

## Original Research Article

# An open label, prospective, observational study on role of homoeopathic medicine in geriatric age group of patients and its analysis using Barthel index

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## ABSTRACT

**Background:** An ordinal scale called the Barthel scale is used to measure how well people conduct activities of daily living (ADL). The likelihood of being able to live at home with some degree of independence increases with a higher score. A study on elderly patients aged 60 to 80 with a variety of illnesses, including dementia, osteoarthritis, benign prostatic hyperplasia, hypertension, diabetes mellitus and stroke, was carried out at Government Homoeopathic Medical College and Hospital in Bhopal, Madhya Pradesh.

**Methods:** To study the role of homoeopathic medicine in geriatric group of patients and its analysis using Barthel Index. It was observational, individualistic, descriptive study.

**Results:** A total of 944 patients were included in the study and after the statistical analysis of data the paired samples t-test results show that there is a statistically significant difference between the "AFTER" and "BEFORE" measurements, with the "AFTER" measurements being significantly higher. The results suggest a highly significant difference between the two groups being compared, with a large effect size. The extremely small p-value ( $4.076 \times 10^{-151}$ ) indicates that the observed difference is very unlikely to have occurred by chance if the null hypothesis were true.

**Conclusions:** It is concluded that homoeopathic medicine seems to be efficacious in treating and managing various kinds of ailments in geriatric group of patients like dementia, osteoarthritis, benign prostatic hyperplasia, hypertension, diabetes mellitus, stroke etc. using Barthel index scoring.

**Keywords:** Barthel index, Geriatric age group, Homoeopathy, Scoring

## INTRODUCTION

The Barthel index calculates how much help a person needs for ten ADLs related to mobility and self-care. The scale, which was first used in 1965, provided a score between 0 and 100.<sup>1</sup> After arguing that the initial scoring system gave a too accurate picture, Collin et al, (1988) suggested a change in which each domain was given a score in one-point increments, with a total score of 20 signifying functional independence. Research on the

reliability of the Barthel ADL index. Each of the 10 elements is given a point value and the aggregate of the points given to each functional ability determines the overall result.<sup>1</sup> This allows the examiner to measure a patient's functional disability by quantifying their performance. Either direct evaluation or observation or trustworthy interviews with the patient, family or staff might be used to assign scores. Additionally, studies indicate that ratings may be assigned based on the examiner's clinical expertise and "common sense." The

more autonomous the patient is in doing the assessed ADLs, the higher the score. Additionally, higher ratings suggest that after being discharged from the hospital, the patient is more likely to return home, but with differing levels of support. The more dependent the patient is on the performance of ADLs, the lower the score and the more specialized care will be needed upon discharge.<sup>2</sup> While the Barthel Index is used in many populations, its use is highly recommended in the assessment of individuals with stroke, Parkinson's, brain injury, cancer, COVID-19, patients admitted to the intensive care unit and with older persons.<sup>2</sup> The ten variables addressed in the Barthel scale are

Feeding, bathing, grooming, dressing, bowels, bladder, toilet use, transfers (bed to chair and back), mobility (on level surfaces), stairs, total (0-100).

The BI's simplicity is one of its advantages. It is helpful in assessing a patient's level of independence prior to therapy, his development during treatment and his condition at the point of maximal benefit. Everyone who works with a patient may understand it with ease and anyone who follows the above-mentioned item descriptions can score it accurately and fast. The breakdown of the score into individual components is more significant and informative because it shows the areas of deficiency.

### ***Homoeopathy in geriatrics***

The scientific branch of medicine that studies the health of the elderly is called geriatrics. The ultimate goal of geriatric healthcare is to improve the health status of elder populations by alleviating and treating illnesses, disabilities and afflictions. In many ways, geriatric medicine differs from adult medicine. An elderly citizen's physiological composition is very different from that of an adult. When the body's organ systems start to fail, it's referred to as "old age." Seniors' living conditions, dependence and physical functioning are the main concerns of geriatricians.<sup>4</sup>

Taking care of a senior's health is not the same as taking care of an adult. One important difference between geriatrics and adult healthcare is that seniors frequently lack the capacity for independent critical thought. Concerns about informed consent, legal culture, confidentiality and other issues should always be recognized. Elder abuse is a serious issue for this age group as well. Geriatricians often have to help the caregivers and, in some cases, the family instead of the old. The most urgent issues in geriatric medicine are incontinence, inflexibility, instability and reduced cognition. Seniors may experience health issues such as decreased activities of daily living, the usage of numerous medications, diminished vision and hearing and depression.<sup>5</sup>

