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Review Article

Effects of Thai Chi exercises, and laughter therapy on active aging in community-dwelling older adults: A systematic review.

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Abstract

Background: Community-dwelling older adults lack opportunities for health care, health-related knowledge, participation in health care activities, and a sense of security. These all are some of the identified hindrances on Active-aging elderly living in the community. This study explores the fundamental elements of long-distance Happy-age education in terms of Active-aging in older adults living in the community.

Methodology: An extensive literature search returned 443 studies. Of these, only 10 studies met the inclusion criteria of a scientific investigation of the effectiveness of long-distance happy age education programs, including fun exercise and laughter that contain appropriate elaboration on theoretical constructs and methods.

Results: The qualitative assessment resulted that programs containing more fun-based interventions are effective regardless of the type of intervention. The effectiveness is also modulated by other variables such as the participant's education level, gender, current health status, and financial constraints.

Conclusion: This review suggests that the level of the community-dwelling older adults have seemed to benefit from Thai Chi Rhythmic exercises and laughter exercises. More studies of this topic with older adult populations are needed to select the most convenient Happy-age education program that can improve the level of Active-aging and prolong life with happiness can be fulfilled.

Keywords

Active-Aging, Long-Distance Happy-Age Education, Geriatric, Effectiveness, Thai Chi, Rhythmic Movement, Laughter Therapy.

Introduction

The aging of populations worldwide is rapidly increasing, revealing a dramatic development of human society[1-3]. Fifteen million people that is almost 7% of the total population of Pakistan are aged over sixty-five years, bringing new challenges to the country[4]. From a stereotype as the viewpoint of aging is often reflected as a crucial social problem[5,6]. Older persons are considered "incapable" or "worthless" and are seen as consumers of social assistance rather than creators. People are oblivious to their unique abilities and good impacts on society[7]. Consequently, the government and families tend to hold a negative view while dealing with age-related issues, which seriously hampers the functioning and self-actualization of older adults, making them a burden[8] to both the government and their families[9,10]. Although the government has assigned the task of developing a plan for Active-aging in elderly adults to the health task force forum, none has been implemented properly except the health package for elders. There is an urgent need to design a strategy to implement the concept of Active-aging or successful Aging[10-12].

Active aging is the main component of developmental progress and healthy life in old age. World Health Organization's (WHO) Active-aging Policy Framework describes Active aging as the process of maximizing chances for health, involvement, and security as individuals age for improvement in the quality of life[13]. Reduce psychosocial and physical health problems in all ages[12,14]; However, formal and informal education platform[12] offers learning opportunities for older adults in the form of intergenerational program[15], occupational therapy[16], and recreational based program[11,17], mostly focused on the association between physical activity in Active-aging[17–21].

According to the theory of Active-aging and lifelong learning, education and skill development training can help older adults maintain their biological condition and productivity over time and increase social participation[22,23]. To assist senior citizens in achieving the goal of active aging[24], a participatory and fun-based learning approach creates a standardized model[25]. Older people can increase their knowledge through staying active, socializing, or simply because they enjoy learning[26,27].

The happy-age education program is considered the newest concept in Active-aging education[28]. It improves physical and cognitive functioning, social engagement, and productivity[29–33]. Fun-based education provides happiness for elders by incorporating all the learning resources for new skills development competency in old age. It has proven to be an effective program to promote Active aging through various versions and editions[34].

Along with an increasing number of elderly in Pakistan, the elderly live in an inhospitable environment, lead a stressful life, and suffer from psychosocial illness, which has become a central social problem closely related to the country's political, economic, and social development[35]. To deal with such issues, long-distance Happy-age programs, including laughter therapy and Thai Chi exercise[36], can effectively promote Active aging in Pakistani elders[37]. Consider active-aging to be the lifetime process of maximizing one's ability to function and socialize[25,38,39]. It will helps to improve social governance, maintain social harmony and stability, and promote high-quality economic development by improving the quality of life[25,40].

