

Differences In The Effectiveness Of Brain Exercises And Beaprecreation Therapy On Cognitive Function In Elderly In Bujel Village Kediri City In 2023

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ABSTRACT

Elderly or old age is the final stage in the human life cycle. Those in this age range will begin to experience degenerative decline in all body systems, one of which is cognitive function. Serious treatment efforts are needed to maintain cognitive function in the elderly in society. One way is by applying complementary therapy. One of them is by applying behavioral therapy and brain exercises. Both of these therapies are able to improve the brain for calculus, memory, concentration etc. This research aims to find out the differences between brain exercises and behavioral therapy on cognitive function in the elderly in the Bujel sub-district, Kediri City in 2023. The population in this study is 45 elderly people in the Bujel sub-district. The sample in the study was 25 people in group 1 with behavioral therapy treatment and 20 people in group 2 with brain exercises using the sampling method using the total population. The research design used was pre-experiment with a two group pre-posttest and post-posttest method. The instrument used is the Mini Mental State Examination (MMSE). Bivariate analysis uses the Wilcoxon and Mann Whitney tests. The results of the research. The statistics obtained are: in group 1: $p\ 0.00 < 0.05$. There is an influence of beapreasi therapy on cognitive function in the elderly in Bujel sub-district, Kediri City in 2023. Before carrying out beapreasi therapy, most respondents experienced a mild decline in cognitive function. Meanwhile, after undergoing behavioral therapy, the majority of respondents had normal cognitive function. In group 2, the P_v value was obtained: 0.005 so that $P_v < \alpha$ concluded that there was an influence of brain exercise on cognitive function in the elderly. After comparing the results in the two groups, the value P_v : 0.000 was obtained, it was concluded that $P_v < \alpha$. There are differences in the effect of the two therapies on cognitive function in the elderly. Appreciation therapy is better at improving cognitive function in the elderly compared to brain exercises, although the difference is very minimal. These two therapies are able to improve brain function by providing proper exercise and oxygenation patterns to the brain. It is hoped that brain exercises and behavioral therapy can be carried out regularly by elderly people in the community.

Keywords : Brain Gym, Beaprecreation Therapy, Decreased Cognitive Function, Elderly

BACKGROUND

Degenerative disease is a health condition that causes tissues or organs to deteriorate over time. There are quite a few types of generative diseases that are associated with aging, or worsen during the aging process, as well as related to genetic problems and lifestyle choices. Many of these diseases are incurable and can only be managed to relieve and improve symptoms. Lance with degenerative processes will experience physical and cognitive

impairment. Decreased cognitive abilities are often considered a common problem and are a natural occurrence in older people.

The decline in cognitive abilities is characterized by dementia or memory loss. Lack of memory or much forgetfulness is one of the early symptoms of bitterness that occurs in the elderly. The further impact of cognitive impairment is generally dementia. Dementia is a degenerative disease caused by cell death that involves a decline in memory and thinking processes. Generally, after people enter old age, they will experience a decline in cognitive and psychomotor function. Cognitive functions include learning processes, orientation, understanding, understanding and attention, thus causing aged reactions and behavior to become slower.

According to Riskesdas 2018, the prevalence of the population with schizophrenia in East Java Province was 7.30% or the equivalent of 1,170 inhabitants. In the year 2022 until November it is known that the number of dementia has continued to increase, especially in the area of Puskesmas Sukorame Kediri. In the work area of Sukorami from January to November 2022 there are as many as 25 elderly with demency from the total patient visits to Pushesmas sukorame 2022. The above data indicates that there has been an increase in cases of dementia in the Puskesmas Sukorame City of Kediri working area over the last 3 years.