Seniors may experience health issues such as decreased activities of daily living, the usage of numerous medications, diminished vision and hearing and

depression. Because homeopathy meets the requirements for an ideal senior care medical system, it is advantageous for the elderly. In homeopathy, patients receive holistic care and medications are tailored to the individual rather than the illness.<sup>7</sup> Homeopathy is a safe, effective and widely empirical medical system. Since homeopathic medications are non-toxic, there is no risk of overdosing. They are also less costly than traditional regimens, readily kept and non-addictive. Homeopathy provides a progressive, albeit frequently intense, treatment for acute or chronic disease, regardless of whether the signs are behavioural, psychological or physical. Most people, from babies to seniors, seem to benefit from homeopathy.<sup>4</sup> Our bodies undergo numerous harmful and deteriorating changes as we age and our metabolism slows down. Standard treatments for old age ailments only provide temporary relief, while homeopathic remedies are accurate, quick and effective for elderly patients. Homeopathy is beneficial to seniors because they need gentle, precise medicines.

According to some study, people's immune systems are strengthened and diseases are less likely to recur when they receive homeopathic treatment for common ailments. If the ailment has not advanced past the point at which the immune system can fight off illness or beyond the serious conditions that call for surgery, homeopathy can help you avoid unnecessary operations. Even the most challenging surgical cases can benefit from homeopathic medication's ability to speed healing and regeneration and lessen post-operative stress.<sup>8</sup>

Seniors are particularly vulnerable to psychological instability because of the aging process, problems with physical health, brain dysfunction and socioeconomic factors like the loss of financial security and familial support networks. Among the psychological issues that are frequently observed in older adults include dementia, Alzheimer's disease and emotional disorders. Mental diseases including dementia, depression and Alzheimer's, which are more common in older adults, are treated with homeopathy.<sup>7</sup>

### ***Aim and objectives***

To study the role of homoeopathic medicine in geriatric group of patients and its analysis using Barthel Index

## **METHODS**

### ***Study design***

The study was observational, individualistic and descriptive.

The primary risk factor for multimorbidity is aging, which is marked by an increased vulnerability to the emergence of numerous chronic illnesses. According to gerontology, the cumulative accumulation of several illnesses, which considerably quickens with age, is an

indication of age-related multisystem homeostatic dysregulation and a progressive decline in resistance.

The biology of aging may be better understood by researching multimorbidity, at the same time, tactics to avoid or lessen the burden of multimorbidity may be developed by comprehending the underlying causes of aging. Therefore, in order to encourage creative research projects to enhance the management and treatment of older patients with multiple morbidities, we think it is time to establish links and foster communication between the clinical experience of general practitioners and geriatricians and the scientists who study aging.

System of medicine known as homeopathy is based on the unchanging principle that "like cures like," or "Similia Similibus Curantur." Accordingly, homeopathy can be described as a treatment approach based on symptom similarities. The selection of the medication is essentially predicated on the idea that it must be able to cause the majority of the disease's symptoms in healthy individuals in order to be effective. Accurate homeopathic selection is not the only factor that determines a medicine's suitability for a certain situation, the right dosage amount is also important. The term "minute dose" refers to the smallest amount of medication that causes the least amount of vital force excitation while yet having the ability to accomplish the required. Due to their cheap production costs and generic, non-patented and non-patentable nature, homeopathic medicines are far less expensive than traditional prescription medications. Therefore, the treatment is affordable for people in both rural and urban areas.

### **Study design**

Authors conducted an open-label trial or open trial, which is a type of clinical trial in which information is not withheld from trial participants. Specifically, the patient and researchers are both aware of the medicine being given. Both the researcher and the study participant (and caregiver, if relevant) are informed of the treatment given to study participants in an open label trial. This strategy is frequently used to collect safety data from the same individuals in an extension trial, which happens right after a randomized controlled trial. In order to ascertain how various factors impact the rates of a particular outcome, our study is a prospective cohort study, which is a type of longitudinal cohort study that tracks a group of comparable people (cohorts) throughout time who differ with regard to specific parameters under investigation. The study protocol was reviewed and approved by the Institutional Ethical Committee of our institute. Informed consent was obtained from each subject before enrolment.

