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Research Article

Well-being among Elderly Individuals with Fibromyalgia

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Abstract

Aims: The study aimed to assess the mental well-being of elderly individuals diagnosed with fibromyalgia in a selected community in Chennai, India, and to explore its association with selected demographic variables.

Objectives: (1) To assess the well-being among elderly individuals with fibromyalgia. (2) To determine the association between selected background variables and well-being in elderly individuals with fibromyalgia.

Materials and Methods: A cross-sectional study was conducted involving 80 elderly patients with a confirmed diagnosis of fibromyalgia. Participants were selected through consecutive sampling from the community. Ethical approval was obtained from the Institutional Ethics Committee. Data were collected using a demographic pro forma and the Short Warwick-Edinburgh mental well-being scale, which scores mental well-being on a scale ranging from 7 to 35.

Results: The mental well-being scores ranged from 7 to 11, with a mean score of 8.71 (±0.94), corresponding to a mean percentage score of 24.8%, indicating a low level of mental well-being among the participants. Statistical analysis revealed a significant association between previous occupation and mental well-being ($P = 0.023$), where participants previously employed in the organized sector reported higher well-being scores compared to those unemployed or engaged in informal labor. No significant associations were observed between mental well-being and other demographic variables, including age, gender, educational status, religion, living status of spouse, financial dependency, income, number of children, body mass index, and history of chronic illness ($P > 0.05$).

Conclusion: Elderly individuals with fibromyalgia in this community experience consistently low mental well-being. Occupational background appears to influence mental well-being, emphasizing the need for tailored interventions focusing on psychosocial support to improve the quality of life in this population.

Keywords: Elderly population, fibromyalgia, mental well-being, occupational influence, short Warwick-Edinburgh mental well-being scale

Introduction

Fibromyalgia is a persistent disorder marked by widespread muscle and joint pain, exhaustion, sleep issues, and cognitive impairments, profoundly affecting the quality of life. Among elderly individuals, a study found that 5.5% had fibromyalgia and 14.1% experienced chronic widespread pain.[1] Fibromyalgia significantly impacts multiple dimensions of well-being, such as physical, emotional, cognitive, and social, especially in elderly individuals. Its intricate and enduring symptoms frequently compound age-related difficulties, making them more detrimental to everyday living.

Nationally, the Longitudinal Ageing Study in India found that 36.6% of older adults were often troubled by pain, with a significant decline in quality of life among those affected.[2] The average quality of life score was 81.6 for those with pain, compared to 85.2 for those without, indicating a substantial impact of chronic pain on well-being.[3]

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Elderly individuals may avoid social gatherings or community activities due to discomfort, embarrassment, or the physical effort required for participation.[4] This reduction in social interaction can weaken support networks and contribute to feelings of loneliness and decreased emotional resilience. Poor sleep quality is another common issue, as many individuals with fibromyalgia experience insomnia or non-restorative sleep. These disturbances further exacerbate fatigue and pain perception, creating a vicious cycle that diminishes both physical recovery and emotional well-being.[5]

In addition, elderly individuals with fibromyalgia may experience feelings of helplessness or low self-worth due to their reduced independence. The unpredictability of symptoms can generate chronic stress and fear, negatively impacting mental health and overall quality of life.

Randomized controlled trials and observational studies have shown that physical activity is an effective non-pharmacological approach to enhancing well-being in individuals with fibromyalgia. Regular low-impact activities such as walking, swimming, stretching, or yoga have been found to reduce chronic pain, improve sleep and mood, and increase energy levels.[6,7]

These activities also empower individuals by enhancing their sense of control over their lives. Over time, consistent physical activity contributes to improved overall health, reduced anxiety and stress, enhanced self-esteem, and better daily functioning. Although individual responses may vary, regular low-impact exercise is widely recommended by healthcare professionals and supported by evidence-based guidelines for the management of fibromyalgia.[8]

Statement of the problem

A descriptive study is to explore the well-being of elderly individuals with fibromyalgia in a selected community, Chennai.

Objectives of the study

1. To assess the well-being among elderly individuals with fibromyalgia
2. To determine the association between selected background variables and well-being in elderly individuals with fibromyalgia.