Data from Puskesmas Sukorame in particular posyandu lansia kelurahan Bujel Kota Kediri indicates that the most cases of dementia in Kelurahan Boujel especially in RW 01. Kelurahan Bujele is one of the areas in the work area of puskesmas Sukoram with a large number of elderly and the highest incidence of dementias in the last 1 year. Statistical data for 2022 in the same city of the number of elderly about 100 people. obtained the incidence of cognitive impairment of 64 people. 80% of them have dementia.

Based on a preliminary survey conducted on January 11, 2023, in Bujel, during an interview with a permanently blooming elderly posyandu cadre, information was obtained that 8 out of 10 older persons suffer from cognitive dysfunction from mild to severe. From the results of the observations of the eight people, 80% were dementia and only a small proportion had schizophrenia. From random interviews during the survey with several seniors found many of them had disorientation, disturbance of concentration and short-term memory. From the survey obtained information that many of the seniors in Kelurahan Bujel had cognitive dysfunction.

The decrease in cognitive function in the elderly can be minimized by the application of complementary therapies to the elders in the community. (Surahmat et al., 2019). One of the therapies that can be used to improve cognitive function is brain exercise and beapreation therapy. Cognitive function improvement is done by improving concentration, memory and good perception (Revanni, 2022). Beapreation therapy is a combination of brain exercises with benzone relaxation performed jointly to improve cognitive functions in the elderly. (Ramayanti, 2022).

Brain gym is also supposed to be able to maintain even enhance the cognitive function of the elderly. There are many benefits to doing brain gym. Light movements with play through hand and foot movements can give stimulation or stimulation to the brain. It is the movements that produce stimulation that can enhance cognitive abilities (awareness, concentration, speed, perception, learning, memory, problem-solving, and creativity), besides, spiritual activities should be encouraged to give tranquility to the elderly. (Ramayanti, 2020).

Benson relaxation is a technique that relies on the individual's beliefs in religion, in which the individual expresses his state to God. (Revani Dea Sisila1, 2022). From the review the author is interested to take the research with the title: "Differences in the effectiveness of brain exercises and beapreation therapy to cognitive functions in the elderly in the village of Bujel City Kediri in 2023.

METHOD

This type of research is inferential. Included in field research. With pre-experimental methods with two group pre-test - post test and Post-post group design, that is, on this design allows researchers to test the changes that occur after performing treatment in two different groups. By observing, before and after the treatment of each group, then comparing the treatment between the two groups. The population in this study was all the elderly in the age range of 45 to 65 years with cognitive decline conditions that were in the Bujel maturation of 45 people. Divided into 2 groups. The first group received beapreasi therapy with a sample of 25 people and the second group received brain gymnastics with 20 people. The sampling technique in this study is the total population. The variables observed or studied in this study are cognitive functions in the elderly before and after brain exercise and beapreasi therapy. The instruments used in this study using beapreasi therapy leaflets, observation sheets and Mini Mental Status Examination (MMSE) validity tested by calibrated data collection in the elderly aged 45-59. The research procedure is carried out by taking care of permits, then the researchers approach the respondents. (inform consent). Then the researchers took the data by performing an initial assessment of cognitive decline as a pre-test according to population criteria and the sample was subsequently given brain exercise intervention and beapreasi therapy in each group. Each therapy is given according to the prescribed treatment dosage.

RESULT

a. General Data

Here are the results of the study on group 1 with the treatment of beapreasi therapy:

1.Characteristics of respondents by gender

| Jenis Kelamin | F | % |
|---------------|----|-------|
| Male | 0 | 00.0 |
| Female | 25 | 100.0 |
| Total | 25 | 100.0 |

(Source: Primary Data 2023)

Based on table 1, it can be concluded that all (100,0%) of the respondents are female.

