

# GLOBAL AND REGIONAL ESTIMATES OF CLINICAL AND ECONOMIC BURDEN OF OSTEOARTHRITIS IN LOW- AND MIDDLE-INCOME COUNTRIES: A SYSTEMATIC REVIEW

Francis Fatoye, MBA, MSc, PhD<sup>1</sup>, Chidozie Mbada, MSc, PhD<sup>1</sup>, Clara Toyin Fatoye, MA, Zalmi Hakimi, PhD<sup>2</sup>, Ushotanefe Useh, MSc, PhD<sup>3</sup>, Tadesse Gebrye, MPH, MSc<sup>1</sup>

<sup>1</sup>Manchester Metropolitan University, United Kingdom, <sup>2</sup>Sobi, Amsterdam, Netherlands, <sup>3</sup>North-West University, Potchefstroom, South Africa

## Introduction

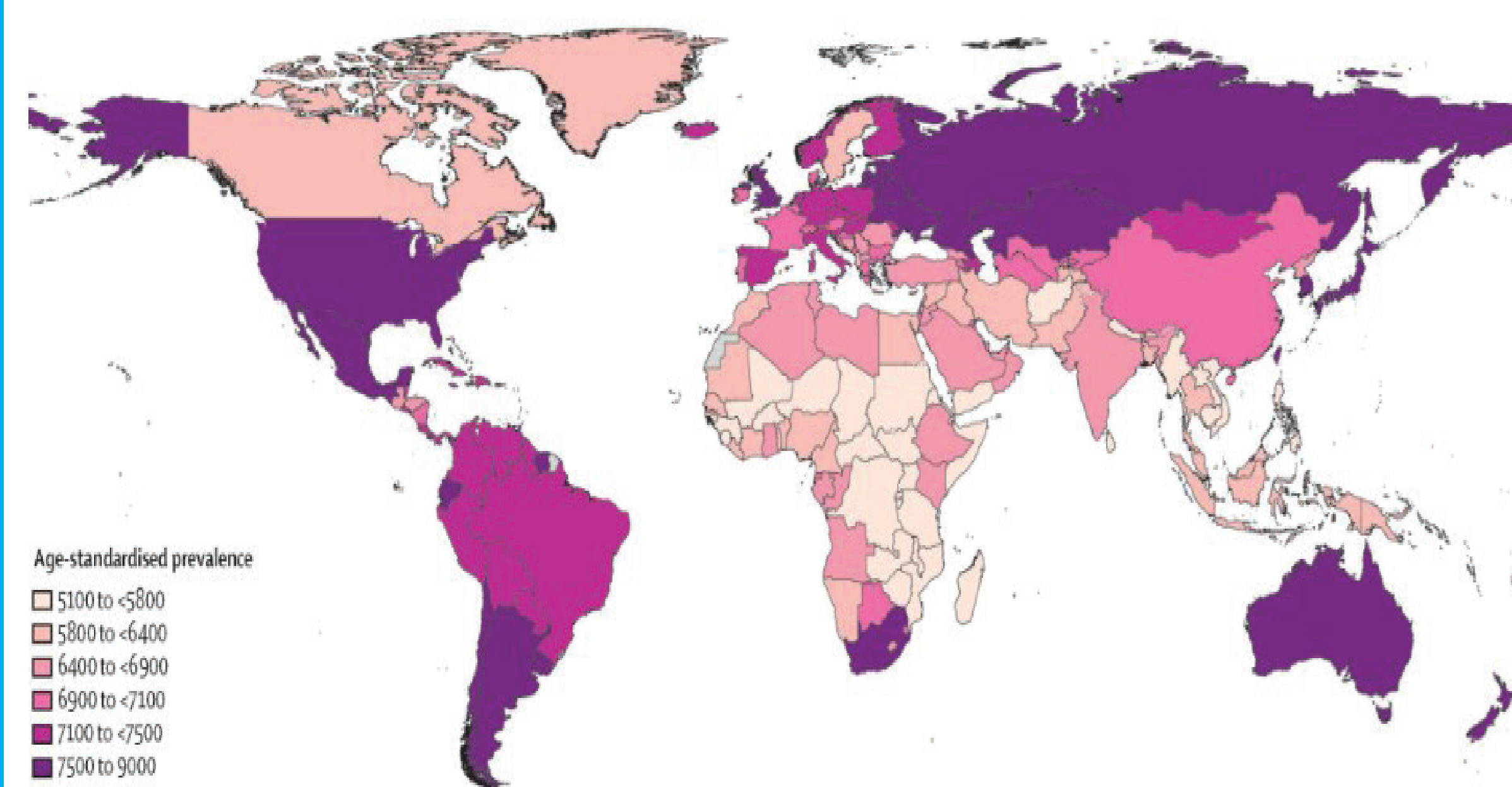
- Osteoarthritis (OA) is one of the most prevalent musculoskeletal disorders globally and a leading cause of pain, disability, and reduced quality of life.
- Its impact is particularly pronounced in LMICs, where aging populations, increasing obesity rates, and limited access to healthcare services exacerbate disease burden.
- Despite this, evidence on the combined clinical and economic impact of OA in LMICs remains fragmented, highlighting the need for comprehensive synthesis to inform policy and resource allocation.