Moreover, Elders' curriculum is focused on leisure activities rather than classroom lectures[41]. However, in the latter half of the 20th century, the research provided evidence that learning potential in old age is high when fun-based education40 increases older adults in contributing to social and economic development[42]. Learning is an important aspect of aging productively, a latent process that involves skills, experiences, intelligence, memory, and perception, among other qualities[43].

Elder education forums have been developed in foreign countries, focusing on mental, physical, and social health in the last stage of life[44]. Non-formal lifelong learning may aid in the psychological wellbeing, feeling of empowerment, creativity, and

self-fulfillment of older adults[45]. Older adults are kept deprived in our country due to fewer opportunities to participate in learning[46].

Active aging can be improved through leisure activities[47], skills training[17], institutional intergenerational programs[48], and development of standardized senior citizen curriculum for elders[49], shown significant improvement in elders' overall health status[50]. Nurses, researchers, and public health specialists are preoccupied with long-term health issues in the young population. In contrast, the elderly are neglected, resulting in a low quality of life premature disabilities[10,45,51].

Long-distance elder education[18,52,53] promotes healthy lifestyles active aging[52]. Fun-based teaching is an important resource in elder education that is easily accessible to elders[13,26,54] based on physical activity, deep breathing exercises, laughter therapy, or video games[30,55,56]. These can be applied to the elder's learning process[30], wellness[57], happiness[41], internal satisfaction[55], reduced incidence of serious illness[29]. Brings self-accomplishment that positively influences people's elder's abilities[58].

Fun education is a therapeutic approach[59] or enjoyment[39] and improves sleep quality[41,57]. Video-based fun education provides explanation learning that can easily perform at home and unable to cope with chronic diseases with a happy life[50,60,61]. On the other hand, the Pakistani government only focuses on secondary and tertiary prevention[50,61] and not on leisure-based education for older adults[32]. Although older people are enmeshed in changing socio-economic structure, it may lead to low support to older people by their respective families. It warrants the need to devise formal strategies for Active-aging to the growing older population of Pakistan[62]. Long-distance happy education can be established by keeping in mind enjoyment and science-based distance education related to Active-aging, which has been lacking in the previous studies[39,42,63–65], a key teaching style and learning[66]. Laughter is fundamentally a social phenomenon that does affect us as human beings[67]. Joy lowers the neural threshold for perceiving life events as positive and hopeful. However, a fun experience does not necessarily mean that it is an easy or comfortable experience[31].

Happy-age education in old age mainly deals with the concept of wellness[68], quality of life, mental and physical health, and sense of security when frail[22, 29,61] . Therefore, special design courses[69], activities, and materials can be shared in the form of video or simulation[33].

The aim of this systematic review is to evaluate the benefit of fun-based purposeful body movement and self-induced laugh therapy in improving Active Aging in community-dwelling older adults.

Methodology

The systematic review was carried out by following the PRISMA guidelines for preferred reporting items[70]. This study is a systematic review conducted to examine the scientific strategies for older adults' Active-aging. Articles were searched from the following databases: PubMed/Medline, Web of Science (WOS), Scopus, and EBSCO, Science Direct, and Wiley online library using keywords. All the relevant terms were then integrated or connected with Boolean conjunction.

Search Strategy

(("Aged"[Mesh] OR "Elderly"[tiab] OR "Old age*"[tiab] OR "Senior Citizen"[tiab] OR "Geriatric Population"[tiab] AND "Education, Distance"[Mesh] OR "long distance therapy"[tiab] OR "Leisure based education "[tiab] OR "virtual intervention"[tiab] OR Fun Education"[tiab]) OR"wellness education"[tiab]) AND "Healthy Aging"[Mesh] OR "Active-aging"[tiab] OR "successful aging aging"[tiab] OR "happy aging"[tiab]. Manual search performed to get further papers for review.

460 articles were found in PubMed and 30 from another source in the initial search, and it reduced to 356 when filtered the year from 2015 to 2021. After that, it was again filtered for full-text articles, and only 343 remained in the list. They were then filtered for the RCT study, and the number was reduced to 18 papers. Lastly, filtered from language

and only English selected, thus only 10 articles for further review.