2.Characteristics of respondents based on age

| Age | F | % |
|-------|----|-------|
| 45-55 | 13 | 52.0 |
| 55-65 | 9 | 36.0 |
| 65-75 | 3 | 12.0 |
| Total | 25 | 100.0 |

(Source : Primary Data 2023)

Table 2 shows that almost half (52.0%) of respondents are 45-55 years of age. Tabel 3 Distribusi frekuensi jenis tingkat pendidikan lansia di RW 001 Kelurahan Bujel Tahun 2023.

| Last Education | F | % |
|--------------------|----|------|
| Not School | 0 | 00.0 |
| Elementary school | 11 | 44.0 |
| Junior High School | 5 | 20.0 |
| Senior High School | 9 | 36.0 |

| | | |
|-----------------|----|-------|
| Bachelor degree | 0 | 00.0 |
| Total | 25 | 100.0 |

(Source: primary data 2023)

Based on table 3, it can be concluded that almost half (44,0%) of respondents graduated from SD.

Here's the general data on the results of the study in group 2 with the treatment of gymnastics. otak:

4.Characteristics of respondents based on age

| Age | Frecuency | Percentage (%) |
|-----------------------|-----------|----------------|
| Elderly (60-74 tahun) | 14 | 70 |
| Old (75-90 tahun) | 6 | 30 |
| Jumlah | 20 | 100 |

Source : Primary Data 2023

Based on table 4, it can be interpreted that the majority of respondents are 11 elderly (55%) Elderly (60-74 tahun).

5.Characteristics of respondents based on education

| Education | Frecuency | Percentage (%) |
|--------------------|-----------|----------------|
| Elementary School | 18 | 90 |
| Junior High School | 2 | 10 |
| Senior High School | 0 | 0 |
| Jumlah | 20 | 100 |

Source: Primary Data 2023

Based on the table, it can be interpreted that almost all of the respondents, 18 years of age (90%) have a basic education.

6. Respondent characteristics based on gender.

| Gender | Frecuency | Percentage (%) |
|--------|-----------|----------------|
| Male | 7 | 35 |
| Female | 13 | 65 |
| Total | 20 | 100 |

Source : PrimaryData 2023

Based on table 6, it can be interpreted that the majority of respondents are 13 elderly (65%) as farmers.

B.Data Khusus

1.The following are specific data on group 1 with treatment form beapreation therapy:

1.1.Cognitive functions of respondents prior to beapreciation therapy.

| Pretest | F | % |
|----------------|----|-------|
| Normal (24-30) | 2 | 8.0 |
| Mild (18-23) | 23 | 92.0 |
| Serious (0-17) | 0 | 0 |
| Total | 25 | 100.0 |

(Source: primary data 2023)

Based on table 1.1 above, it is seen that (92,0%) of respondents before Beapreasi therapy had a mild decline in cognitive function.

1.2 The degree of decline in the cognitive function of the respondent after being given Beapreasi therapy.

| Pos-test | F | % |
|----------|---|---|
|----------|---|---|

| | | |
|----------------|----|-------|
| Normal (24-30) | 22 | 88.0 |
| Mild (18-23) | 3 | 12,0 |
| Serious (0-17) | 0 | 0 |
| Total | 25 | 100.0 |

(Source : primary data 2023)

Based on table 1.2 above it is seen that almost all (88,0%) of respondents after the administration of Beapreation Therapy have a level of normal cognitive function decrease.

1.3 Analysis of the Impact of Beapreation Therapy on Cognitive Function in the Elderly in Bujel Year 2023.

| cognitive function | Before the therapy | | After the Therapy | |
|--------------------|--------------------|------|-------------------|------|
| | F | % | F | % |
| Normal | 2 | 8,0 | 22 | 88.8 |
| Mild | 23 | 92,0 | 3 | 12,0 |
| Total | 25 | 100 | 25 | 100 |

(Source: primary data 2023)

From the bi-variant statistical test using the Wilcoxon Sign Rank Test the following results were obtained: at $\alpha = 0.05$ p value of 0,000 $P_v < \alpha$. It was concluded that H0 was rejected and H1 received, which gives an interpretation that there was an influence of Beapreasi therapy on cognitive function in the elderly in the Bujel Municipality of Segiri by 2023.