## Purpose

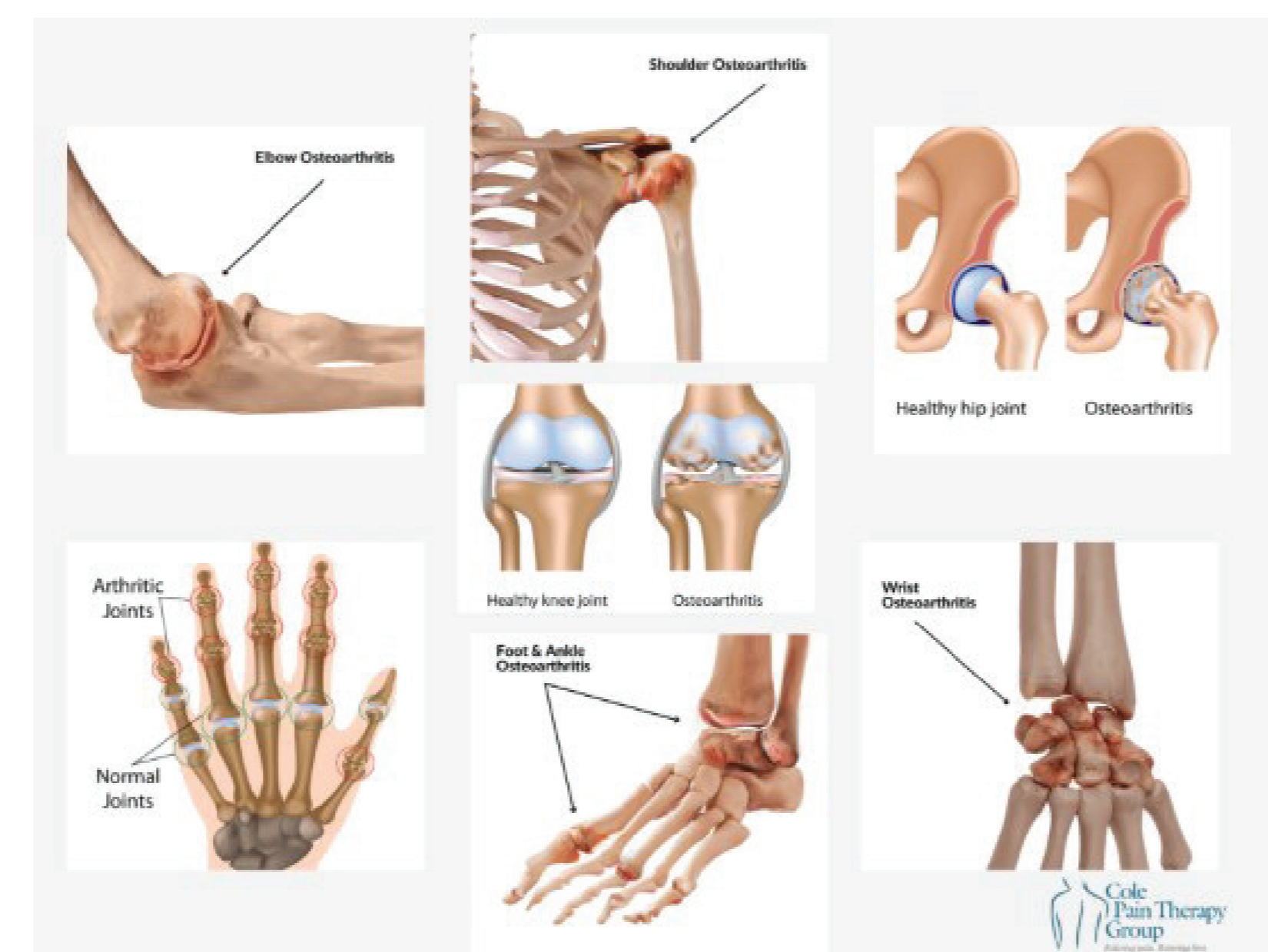
- This review aimed to synthesise evidence on the clinical and economic burden of OA within LMICs.