Inclusion Criteria

Studies on Participants of elderly age >65 years and over who availed interventions for physical, mental, social, and spiritual wellbeing offered by any health care provider or trained facilitators. Studies on Active-aging interventions and/or programs; Randomized control trial journal papers[56,71] published in English and Urdu between July 2011 to August 2021 are included. Papers, which did not explicitly mention a Happy-age education outcome, were screened for eligibility due to the concept's novelty. Two researchers independently identify one or two criteria at least one component of Active-aging education.

Exclusion Criteria

Studies on programs targeted health care providers to produce health information resources and health promotion concepts. This research aims to find programs based on distance Happy-age education that directly benefit the older adult population through the development of skills, and building their capacity[41,68].

Data extraction

Articles that met the selection criteria were then critically rated based on methodological quality relevance to the research objectives. The following quality criteria were applied to the articles: quasi-experimental and experimental design; loosen the geographical relevancy and included all geographically related articles for review with Happy-age intervention evaluation. For critically appraising studies specific to geriatric health and public health practice[25,72]. The selection of articles was reviewed in combination with the Population Intervene Comparison is on and Outcome (PICO) methodological quality assessment tool.

PICO favors using an evidence-based approach to answering the research questions. For each review, the following information will be extracted by one reviewer and independently checked for accuracy by a second reviewer. In extracting key findings, we will focus on identifying benefits, harms, and costs related to the intervention and list any highlighted potential barriers to implementation.

Risk of bias

The interventional studies' quality was evaluated using an effective public health practice project (EPHPP) tool containing six components: selection bias, study design, confounders, blinding, data collection method, and withdrawals/ dropouts. Each component is rated as weak (1 point), moderate (2 points), and strong component (3 points). The maximum total score per study is 3.00. Two authors performed the search of articles in various databases. The records were then subjected to a final assessment using the EPHPP tool, which established inclusion and exclusion criteria.

Results

The result was calculated from all articles selected from the online database plus secondary searches. In figure 1, the search approach is depicted. Total 10 papers were chosen from the 80 full reviewed papers checked in the online database search. The articles were classified in this way; Four articles[32,33,35,36] were classified as fun-based exercises that prevent physical disabilities and the remaining were enjoyably classified as health literacy[35,37–40].