The following is the special data from the second group of 20 people who were treated with brain exercises:

2.1 Cognitive functions of the elderly before the Brain Gym in Bujel County in 2023

| Cognitive Function | Frecuency | Percentage (%) |
|--------------------|-----------|----------------|
| No Disturbance | 2 | 10 |
| Mild | 4 | 20 |
| Serious | 14 | 70 |
| Total | 20 | 100 |

(Source : Primary data 2023)

Based on table 2.1, the majority of respondents were 14 elderly (70%) with severe cognitive impairment.

2.2. Cognitive functions in the elderly after performing Brain

| Cognitive Function | Frecuency | percentage (%) |
|--------------------|-----------|----------------|
| No Disturbance | 3 | 15 |
| Mild | 10 | 50 |
| Serious | 7 | 35 |
| Total | 20 | 100 |

(Source: Primary Data, 2023)

Based on table 4.2.5 it can be interpreted that half of respondents, 10 elderly (50%) have mild cognitive impairment.

2.3 Cross Tabulation The Influence of Brain Gym on Cognitive Function of Dementia Elderly in Kel. Bujel

Tabel 2.3 Cross Tabulation The Influence of Brain Gym on Cognitive Function of Dementia Elderly in Kel. Bujel

| | Category | Post test | | | | | | | |
|-----------------|----------------|-----------|----|----------|----|-------------------|----|-------|-----|
| | | Mild | | Moderate | | Serious | | Total | |
| Pre test | | f | % | f | % | F | % | f | % |
| | No disturbance | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Mild | 2 | 10 | 0 | 0 | 0 | 0 | 2 | 10 |
| | Moderate | 1 | 5 | 3 | 15 | 0 | 0 | 4 | 20 |
| | Serious | 0 | 0 | 7 | 35 | 7 | 35 | 14 | 70 |
| | Total | 3 | 15 | 10 | 50 | 7 | 35 | 20 | 100 |
| p-value : 0,005 | | | | | | Negative rank : 8 | | | |
| α : 0,05 | | | | | | Positive rank : 0 | | | |
| | | | | | | Ties : 9 | | | |

(Source : primary data ,2023)

Based on table 4.2.6 it can be interpreted that almost most respondents at the time of pre-test have severe cognitive functions of the elderly but after therapy respondents have moderate cognition functions that is as many as 7 (35.8%) in the City of Kediri district in 2017. Based on the Wilcoxon test obtained p value (sig 2 tailed) $< \alpha = 0,005 < 0,05$ means H_0 rejected and H_a received which means there is an impact of Brain Gym on the cognitive function of Lansia dementia in Bujel City Township by 2023.

In this study obtained negative rank result which means that the cognitive function of the elderly after given Brain Gym is smaller than before given the Brain gym. The ties that occurred in this study can be concluded that there is an improvement in cognitive function just stays in the same category. 2.4 Cross tabulation of differences in effectiveness of beapresi therapy and brain exercises against cognitive functions in the elderly in Bujel City Kediri year 2023

From table 4.2.7 above it can be seen that after giving brain exercises half (50%) of the respondents experienced cognitive dysfunction in a mild degree. And in the other group, after giving therapy beapresi almost all (88%) of respondents had normal cognitive function conditions. From here can give an interpretation of the result that there is a striking difference in conditions between the two groups. There were different cognitive changes between the two groups. In the group with beapreation therapy treatment, the improvement in cognitive function increased very significantly compared to the groups with brain exercise treatment. In a statistical trial in two different groups using man whietney $\alpha ; 0,05$ obtained P value of 0,0005 so P value $< \alpha$, it was concluded that there was a difference in the effectiveness of brain exercises and beapreation therapy on cognitive functions. In a trial of 1 group coupled Pre-post Test with Wilcoxon known Pv values in brain exercise of: 0,005, while in the therapy group beapreation value of P value of: 0,000. Treatment on beapreation therapy is more effective in improving cognitive function in the elderly.