### **Study place**

The study was carried out at Government Homoeopathic Medical College and Hospital in Bhopal, Madhya Pradesh.

### **Study duration**

The study was carried out from January 2024 to April 2025.

### **Patients**

Before experiencing the outcome, patients are enrolled in the study. All older adults regardless of their disease and health state were invited to participate. Older adults were enrolled by the study physicians. They are then monitored as the disease progresses to determine which participants experience the consequence and which do not and scoring was noted down on every follow up. Because cohort studies are observational in nature, researchers will monitor the participants without changing any of the variables or altering their surroundings.

### **Data analysis**

For the statistical analysis of the data of 944 patients we use paired samples T-Test and ANNOVA Test. 1. A paired samples t-test is a statistical test used to compare the means of two related groups. It is used when the same subjects are measured under two different conditions or at two different time points. Key components of the Results: t-statistic:32.391 The t-statistic (32.391) measures the difference between the means relative to the variation in the data. Degrees of freedom (df):943 The degrees of freedom (943) refer to the number of independent pieces of information used to calculate the t-statistic. In a paired t-test, it's typically one less than the number of pairs of observations. p-value: Less than 0.001. This indicates a statistically significant difference between the "AFTER" and "BEFORE" measurements.

Vovk-Sellke Maximum p Ratio:4.076×10+151. This value represents the maximum odds in favor of the alternative hypothesis (H<sub>1</sub>) over the null hypothesis (H<sub>0</sub>), based on the two-sided p-value. Mean Difference:16.695 Standard Error of the Difference:0.515. Descriptive Statistics: AFTER: Mean=93.692, Standard Deviation (SD)=11.441, Standard Error (SE)=0.372, Coefficient of Variation=0.122. BEFORE: Mean=76.997, Standard Deviation (SD)=18.144, Standard Error (SE)=0.591, Coefficient of Variation=0.236. Interpretation-The paired samples t-test results show that there is a statistically significant difference between the "AFTER" and "BEFORE" measurements, with the "AFTER" measurements being significantly higher. The results suggest a highly significant difference between the two groups being compared, with a large effect size. The extremely small p value (4.076×10-151) indicates that the observed difference is very unlikely to have occurred by chance if the null hypothesis were true. The Vovk-Sellke Maximum p ratio indicates very strong evidence against the null hypothesis. Repeated measures ANOVA test, which is a statistical method used to analyze data from experiments where the same subjects are measured multiple times. Here's a breakdown of the key

information presented; within subjects effects RM Factor 1, this likely represents the independent variable that is being manipulated within each subject. Sum of Squares: 131555.932. A measure of the total variability attributed to the RM Factor 1. Degrees of Freedom (df): 1. The number of independent pieces of information used to calculate the sum of squares. Mean Square: 131555.932. The sum of squares divided by the degrees of freedom.

F-statistic: 1049.163. The F-statistic, which is the ratio of the mean square for the RM Factor 1 to the mean square for the residuals. p-value: < .001 p value, which represents the probability of obtaining the observed results if the null hypothesis is true. A p-value less than 0.001 is considered statistically significant. Vovk-Sellke Maximum p-Ratio:  $4.076 \times 10^{151}$ . This column represents the variance-standardized maximum possible odds ratio. Eta squared ( $\eta^2$ ): 0.527. This is eta-squared, a measure of effect size, indicating the proportion of variance explained by the independent variable.

Between Subjects Effects: Sum of Squares: 315650.218 Degrees of Freedom (df): 943 Mean Square: 334.730 Type III Sum of Squares was used. Descriptives: RM Factor 1: Level 1: N: 944 Mean: 93.692 Standard Deviation (SD): 11.441 Standard Error (SE): 0.372 Coefficient of Variation: 0.122 Level 2: N: 944 Mean: 76.997 Standard Deviation (SD): 18.144 Standard Error (SE): 0.591 Coefficient of Variation: 0.236 Interpretation The results suggest that the repeated measure factor (RM Factor 1) has a significant impact on the dependent variable. There is a significant effect of RM Factor 1, indicated by the p value<0.001.