Null hypothesis

H_{01}: There is no significant association between selected variables and well-being among elderly individuals with fibromyalgia.

Materials and Methods

Study design and setting

This descriptive study was conducted in selected communities in Chennai, India. The focus was on assessing mental well-being among elderly individuals diagnosed with fibromyalgia.

Sample size and sampling method

A total of 80 elderly individuals aged 60 years and above with a clinical diagnosis of fibromyalgia were included in the study. Participants were selected using a consecutive sampling technique. Individuals with major psychiatric disorders, severe cognitive impairment, or terminal illnesses were excluded from the study.

Data collection tool and technique

- Section A: Demographic data Pro forma

This section was designed to collect background information on the participants, including age, gender, education, marital status, living arrangements, comorbid conditions, and duration of fibromyalgia. This information was gathered through structured interviews to help contextualize the findings and explore possible associations with mental well-being.

- Section B: Short Warwick-Edinburgh mental well-being scale (SWEMWBS)

This section assessed the participants' mental well-being using the SWEMWBS, a validated, 7-item scale developed by Stewart-Brown *et al*.[9] The scale measures positive aspects of mental health, including optimism, feeling useful, relaxed, and thinking clearly. Each item is rated on a 5-point Likert scale ranging from "none of the time"[1] to "all of the time."[5] The total score ranges from 7 to 35, with higher scores indicating better mental well-being. The SWEMWBS provides a concise yet reliable assessment of overall mental wellness.

Statistical analysis

The collected data were entered into Microsoft Excel and analyzed using the Statistical Packages for the Social Sciences version 22. Continuous variables were expressed as mean ± standard deviation and categorical variables as frequencies and percentages. Data were visually represented using bar and pie charts. The Chi-square test was used to determine associations between selected variables and well-being scores, with a $P < 0.05$ considered statistically significant.

Ethical considerations

Ethical approval was obtained from the Apollo Institutional Ethics Committee, and written informed consent was secured from all participants before data collection.

Results

- Section A

Table 1 presents the descriptive statistics of well-being scores among the elderly population with fibromyalgia ($n = 80$). The scores were measured using the SWEMWBS, which has a possible score range from 7 to 35. In this study, the observed scores ranged from a minimum of 7 to a maximum of 11, with a mean score of 8.71 ± 0.944. The mean percentage score was calculated as 24.8%, indicating a low level of mental well-being among the participants [Table 1].

Table 1: Descriptive statistics of well-being score among elderly population (*n*=80)

Assessment	Obtainable score	Minimum	Maximum	Mean	SD	Mean %
Elderly individuals	7–35	7	11	8.71	0.944	24.8

These findings suggest that the majority of elderly individuals in the sample reported poor mental well-being, as reflected by their relatively low scores on the SWEMWBS. This low range of scores implies limited positive emotions and psychological functioning in this population, which may be influenced by factors such as chronic pain, reduced mobility, social isolation, or other comorbidities commonly associated with fibromyalgia in older adults.

- Section B

Table 2 presents the association between well-being scores and selected background variables among elderly individuals with fibromyalgia. A statistically significant association was found between previous occupation and well-being ($P = 0.023$), indicating that occupational background may influence mental well-being in this population. Participants who had worked in the organized sector reported higher well-being scores compared to other groups. However, no significant associations were observed between well-being and other demographic variables, including age, gender, educational status, religion, living status of spouse, financial dependency, income, number of children, body mass index (BMI), and history of chronic illness ($P > 0.05$ for all). Therefore, the null hypothesis stating that there would be no significant association between selected background variables and well-being was rejected with respect to previous occupation, while it was retained for all other variables.