DISCUSSION

4.2.1 Cognitive functions before doing Beapreasi therapy on the elderly in the Bujel town of Kelurahan by 2023.

Based on a study conducted at Bujel City School in 2023 of 25 respondents aged 45-75 years. The results of the study, stated that cognitive impairment prior to Beapreation therapy as many as 23 respondents had mild cognitional dysfunction (92,0%) and as much as 2 respondents did not have a cognitively impaired function (8,0%), this gives reason for almost all respondents have a mild reduction in cognitive function.

According to the findings of senior researchers suffering from cognitive impairment is 92% because there are some elderly living alone, only staying at home and not much activity. From the results of the interviews obtained data that there has never been any activity conducted by the elderly to examine the cognitive functions or therapeutic therapies complementary to prevent and improve the cognitive functions in the elders. Often there are complaints from the elderly there who forgot to turn the stove off after cooking. Difficulty remembering and slower in counting. All of this leads to signs and symptoms of cognitive impairment due to degenerative processes experienced by the elderly.

The rest (8%) suffered from mild cognitive impairment. The minimum of cognitive dysfunction due to many of the elderly in the region is proven from the results of many interviews that earnestly worship the musholas at the time of the fire. Most of them like to read especially for Muslims by reading the Qur'an, it's a little more going to be a determining factor of low cognitive dysfunction in the elderly. The researchers also found that two respondents did not experience any cognitive impairment (8.0%) because the elderly were still active in their daily activities, i.e. having pets and always following the socialization activities given by the Posyandu cadres.

The decline in cognitive function in the elderly is caused by disorders occurring in the brain as a result of degenerative processes. Lansia with cognitive impairment will affect the ability to think. They'll have trouble remembering prescriptions, calculations, and memory. (Kartolo & Jeanny, 2020).

Cognitive function measurement using the Mini Mental State Examination (MMSE) questionnaire, which is a test on cognitive impairment. The validity and rehabilitation test results are above 0.60, which means valid and reliable. (Komala, et al, 2021).

4.2.2 Cognitive functions after Beapreasi therapy in the elderly at Kelurahan Bujel City Kediri Year 2023.

Based on the results of the study at Kelurahan Bujel Kota Kediri in 2023 of 25 respondents aged 45-75 years. Results of the research, stated that the decline of cognitive function in the elderly in kelurahan bujel city Kediri by 2023 after being given Beapreation Therapy as many as 22 respondents had improved cognitivo function, most (88,0%) had normal cognitiva function and the rest were only mild disorders. From demographic data it is known that most respondents are in the age category of early age 45-55 years. It will of course support the therapeutic program. At this age the brain still feels very capable of responding to the therapy given. The damage to the brain itself is not as great as that of an elderly person who has grown old.

The entire female-type repondation supports the effects of this therapy where psychologically women are more late-to-be creatures to follow the therapeutic program according to the procedure until it is completed. Age and gender demographics support the effect of beapreation therapy on cognitive function in the elderly.

From the results of interviews with the cadets and some family members at the site obtained information that the majority of the elderly there have positive activities that accompany therapy such as the existence of the study of the elders *dimushola*, the hobbies of elders who love to read books, the hobby of those who like to wake up in the morning to carry out the morning worship. Where all these positive activities will support the health of the neuro system in the elderly. With the administration of beapreation therapy and curved activity proper health of the brain will be very fast to improve.

Besides, there are some findings that make the cognitive system of the elderly react quickly with this therapy. Some of them have a hobby of keeping livestock like chickens, poultry, birds, etc. Of course by continuing to move and having a happy heart the health of the elderly brain will quickly recover.

The delivery of beapreation therapy is done with scheduled adjustment of respondents' requests, and procedures. This activity has the full support of the village, Puskemas and Kader Posyandu seniors. So this therapy can be implemented more smoothly and in accordance with the desired purpose..