The effect size ( $\eta^2$ ) of 0.527 suggests a large effect of RM Factor 1. The Vovk-Sellke Maximum p ratio indicates strong evidence in favor of the alternative hypothesis (H1). The means for Level 1 (93.692) and Level 2 (76.997) of RM Factor 1 differ significantly. The large F-statistic and small p value provide strong evidence against the null hypothesis. The descriptive statistics further show that the mean value of the dependent variable is significantly different between the two levels of RM Factor 1.

Barthel index form filled by total 944 patients at the first visit of the treatment and in subsequent follow up visits. Before and after readings are mentioned below graphically.

### Interpretation

There was total 10 items in the questionnaire first one is feeding in which out of 944, 91 patients scored 0 which indicates complete dependence on their first visit and in the follow up 8 patients scored 0. Second item is bathing in which out of 944, 146 patients scored 0 on their first visit and in the follow up 18 patients scored 0. Third item is grooming in which out of 944, 177 patients scored 0 on their first visit and in the follow up 19 patients scored 0.

Fourth item is dressing in which out of 944, 99 patients scored 0 on their first visit and in the follow up 10 patients scored 0. Fifth item is bowels in which out of 944, 70 patients scored 0 on their first visit and in the follow up 8 patients scored 0. Sixth item is bladder in which out of 944, 79 patients scored 0 on their first visit and in the follow up 10 patients scored 0. Seventh item is toilet use in which out of 944, 60 patients scored 0 on their first visit and in the follow up 8 patients scored 0. Eighth item is transfers in which out of 944, 66 patients scored 0 on their first visit and in the follow up 6 patients scored 0. Ninth item is mobility in which out of 944, 144 patients scored 0 on their first visit and in the follow up 7 patients scored 0. Tenth item is in which out of 944, 83 patients scored 0 on their first visit and in the follow up 9 patients scored 0.

## RESULTS

A total of 944 patients were included in the study, the paired samples t-test results show that there is a statistically significant difference between the "AFTER" and "BEFORE" measurements, with the "AFTER" measurements being significantly higher. The results suggest a highly significant difference between the two groups being compared, with a large effect size. The extremely small p value ( $4.076 \times 10^{-151}$ ) indicates that the observed difference is very unlikely to have occurred by chance if the null hypothesis were true. The Vovk-Sellke Maximum p ratio indicates very strong evidence against the null hypothesis. Repeated measures ANNOVA results suggest that the repeated measure factor (RM Factor 1) has a significant impact on the dependent variable. There is a significant effect of RM factor 1, indicated by the p value<0.001. The effect size ( $\eta^2$ ) of 0.527 suggests a large effect of RM factor 1.

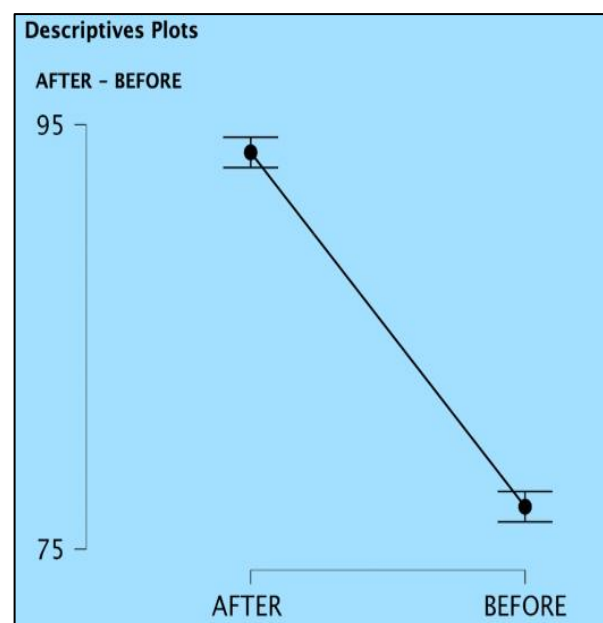
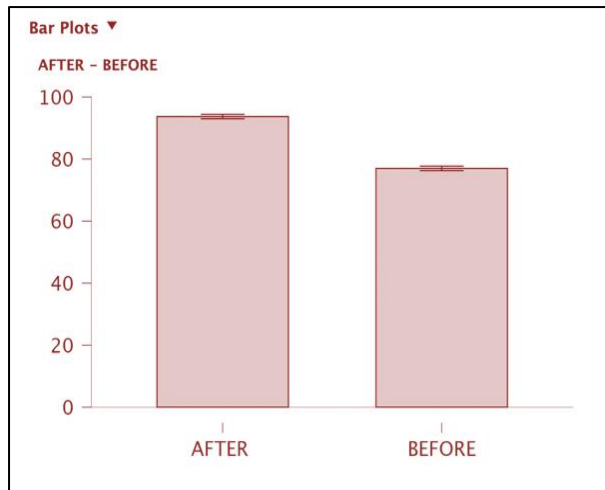


Figure 1: Descriptive plots before and after.



