support of educational institutions in the area of health to be considered as headquarters of clinical practice and social service, which would result in better care for guests, as the care of Elderly people demand high expenses that monthly installments do not usually cover in full.

Likewise, it should be stressed that non-pharmacological treatment is essential for these people, so a culture of gerontological intervention must be fostered to achieve satisfactory results in all permanent social assistance establishments.

Likewise, it should be foreseen that working with older adults with multiple pathologies represents a challenge for the health professional, who should have the patience and knowledge to design, apply and evaluate the results achieved with an intervention plan, for which interdisciplinary collaboration.

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