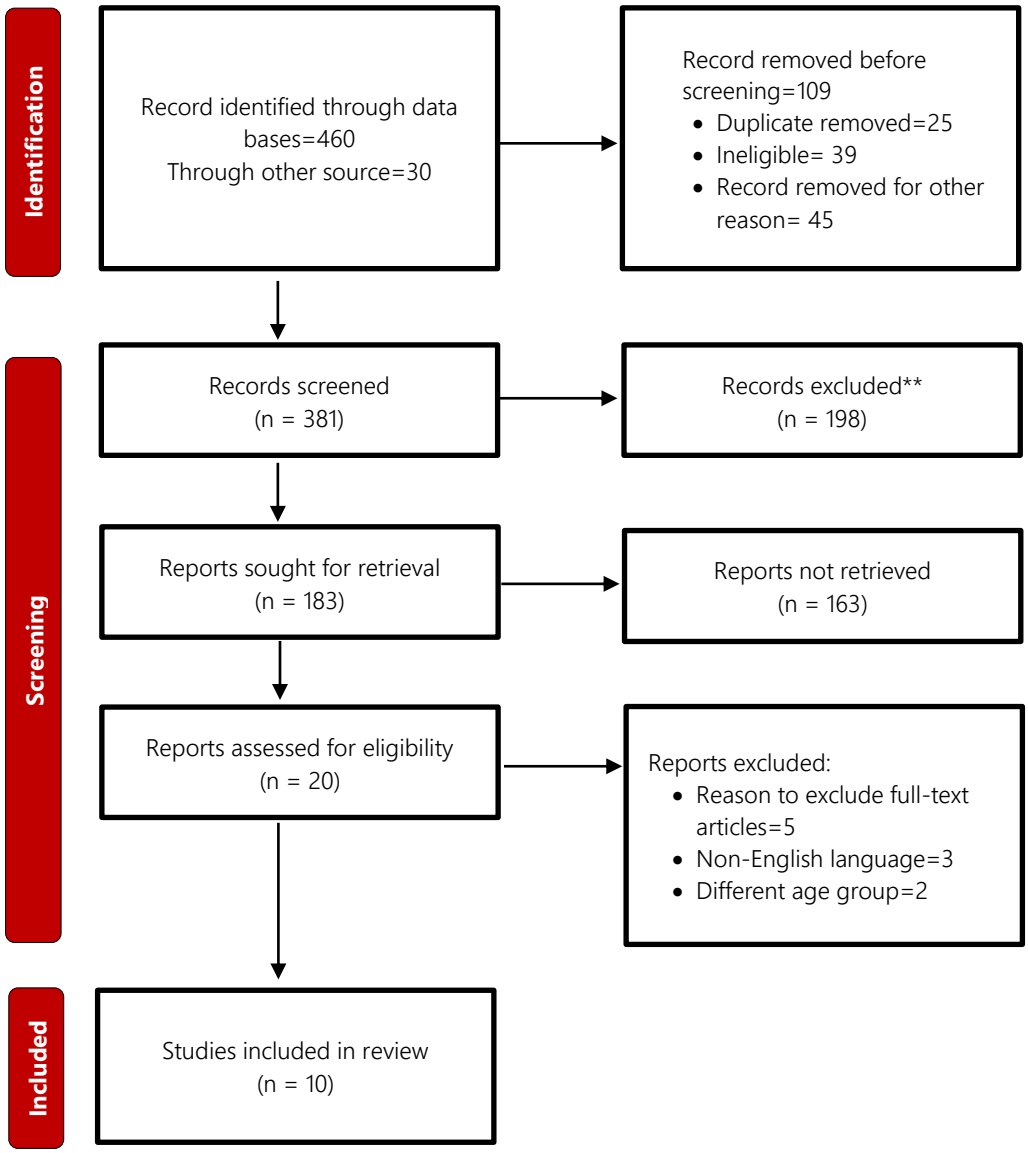

Figure 1: Summary of the search for review

Table 1: Summary of the review.

Author Details	Ref no.	Age & Gender	Intervention Model & Control Group	Therapeutic Approach Treatment Length	Mode, Sessions, Dosage (Hours) Assessments	Results
Bernardelli et al, 2018	21	>70 years old elders. Community home-based. Eligible people (*n* = 186).	four months of weekly APA classes of 45 min or in control group performing usual lifestyle activity	adapted physical activity (APA) program	short physical performance battery (SPPB), pain (visual analogic scale, McGill Questionnaire), Disability Index (ODI), Geriatric Depression Scale were used in this study	a statistically significant difference in the time to walk 400 m only in the subgroup intervention with the lower performance at baseline
Cederbom et al, 2019	23	Age >75 years are having muscular pain. Home-based. Gender is not mentioned.	Behavioral medicines intervention for 16 weeks duration and then mobile call follow up.	Total of 12 weeks intervention to change behavior in old age self-health management.	The participants in I.G. received in total nine-session/ weeks 1–8 and 12. supportive telephone call they received In Ten week.	The results showed a significant difference in pain severity between the groups. A significant difference in increased PCS and MCS for HRQL between the I.G. and C.G. was found.
Gunning et al, 2021	27	>60 years old. Both gender, Neurology Department of Taipei Medical University Hospital, Taiwan,	6 weeks intervention and 6 weeks control period	video game based exercises	Behavioral evaluation scales were used to evaluate the intervention.	An iterative video game-based exercises training improves balance, postural stability, and confidence in preventing falls. However, this IVGB exercise does not significantly impact the quality of life.