**Figure 2: Bar plots before and after.**

The Vovk-Sellke Maximum p ratio indicates strong evidence in favor of the alternative hypothesis (H1). The means for level 1 (93.692) and level 2 (76.997) of RM factor 1 differ significantly. The large F-statistic and small p value provide strong evidence against the null hypothesis. The descriptive statistics further show that the mean value of the dependent variable is significantly different between the two levels of RM factor 1.

### **Bias**

There can be chances of various types of bias in the study like sampling bias, selection bias and information bias and to remove that we used random methods to select participants. We Used standardized, validated tools. We clearly document methods and limitations and for Statistical analysis, we used appropriate statistical methods to account for potential biases.

**Table 1: Ten points of BI with grading.**

| S. no | Grading                                                                | Before | After |
|-------|------------------------------------------------------------------------|--------|-------|
| 1.    | 0=unable                                                               | 91     | 8     |
|       | 5=needs help cutting, spreading butter, etc. or requires modified diet | 220    | 56    |
|       | 10=independent                                                         | 633    | 880   |
| 2.    | 0=independent                                                          | 146    | 18    |
|       | 5= independent (or in shower)                                          | 798    | 926   |
| 3.    | 0= needs to help with personal care                                    | 177    | 19    |
|       | 5=independent face/hair/teeth/shaving                                  | 767    | 925   |
| 4.    | 0=dependent                                                            | 99     | 10    |
|       | 5=needs help but can do about half unaided                             | 194    | 55    |
|       | 10=independent                                                         | 651    | 879   |
| 5.    | 0=incontinent                                                          | 70     | 8     |
|       | 5 =occasional accident                                                 | 189    | 64    |
|       | 10=continent                                                           | 685    | 872   |
| 6.    | 0= incontinent or catheterized and unable to manage alone              | 79     | 10    |
|       | 5 =occasional accident                                                 | 233    | 82    |
|       | 10=continent                                                           | 632    | 852   |
| 7.    | 0=dependent                                                            | 60     | 8     |
|       | 5=needs some help, but can do something alone                          | 216    | 59    |
|       | 10=independent                                                         | 668    | 877   |
| 8.    | 0= unable, no sitting balance                                          | 63     | 6     |
|       | 5= major help                                                          | 218    | 19    |
|       | 10 minor helps                                                         | 225    | 216   |
| 9.    | 15= independent                                                        | 438    | 703   |
|       | 0=immobile or < 50 yards                                               | 134    | 7     |
|       | 5= wheelchair independent, including corners, > 50 yards               | 157    | 17    |
|       | 10 =walks with help of one person (verbal or physical) > 50 yards      | 206    | 162   |
| 10.   | 15= independent (but may use any aid; for example, stick) > 50 yards   | 447    | 759   |
|       | 0=unable                                                               | 83     | 9     |
|       | 5=needs help                                                           | 231    | 245   |
|       | 10=independent                                                         | 630    | 690   |

**Table 2: Demographic data and clinical characteristics of study participants.**

|                                                       |                                                                                                                                                      |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Demographic data</b>                               | 944 patients were included in the study of both sexes of geriatric age group and patients of all the socioeconomic status are included in the study. |
| <b>Clinical characteristics of study participants</b> | Patients suffering from the geriatric age group diseases like hypertension, osteoarthritis, BPH, diabetes etc.                                       |

## DISCUSSION

A study on elderly patients aged 60 to 80 with a variety of illnesses, including dementia, osteoarthritis, benign prostatic hyperplasia, hypertension, diabetes mellitus and stroke, was carried out at Government Homoeopathic Medical College and Hospital in Bhopal, Madhya Pradesh. On the first visit patient/ study physician/guardian has to fill the proforma as per the study protocol and scoring is noted down, same process is followed in follow up visits after application of homoeopathic medicine which is compared with the scoring of next follow up visits.<sup>1</sup>

The study demonstrated a highly significant improvement in the outcome measures after the intervention, as indicated by the paired samples t-test and repeated measures ANOVA. The “AFTER” scores were significantly higher than the “BEFORE” scores, with a very large effect size ( $\eta^2=0.527$ ). The extremely small p-value and Vovk-Sellke statistics strongly support rejection of the null hypothesis, confirming that the observed changes are not due to chance.