Table 2: Association between well-being and selected variables of the elderly population (*n*=80)

Variables	*n*	Mean	SD	One-way ANOVA/"*t*" test
Age in years				
61–65	61	8.67	0.978	*t*=0.683
>65	19	8.84	0.834	*P*=0.743
Gender				
Male	12	9.00	1.044	*t*=1.147
Female	68	8.66	0.924	*P*=0.255
Educational status				
No formal education	55	8.65	0.907	F=1.846
Primary education	19	8.63	0.955	*P*=0.146
Secondary education	2	9.00	1.414	
Higher secondary	4	9.75	0.957	
Previous occupation				
Unemployed	32	8.38	0.871	F=3.362
Homemaker	34	8.85	0.958	*P*=0.023
Laborer	8	8.88	0.641	
Worked in organized sector	6	9.50	1.049	
Religion				
Hindu	62	8.66	0.974	F=0.839
Muslim	4	8.50	0.577	*P*=0.436
Christian	14	9.00	0.877	
Living status of spouse				
Alive	21	8.67	0.913	*t*=0.258
Dead	59	8.73	0.962	*P*=0.797
Financial dependency				
Independent	9	8.44	0.882	F=1.039
Partially dependent	14	9.00	1.109	*P*=0.359
Dependent	57	8.68	0.909	
Income/month in IRS				
Up to 5000	44	8.68	0.983	*t*=0.320
5001–10000	36	8.75	0.906	*P*=0.750
Number of children				
One	49	8.69	0.769	F=0.671
Two	28	8.68	1.188	*P*=0.514
>Two	3	9.33	1.155	
BMI				
Normal range (18.5–24.9)	43	8.58	0.982	F=1.270
Overweight (25.0–29.9)	32	8.81	0.738	*P*=0.287
Obesity (≤30.0)	5	9.20	1.643	
History of chronic medical illness				
Absent	17	8.88	0.857	*t*=0.834
Present	63	8.67	0.967	*P*=0.407

ANOVA: Analysis of variance, SD: Standard deviation, BMI: Body mass index

Discussion

In this study, the observed well-being scores among elderly individuals with fibromyalgia ranged from a minimum of 7 to a maximum of 11, with a mean score of 8.71 ± 0.944. The mean percentage score was 24.8%, indicating a low level of mental well-being in this population. These findings suggest that participants experience limited positive emotions and psychological functioning, which may be influenced by chronic pain, reduced mobility, social isolation, or comorbidities commonly associated with fibromyalgia in older adults.

A study by Fawaz and Suliman found that elderly individuals with fibromyalgia had significantly lower well-being compared to healthy peers. The fibromyalgia group showed higher disability (fibromyalgia impact questionnaire [FIQ] and Health Assessment Questionnaire Disability Index scores) and poorer social functioning (SF-36 score, $P < 0.001$). These findings support the present study, where all participants had low well-being scores, highlighting the negative impact of fibromyalgia on mental and social health in older adults.[10]

This study found a significant link between previous occupation and well-being ($P = 0.023$), with participants from organized sector jobs reporting better mental wellness. In contrast, no significant associations were found between well-being and other factors such as age, gender, education, religion, spouse's living status, financial dependency, income, number of children, BMI, or chronic illness ($P > 0.05$), indicating these may not strongly influence well-being in this group.

A recent study by Fischetti *et al*. analyzed data from the Italian Fibromyalgia Registry, encompassing 3,221 patients. The findings revealed that lower educational levels were significantly associated with more severe fibromyalgia

symptoms, as measured by the FIQ revised ($P < 0.0001$). In addition, separated or divorced males exhibited higher symptom severity compared to other marital status groups ($P = 0.001$), highlighting the influence of sociodemographic factors on disease impact.[11]

Considering the significant impact of fibromyalgia on both mental and physical health particularly among older adults promoting well-being emerges as a crucial component of care. Evidence-based interventions, including structured physical activity, psychological counselling, and enhanced social engagement, have demonstrated effectiveness in improving overall quality of life.

Conclusion

This study reveals that elderly individuals with fibromyalgia in the selected community of Chennai consistently experience low levels of well-being. The findings emphasize the detrimental effects of chronic pain, limited mobility, and emotional distress on their overall quality of life. These results highlight the necessity for comprehensive interventions targeting physical, psychological, and social dimensions of health. Enhancing community-based care services and raising awareness may contribute meaningfully to improving daily functioning and promoting better health outcomes in this vulnerable population.

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Conflict of Interest

Na.

Funding

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