Pohar et al, 2014	34	>60 years both gender, community living	engaged physical and non-physical, at These included bowling, ballroom dancing, lunch clubs, tai-chi, walking groups, art classes.	One-to-one initial meetings in first 2 weeks), Month 1–3). Further support by joining meeting-3-6 months	6-month program. This included two initial one-to-one meetings	Fun-based interventions for helping socially disengaged older people get out and about more, improve their confidence and engage more with their community.
Heideri et al, 2020	36	Elders age 60 years and above. Nursing home. Male and female both.	One hour of fun education included humorous video clips , musical and visual slides, prizes of humor. Competitions and telling jokes.	Fun that is jock, laugh, and exercises. The quality of life scale and geriatric depression scale was used to see the effect of the intervention.	Only pre and post-test. Time duration one time only	Improve the mental status and QOL of the elderly, this method of therapy can be used as an alternative or complementary model to enhance the health of the elderly.
Ni et al, 2015	48	45-75years old. The study setting was not explicitly mentioned.	4 weeks intervention,	Video game playing	play at Home for 20–25 min per day, at least 5 times per week, for 4 weeks.	Video game-like interventions improve cognitive, affective, and working memory.
Bennett & Hackney, 2017	58	65 years and the above setting was not mentioned	Line Dancing=intervention group. Usual Care: Control group	Total of 8 weeks intervention of line dancing.	warm-up 10 minutes, dancing practice 40 minutes and cool down 15 minutes.	Eight weeks of happy age education significantly improved physical function and reduced self-reported mobility.
Hung et al, 2014	59	Age not mentioned in years. Eight community centers.	structured, slow movement physical activity program conducted in a center (twice/week) and at home (3-4 times/week)	Total of 2.6 years in study. Structured physical activity. Functional Behavioral Analysis (FBA) was used as a tool	physical activity intervention involved walking, with a the goal of 150 min/wk, strength,	structured, moderate-intensity exercises program suggest mobility benefits for vulnerable older adults.

Stathi et al, 2019	67	60-90 years. Both male and female	12 weeks intervention included health education exercise, nutrition, and long-term care were 194 provided once per month over 12 weeks.	Power training and high-speed Yoga training. Two scales, the Berg Balance Scale used.	two 2-week (weeks 5 and 6; weeks 11 and 12) translational Training cycles were incorporated into the PWT program.	Motor skill practice in Parkinson's disease can be improved aging quality through High-speed Yoga and power training.
Oh et al, 2016	77	More than 70 years elderly. Genders not mentioned the setting was a community center	Physical exercises and Elastic band training.	18 weeks Life Review L.R. positive events session And control for six media session	This is more focused on Chinese medicine and promotes self-directed training and initial intervention.	Significant changes in physical activity after the 8-week Physical exercise intervention resulted in a 10% improvement. (P0.001; 120 deg/s; P0.05) and muscle quality (P0.05) after 18 weeks of intervention compared to the control and intervention groups' baselines.

Few articles focused on enjoyable activities, laughter therapy puzzle games to improve psychosocial health in old age people, and no article focused on long-distance Happy-age education included high power exercises and self-induced laughter to improve Active-aging among older adults. Data extracted are represented in table 1. This table provides an in-depth overview of the nature and outcomes of each of the fun-based activities.

Participants

The majority of the study used randomized control trials[56,58,59,67,73], and only one used stratified randomized control trial[34] and purposive sampling method(advertisement, visiting senior centers, and through hospital visit)[58]. The average sample size ranges from 12 older adults[58] to 817 older adults, and the age of the participants ranges from 60 years to 80 years. There are no specific criteria for sample size, but the majority of the researchers recommend more than 30. Most studies also focus on older people residing independently in the community[67,74] and physically inactive[55]. Others use samples of elderly living in institutions for example in nursing homes36. Feminine ratio in the selected studies were similar to male participants; some studies do not mention genders[56].