The researchers found that 3 respondents did not experience any improvement in cognitive function (12.0 per cent) due to elderly refusal to follow Beapreation Therapy according to procedures, no support from the family due to older people living alone and lack of socialization. This gives reason for almost all respondents having improved cognitive function.

According to the brain gymnast at the American Institute at Educational Kinesiology, Paul E. Dennison Ph.D. Although simple, Brain Gym can enhance the cognitive abilities of the elderly. (Franc, 2016). One way to maintain cognitive function in the elderly is by stimulating the brain through sleep and rest. It requires concentration or attention, direction (place, time, situation) and memory.

Beapreasi therapy is defined as a combination of several brain exercise movements developed by Deninson with relaxation Benson. The brain exercise movement chosen is brain exercise as found in the Prasetyo study (2017) Other research reveals that this therapy has been used to improve the quality of sleep in the elderly and this treatment is known to have a positive influence in improving sleep quality in the elders. Beapreation therapy is given to the group through several stages, including screening, then proceeding to training with several meetings until the group is able to do independently, then being entrusted to do it independently (Hidayat & Amir, 2021).

4.2.2 Cognitive functions before giving brain exercises to the elderly in Bujel Township Kelurahan 2023

The results of the study Cognitive Functions in the elderly before performing Brain Gym in the Bujel Municipality of Kediri by 2023 can be interpreted by the majority of respondents, which is 14 elders (70%) have severe cognitive dysfunction.

From a study of people with normal cognitive capacity between the ages of 62 and 100, it was concluded that the ability to learn or acquire experiences a similar significant decrease with the increase of age, but is not related to education, while delayed recall or forgetting is slightly reduced but usually stable, especially if early learning factors are taken into account. (Petersen et al.1992).

With the increase of age, humans will experience a physiological intellectual decline, a decline that can range from forgetfulness to regression of bitterness. (*demensia*). The facts suggest that aging brains suffer from a decline in memory capacity and a regression in the function of the right hemisphere of the brain that mainly monitors alertness, concentration and attention. (Nugroho, 2008)

The conclusion of this study is that the occurrence of cognitive dementia in the elderly without a single exercise that can relieve the condition of the dementious cause many older

people to suffer from demency or severe degrees. This is because of the physiological factors that the elderly always experience as a result of the decline in all organs of the body, especially in the brain. The elderly brain cells will start to fail to function to the maximum, let alone the elder without being given one exercise that can develop the function of the brain. In addition, a large number of elderly people are suffering from a severe criterion of degenerative disorder that accelerates the degeneration process.

Past work experience also affects the more severe bitterness conditions experienced by the elderly. This is proved by the presence of an elder who previously worked as a PNS who in his work the elderly brain is used and after his retirement his brain is not trained and the fakum and elder has no activity after retirement so that it leads to the brain vacuum in a maximum and in the end he has dementia at a severe degree.

4.2.2 Cognitive functions in the elderly after performing Brain Gym in Bujel Municipality in 2023

The results of the study Cognitive Functions in the elderly after performing Brain Gym in the Bujel Municipality of Kediri by 2023 can be interpreted half of the respondents that is 10 elders (50%) have mild cognitive dysfunction.

The brain, as the body's centre of activity, activates the entire organs and systems of the body through messages passed through nerve fibers consciously or unconsciously. In general, the left brain is responsible for the movement of the right part of the body and vice versa. However, the human brain also has specific functions, for the application of brain gymnastics the term lateral dementia is used for the left and right hemispheres of the brain, focused dementias for the back of the brains (brain trunk and brainstem), and the frontal part of the Brain (Frontal lobes), as well as centralized demencies for the limbic system (midbrain) and the large brain (cerebral cortex). (Denisson 2009).