These results suggest that the intervention had a substantial and meaningful positive impact on the dependent variable. In the past some studies were done in elderly age group people in clinical practice and used in the rehabilitation ward of elderly patients also a study conducted in Uttar Pradesh, India in which Assessment of physical disability using Barthel index among elderly of rural areas was done these are one of the bases for doing present study work.<sup>36,37</sup>

This study focuses on geriatric population; elderly patients often have multiple comorbidities and impaired daily functioning. Studying this group increases the clinical and social relevance of the research. Also, there is use of a standardized outcome measure, the Barthel index is a well-recognized, validated and objective tool for assessing activities of daily living ADL, ensuring reliability of outcome assessment.

Study design is prospective and observational design, since it is a prospective study, data were collected forward in time, which reduces recall bias compared to retrospective studies. Through this study there is contribution to evidence in homeopathy, limited large-scale studies are available on the role of homoeopathic medicine in geriatrics, this study adds to the scientific evidence base.

## CONCLUSION

An open label, prospective, observational study on role of homoeopathic medicine in geriatric age group of patients and its analysis using Barthel index was done at government homoeopathic medical college and Hospital, Bhopal, Madhya Pradesh, India. It is concluded that homoeopathic medicine seems to be efficacious in treating and managing various kinds of ailments in geriatric group of patients like dementia, osteoarthritis, benign prostatic hyperplasia, hypertension, diabetes mellitus, stroke etc. and Barthel index scoring was used for the analysis of improvement which clearly reflects the before and after condition of the patient.

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*Ethical approval: The study was approved by the Institutional Ethics Committee*

## REFERENCES

- da Silva Sousa CD, Santos-de-Araújo AD, Pereira FH, Santos PM, Frutuoso VP, Dibai DB. Level of functionality of patients with congestive heart failure evaluated by the barthel index. *Revista de Gestão Social e Ambiental*. 2024;18(10):1-1.
- Brett L, Collins A, Lemsing K, Poulos CJ. Client characteristics and outcomes of the Australian short-term restorative care programme: a cohort study. *BMC Health Services Research*. 2025;25(1):1-5.
- Li QX, Zhao XJ, Wang Y, Wang DL, Zhang J, Liu TJ. Value of the Barthel scale in prognostic prediction for patients with cerebral infarction. *BMC cardiovas Disord*. 2020;20(1):14.
- Wolfe NK. *Alternative Health Care Utilisation Among Seniors* (Doctoral dissertation, University of Victoria). 2000.
- Jette AM, Tao W, Haley SM. Homeopathy use among older adults in the US. *J Am Med Dir Assoc*. 2018;19(1):64-9.