Information about the recruitment campaign was emailed to health care professionals working in geriatric clinics, elder centers, and community clinics., hospitals geriatric centers, social work, local newspapers, radio stations, and organizations that serve the elderly) and at activities attended by the elderly. Invitation letters were also issued to a particular Christian congregation. public gathering[56,58,59,67] Participants' recruitment was mainly achieved through professional referral and advertisement, except for one study that also recruited from nursing homes[36] and one from medical hospital neurology ward[59], and one study that invited clients from geriatric centers in a community[34,47]. The 7 research reports are interventional designed to promote physical activity in Active-aging through fun exercises under facilitator supervision only, and 2 are video game based[27,59] exercises[34,58,67], one is focused on physical and behavioral health[24]. One is mental wellbeing and focused study[36].

Measuring tools

The quality of life scale consisting of 36 items is frequently used to see the outcome of the fun intervention. The total number of items in the questionnaire was 29. A five-point Likert scale was used. Scores were interpreted as poor, good, better, and high quality of life. The total score was 145 reflects the level of Quality of Life among the elderly. It has five physical domains, level of independence, social relationship, environment, spirituality, and personal beliefs[75] Few studies used the life satisfaction scale in which 50 scores average to say highly satisfied and not satisfied[66,76]. Elders health status, their productivity, life satisfaction, and economic stability is measured usually with Active-aging scale consisting of a total of 36 items divided into 7 domains that are Self-care, Actively learn and integrate into society, Actively contribute to society, Develop spiritual wisdom, Establish economic security, Maintain a healthy lifestyle. The mood disorder that is depression was usually measured through the Beck Depression Inventory or the Geriatric Depression Scale. Elder's generosity, decision-making ability, cognitive ability, affects, and reflection are measured by wisdom scales[36].

Data analysis

Data analysis included repeated measure analysis of variance, ANOVA, and t-test. It is noted that, despite numerous dropouts, no investigation used intention-to-treat in analysis. Intervention Characteristics: Four studies reported Active-aging interventions using the health promotion model included action and learning-oriented fun education. Two studies used Positive life review non-pharmacological behavioral medicines. The objectives of Active-aging fun interventions were diverse and nonspecific. Most studies tend to promote physical activity and social interactions in old age. High-speed yoga programs that appear more often are based on fun and leisure activities and very few video-led happy education programs. Despite the efforts given to identify the intervention types, it is not clear that the interventions are only leisure educational programs and physio, psychosocial fun interventional programs.

In general, there is an evolution in Active-aging strategies and tools within broader interventions of older adults' Active-aging. Various methods and strategies are used (line dancing, laughter therapy, video games, high-speed yoga, etc.) Almost all interventions follow group-based interventions except two studies in which group-based intervention in the first session and then home-based intervention through mobile follow-up. The duration of intervention ranged from 4 weeks to 2.5 years, but most of the study followed 8 to 12 weeks of intervention[41,56,66]. The interventions were led by trained health care providers (two studies), psychologists or psychotherapists (one study) not mentioned (2 studies), and video-based games (2 studies), Health care providers and researchers themselves (1 study) trained facilitators (2 studies).

The duration of each intervention varied greatly (40 minutes to 60 minutes. However, in most cases, especially in multi strategic fun interventions 75% and 85% in control groups[29,52,55,56,77]. Overall, the data reflect good adherence to treatment. Only two study data show no difference in intervention and control group outcome. The majority of the studies selected intervention groups and control

groups with health education, lecture, and written materials[67]. Two studies only keep the control groups on the waiting list[67], one with pre and post-test only[36]. Physical health outcomes were investigated in only two studies[29,78].

In terms of the effects of various sorts of treatments, the statistics show that long-distance Happy-age education achieves better results for Active-aging in elders than other types of therapies, especially on intervention effect size were remain highly different.

Quality appraisal

Table 2: A quality Assessment tool for studies with diverse Designs (QATSDD).