Sagan (in Springer/Deutsch, 1981) stated: "We might say that human culture is the function of the corpus callosum" (that human culture was a function of a corpus kalosum), this is justified because corpus calosum integrated analytical thinking (left brain) with intuitive thinking (right brain) and integrated every structure of the brain part so that it played a role in human behavior and human culture which is the functions of human behaviour.

The opinion that the researchers can give to the elderly who have dementia changes after being treated with Brain Gym suggests that the brain will be more resilient to condition its ability and its brain to dry off the dementias..

4.2.2 The Impact of Brain Gym on Cognitive Function of Dementia Lansing in the City of Bujel by 2023

Based on the above data, it can be interpreted that almost most respondents at the time of pre-test have severe cognitive functions of old age but after therapy respondents have a moderate cognitively old age function that is as many as 7 (35.8%) in Kelurahan Bujel Kota Kediri Year 2023. Based on the Wilcoxon test obtained p value (sig 2 tailed) $< \alpha = 0,005 < 0,05$ means H_0 rejected and H_a received which means there is an influence of Brain Gym on the cognitive function of Lansia dementia in Bujel City Township by 2023.

In this study obtained negative rank result which means that the cognitive function of the elderly after given Brain Gym is smaller than before given the Brain gym. The ties that occurred in this study can be concluded that there is an improvement in cognitivo function just stays in the same category.

Among the brain functions that decrease linearly with age are memory functions, a decline in naming abilities and the speed of retrieving information stored in the memory center. (speed of information retrieval frommemory). The linear decline in memory function occurs in cognitive abilities and does not affect normal lifespan. (Strub, Black,1992). Memory changes or disturbances in brain aging occur only in certain aspects, for example, primary memory (short term memory) relatively does not change with age, whereas in

secondary memories (long-term memory) there are significant changes. That means the ability to transmit information from short-term to long-term memory is declining with the addition of age.

From a study in people of normal age between 62 and 100 years, it was concluded that the ability to learn or acquire experiences a similar significant decrease with age, but is not related to education, whereas delayed recall or forgetting is slightly reduced but usually persists, especially if early learning factors are taken into account. (Petersen et al.1992).

Brain gym is very supportive of changes in dementia in the elderly, it is proved that the occurrence of demency suffered by the elders who are in the category of heavy will decrease after given brain gym. This condition rightly proves that gym bra exercises are very effective in lowering the rate of dementia in the elderly. Therefore, exercise or exercise should be done on a regular basis so that the elderly with severe dementia will decrease with the brain gym activity they do. The family consistency factor in performing brain gym exercises in the elderly needs to be further enhanced so that older people who have previously suffered from cognitive impairment will change to better and will increase as consistencies perform brain gym.

4.2.6 Impact of Beapreation Therapy on Cognitive Functions in the Elderly in the Bujel City of Sujiri Township by 2023.

Based on the results of a study of 25 respondents in Bujel Kelurahan by 2023, before taking Beapreasi Therapy 92.0% had a mild reduction in cognitive function and 8.0% did not have a decrease in cognitive function.

The study found that 23 elderly people suffered from mild cognitive impairment due to the fact that there were some elders who were very good at doing worship that is reading the Qur'an, it affected the development of the brain that every day to read. This is because the dose of Beapreation Therapy given to the respondents is done in order, there are some elderly people who have such a bust as having pets. It is capable ofining the state of cognitive function in a normal state, as the elderly have activity that helps maintain cognitively functioning. Since the elderly did not feel full in their old age, there was a change in the evaluation of MMSE. While given Beapreation Therapy the results of the MMSE examination did not show a decrease from normal to mild.

Analysis results of Wilcoxon Sign Rank Test value p value $\leq 0,05$. The analysis results in this study, p value value (0,00) < of the value α (0,05), then it can be concluded that H0 rejected and H1 received means there is an influence of Beapreation therapy on cognitive function in the elderly in Bujel City Welfare Year 2023.