6. Relton C, Cooper K, Viksveen P, Fibert P, Thomas K. Prevalence of homeopathy use by the general population worldwide: a systematic review. *Homeopathy*. 2017;106(02):69-78.
7. Ross TD. Geriatrics and homœopathy. *British Homeopathic J*. 1954;44(03/04):184-93.
8. Wolfe NK. *Alternative Health Care Utilisation Among Seniors* (Doctoral dissertation, University of Victoria). 2000.
9. Schmidt D. Proof of principle trials: exploratory open studies. *Epilepsy Res*. 2001;45(1-3):15-8.
10. Sedgwick P. What is an open label trial. *BMJ*. 2014;3:48.
11. Hill MJ, Heads AM, Green C, Suchting R, Stotts AL. Pilot testing the effectiveness of whether a survey-driven tablet-based intervention increased willingness of Black women to attend to an initial PrEP clinic visit: the protocol for the pilot randomized controlled trial design and methods. *Contemp Clin Trials Comm*. 2022;29:100985.
12. National Cancer Institute. Prospective cohort study. Available from: <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/prospective-cohort-study>. Accessed 07 July 2025.
13. Mahoney FI, Barthel DW. Functional Evaluation: The Barthel Index. *Md State Med J*. 1965;14:61-5.
14. Ohura T, Hase K, Nakajima Y, Nakayama T. Validity and reliability of a performance evaluation tool based on the modified Barthel Index for stroke patients. *BMC Med Res Methodol*. 2017;17(1):131.
15. Culvenor AG. *Physiopedia: one big constantly updating online textbook written and edited by physiotherapists for physiotherapists (continuing professional development series)*. *British J Sports Med*. 2017;51(23):1707-8.
16. Li QX, Zhao XJ, Wang Y, Wang DL. Value of the Barthel scale in prognostic prediction for patients with cerebral infarction. *BMC cardiovascular disorders*. 2020;20(1):14.
17. Wolfe NK. *Alternative Health Care Utilisation Among Seniors* (Doctoral dissertation, University of Victoria). 2000.
18. Boyd CM. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. *J Am Geriatr Soc*. 2005;53(4):722-8.
19. Teut M, Lüdtke R, Schnabel K, Willich SN, Witt CM. Homeopathic treatment of elderly patients-a prospective observational study with follow-up over a two-year period. *BMC Geriatr*. 2010;10(1):10.
20. Tripathy T, Das S, Swamy PN, Kar M. *Geriatrics skin & homœopathy*. 2012.
21. Spence DS, Thompson EA, Barron SJ. Homeopathic treatment for chronic disease: a 6-year, university-hospital outpatient observational study. *J Altern Complement Med*. 2005;11(5):793-8.
22. Das E. Understanding the principles of homeopathy on a research perspective. *J Complement Med Alt Healthcare*. 2019;9(2):555756.
23. Sedgwick P. What is an open label trial. *BMJ*. 2014;23;348.
24. Hill MJ, Heads AM, Green C, Suchting R, Stotts AL. Pilot testing the effectiveness of whether a survey-driven tablet-based intervention increased willingness of Black women to attend to an initial PrEP clinic visit: the protocol for the pilot randomized controlled trial design and methods. *Contemp Clin Trial Comm*. 2022;29:100985.
25. Taber C, Elnemer W, Marx R. Design of a Prospective Cohort Study. In *Orthopaedic Sports Medicine: An Encyclopedic Review of Diagnosis, Prevention, and Management*. 2025.
26. Collin C, Wade DT, Davies S, Horne V. The Barthel ADL Index: a reliability study. *Int Disabil Stud*. 1988;10(2):61-3.
27. Wade DT, Collin C. The Barthel ADL Index: A standard measure of physical disability. *Int Disabil Stud*. 1988;10(2):64-7.
28. Banerjee S. Commentary: The use of the Barthel Index in clinical settings. *BMJ*. 2010;340:1310.
29. Bell IR, Koithan M, Pincus D. Methodological implications of nonlinear dynamical systems models for whole systems of complementary and alternative medicine. *Forsch Komplementmed*. 2009;16(1):15-21.
30. Mathie RT, Lloyd SM, Legg LA, Clausen J, Moss S, Davidson JR, et al. Randomised placebo-controlled trials of individualised homeopathic treatment: systematic review and meta-analysis. *Syst Rev*. 2014;3:142.
31. Fisher P, Ward A. Complementary medicine in Europe. *BMJ*. 1994;309(6947):107-11.
32. Gupta YK, Ramachandran SS. Homœopathy: Is it a science. *Indian J Pharmacol*. 2010;42(3):145-7.
33. World Health Organization. *Legal status of traditional medicine and complementary/alternative medicine: a worldwide review*. Geneva: WHO. 2001.
34. Saxena A, Vohora SB. Homeopathic drug therapy in geriatric patients: A holistic approach. *J Geriatr Ment Health*. 2003;9(2):24-9.
35. Verma R, Khanna P, Mehta B. National program for health care of the elderly in India: A hope for healthy ageing. *Int J Prev Med*. 2012;3(10):615-7.
36. Stone SP, Ali B, Auberleek I, Thompsell A, Young A. The Barthel index in clinical practice: use on a rehabilitation ward for elderly people. *J Royal Coll Physic London*. 1994;28(5):419-23.
37. Gupta S, Yadav R, Malhotra AK. Assessment of physical disability using Barthel index among elderly of rural areas of district Jhansi (UP), India. *J Fam Med Prim Care*. 2016;5(4):853-7.

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