Criteria scores: 0-3	Reviewed papers undergone for quality assessment									
	Reference No.									
Authors Contribution	**58**	**34**	**23**	**36**	**21**	**27**	**67**	**48**	**59**	**77**
Explicit theoretical framework	0.5	0	0	1	1	1	1	2	1	1
Statement of aim and objectives are clearly mentioned.	2.5	2	2	2	2	2	2.5	2	1	2
The research setting is mentioned	1	1	1	1	2	2.5	2	2	2	2
Coherency among R. question, objectives, and hypothesis	1	1	2	1	1	1	1	2	2	2
The sample size is representative of the population	2	2		1	2	1	1	2	2	2
Description of data collection procedure is clearly mentioned	2	3	2	2	2	2	2	2	2	2
The justification given to select tools and mentioned validity and reliability of selected tools	1	2	1	1	1	2	1	2	1	1
Study strength and limitations mentioned	0	1	1	1.5	1	1	1	1	1	2

Discussion

As it is the only review that synthesizes the results of the effects of long-distance Happy-age education intervention for active aging in the geriatric population, we found that interventional strategy, which is fun, based might be beneficent for older adult's active aging with fewer adverse effects. This review also suggests that there is a possibility for using long-distance happy education to develop a video that is an augmentative approach to the Active-aging process in older adults. Despite the rapid increase in elder populations needing psychosocial treatment, physical fitness, and elder empowerment, there are very less focused on geriatric health and wellbeing.

In addition, the research study intended for fun-based educational interventions for Active-aging in older adults began at the start of the 1960s. It is silent creating ambiguity to evidently generate the effectiveness of Active-aging interventions. There is a lake of homogeneity, and variety in content and style. There is a need to conduct other Active-aging interventions, which could be more convenient, and older adults can perform independently in their homes.

Active-aging fun-based interventions are effective in decreasing physical disabilities and mental health problems in old age and increase Active-aging (performing social activities, contributing to societies, and living happy life instead of life uncertainties) and wisdom level in older adults. Geriatric nurses and health care providers must be aware of fun educational strategies for Active-aging in elders.

Overall, this review suggests at least the option that our geriatric populations might get more

benefit and learn from leisure-type activities that improve active-aging in old age, including those interventions provided in group and then home-based, or nursing home, or geriatric home[79]. Socialization, mimicry, empathy for each other's difficulties, and helping each other acquire entertaining education and new behavior can be nourished through group-focused education[80]. On the other hand, only one study proven that individual-focused happy age education that is (video-based) fun education, more effective for Active-aging than interventions group only[81].

Nevertheless, fun-based education is more effective for active aging as compared to classroom-based lectures for the elderly in the community[36,37]. Moreover, in the literature, there was little intention to evaluate the effects of leisure based learning strategies on individuals, and on group[28,41,56]. Although the time frame for intervention was varied in the included studies. It is evident that in most of the studies, older adult had accomplished an average four weeks of period which seems to be required to achieve Active-aging benefits[30,31]. Treatment dosage for Active-aging has significantly affected the effects of intervention; elders can develop more active when they get at least 8-12 weeks of treatment of fun education[41,56,58,66]. Researches argued that Active-aging in elders needs consistent follow-up and social support to adhere to fun education[28,41,56,57]. Nevertheless, in a previous study, the optimum duration for an Active-aging group and individual intervention is an average of 30-45 minutes, including 15 minutes break. There was a study in our review in which older people spent 90 minutes but the consequences were not mentioned in that study. The strongest effects of the intervention were found for preventing physical disability, improving sleep quality, and mental health status (affective, cognitive, and working memory) principally in the time after intervention[19,47,82].

This can show that Active-aging in old age needs efficacy and consistency in practice to change behavior for Active-aging practice in old age. The reviewed result indicated that the number of sessions, arranged in more time, is connected to a better outcome. Our findings recommend that time duration might affect the result of key variables in Active-aging treatment. Loneliness, depression, inactivity, poor health, high dependency on finance and daily activities are associated with poor quality of life and unsuccessful aging in old age, which can detract through Happy-age or fun education, life satisfaction, social support, and subjective wellbeing happiness[12].