Beapreation therapy is given to respondents by giving brain exercises along with breathing adjustment using benzene relaxation. This therapy can improve the cognitive system in the elderly with several methods, one of which is by increasing the oxygenation system of the brain and the nervous system. The breathing adjustment is done using the relaxation method of benzene breathing. (ira, 2020). This breathing therapy is done by regulating the patterns of inhalation and exhalation, besides that when performing breathing a person should also make a calming and pleasant pronunciation of the heart. It is a prayer that is given priority to those who have the elements of prayer. The prayer which is chosen is adapted to the religion or belief in each person. So relaxing benzene improves the brain's cognitive system by increasing oxygenation and increasing the release of endorphins. The calm and happy effects will boost the sinapses on the nerves of the central nervous system in the brain. (Hidayat, 2021).

In addition to breathing adjustment, beapreation therapy is also done by performing brain exercises. Brain exercise is a pattern of exercises in body movements that are capable of regaining health conditions in the brain. Giving brain exercise therapy is an attempt to prevent the occurrence of cognitive dysfunction in the elderly. (Zahrudin & Akib, 2014).

From a combination of brain exercises and breathing to a complementary therapy called beapreation. This therapy is capable of reducing cognitive dysfunction in the elderly in Bujel Village by 2023. With a study conducted on 25 respondents of 4 meetings over 1 week, results have been obtained that there is an influence of beapression therapy on cognitively functioning in the elders in the village of Buzel City of Kediri by 2023. The results of this study are in line with the previous research conducted by Mustain (2019) which also yielded results on $P_v: 0,000$ obtained results that there is an influence of beapreation therapy on sleep colour in the elderly.

Complementary therapy in particular beapreation therapy will be able to improve cognitive function in the elderly when done on a regular and continuous basis. For cognitive dysfunction in mild to severe stages, this therapy can have a significant effect. However, if the disorder appears to be in a severe stage, this therapy must be in line with mental medicine. Given simultaneously without prejudice to the elderly (Progolapati, 2021).

4.2.7 Difference in effectiveness of beapreation therapy and brain exercises to cognitive function in the elderly in Kelurahan Bujel city by 2023.

The research was done on two different cockroaches. Both of them are located in the district of Yangs Ama, which is the town of Bujel Sidi on the different RWs. The brain gym group was in RW 2 while beapreation therapy was given in the RW 1. Each treatment was given within the same period of one week. The number of respondents in the two groups is only 5 people apart. More in the beapreation therapy group. Initially the brainstorming group consisted of 25 people but dropped out 5 people from the start. So there's only 20 people left to follow the study.

From the results of the studies that have been obtained based on the results on the statistical trials in 2 different groups using Man whiethney at $\alpha:0,05$ obtaining a P_v value of $0,005$ so $P_v < \alpha$, it was concluded there was a difference in the effectiveness of brain exercise and beapreation therapy on cognitive functions. In the trial of 1 group coupled Pre-post Test with Wilcoxon known value of P_v in brain exercise of: $0,005$, whereas in the therapy group beapreation value P_v of: $0,000$. Treatment on beapreation therapy is more effective in improving cognitive function in the elderly.

Beapreasi therapy combines brain exercises and acclaimed breathing adjustment simultaneously so that respondents get two types of therapy in the same time. Whereas the other group only get brain exercise. It can be concluded that giving brain exercise can give more significant results when combined with other adjuvant therapies such as breathing therapy or other complementary therapy.

CONCLUSION

Based on the results of the research and discussions that have been conducted, the conclusion is as follows: Cognitive functions of the elderly in Bujel City Bujiri 2023 before Beapreasi therapy is mostly at a mild level. And after that is at a normal level. Cognitive functions in the elders in Buzel City Cujiri Bujirin 2023 prior to Brain Gym mostly suffer from severe cognitive dysfunction, and subsequently suffers from mild cognitive disruption.

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