Active aging but another outcome (e.g., resilience, mental health, life satisfaction) were positively affected. Fun based Rhythmic exercises and laughter therapy was highly at helping the elderly to achieve Active-aging, improve constructive feelings, wisdom, lessen various mental health illness more specifically depression in comparison to participants in the waiting list, nonspecific treatment conditions, and usual care (i.e., daily activities at their nursing home, health education on Active-aging[6,81], usual care only)[79]. The effects were less when follow-up was delayed than those with a facilitator directly supervised and taken follow-up. Carefulness is required because we are not cleared to detect the superiority of one intervention over another intervention design.

Moreover, relevant variables such as Active-aging and wisdom level could be assessed in future studies to see the effects of distance fun education. For Active-aging treatments, (intervention must incorporate all the seven components of a treatment model[83]. However, the majority of the scholarships certain in this appraisal only apply some Active-aging and wisdom components to be assessed. In any circumstance, it seems correct to undertake that well-trained facilitators carry out the intervention, well-structured video already developed through which effective intervention can be carried out. Fun-based Active-aging interventions improve the physical strength[44], memory level[84], positive emotions, judgmental power, decision-making ability, and productivity in old age, and are still unresolved. Hence, Happy-age education with inactive, nonproductive, and unhappy older adults is highly recommended[85]. Most studies did not mention the genders, so the

female may develop more mental health problems and poor decision-making influence their active aging ability[18,72]. On the other hand, they might take more benefit from Happy-age education due to feminine personality and feelings of empowerment during the intervention.

Older adults in every society have traditionally been placed in the more formal group than younger groups; such group is difficult to assess. Drop out was low, only 5% in fun-based intervention. Several are not attentive in contributing to the other types of interventions and where the duration was so long; even if they are interested, they have solemn troubles that avoid them from getting involved. The sample size of the studies reviewed here (which is typically medium or low) backs up this assertion. It may be useful to conduct studies of active-aging therapies with older persons with sample sizes greater than 50. Rhythmic exercise and purposeful laughing are safe and effective to improve older adults' active-aging and wellbeing of older adults. Nevertheless, some limitations should be acknowledged, involving the inclusion criteria we employed, the heterogeneity of the available treatments, and the analyses performed.

The limitation concerns the therapeutic heterogeneity between studies that influence and decrease the generalization of experiential management effects. However, the response definition was reasonably consistent within the Active-aging intervention model. It may be difficult to conclude whether the positive outcomes were attributed to the Happy-age education alone (Rhythmic exercises or laughter therapy, a synergetic intervention effect, or to the conventional treatment received by the patients. Nevertheless, results from our overall analysis support Happy-age education as an adjunctive treatment or as a monotherapy for older adults.

Fifth, it is also a limitation that the included studies' wisdom components (cognitive, affective, and reflective) components were not assessed. Unmeasured wisdom levels like cognitive impairment could have interfered with the report of Active-aging levels and wisdom levels themselves, as mild cognitive impairment is associated with increased anxiety and depression.

Conclusion

In conclusion, the limitation concerns the therapeutic heterogeneity between researches that can decrease the generalization of the findings of experiential treatment effects. However, the response explanation was sensibly reliable within the intervention model of Active-aging in elderly. It may be hard to determine whether the results were attributed to the Happy-age education alone (Rhythmic exercises or laughter therapy, a synergetic intervention effect, or to the conservative treatment received by the patients. Nevertheless, results from our overall analysis support Happy-age education as an additional convenient strategy or as a singular basic therapy for older adults to remain active and spend high quality of life It is also a limitation that the included studies' wisdom components (cognitive, affective, and reflective) components were not assessed. Unmeasured wisdom levels like cognitive impairment, and underdeveloped wisdom in elderly could have hampered with the report of Active-aging levels and wisdom levels themselves, as poor wisdom in elderly is associated with increased mental health illness and loneliness.

Conflicts of Interest

The authors have declared that no competing interests exist.

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