## Methods

- Systematic review conducted in accordance with PRISMA guidelines
- Databases searched: PubMed, Medline, CINAHL, PsycINFO, Global Health Economics, and Scopus (inception to Nov 12, 2025)
- Included English-language studies assessing clinical and economic burden of OA in LMICs
- Study quality evaluated using the Newcastle-Ottawa Scale (cohort studies)



<https://www.thelancet.com/journals/lanrhe/article/PIIS2665-9913%2823%2900163-7/fulltext>



<https://colepaintherapygroup.com/osteoarthritis-treatment-fast-relief-for-joint-pain-and-quick-recovery/>

## Results

- 752 records identified; 10 studies included (Asia n=5, Latin America n=3, Eastern Europe n=1, Sub-Saharan Africa n=1)
- Sample sizes ranged from 112 to 184,363; majority focused on knee OA in adults  $\geq 40$  years, with women representing 60–81%
- Healthcare utilization varied: higher hospitalisation in OA vs non-OA (28.9% vs 22.2%); surgical cases Total Knee Arthroplasty all inpatient (29.7% emergency, 70.3% elective)
- High outpatient use: 22.7% (1 visit), 34.3% (2–3 visits), 43% ( $\geq 4$  visits); hospital stay ranged from 3 to 10.3 days
- Annual per-patient costs ranged from USD 685 to 1,324; direct costs (70–76%) exceeded indirect costs (24–29%)

## Conclusion

- Osteoarthritis places a considerable clinical and economic burden on LMICs, as evidenced by high healthcare utilization, varied hospitalization patterns, and notable per-patient costs largely driven by direct medical expenses.
- These findings underscore the need for more robust, context-specific economic evaluations to better inform policy and resource allocation.

## References

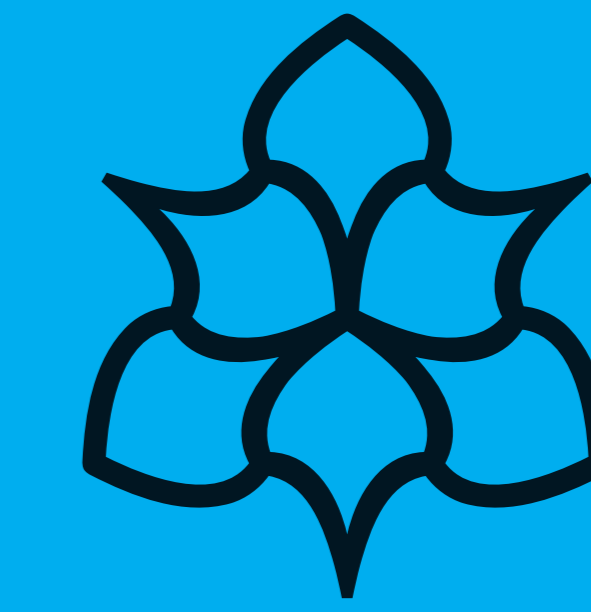
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## Contact:

Professor Francis Fatoye BSc, MSc (SportMed), MSc, PhD, MBA  
Department of Health Professions  
Manchester Metropolitan University, M15 6GX, UK

Email: [f.fatoye@mmu.ac.uk](mailto:f.fatoye@mmu.ac.uk)

# Development of a Professional Framework for Market Access within the Pharmaceutical Industry: A Multi-Methods Study



**1 Department of Health Professions, Manchester Metropolitan University, Birley Fields Campus, Bonsall Street, Manchester, M15 6GX, UK**

**2 Department of Health, Wellbeing and Social Care. Global Banking School. 3 Universal Square Devonshire St N, Manchester M12 6JH, UK**

**3 Health Economic and Market Access Consultants (HEMAC) Limited, Manchester, UK**

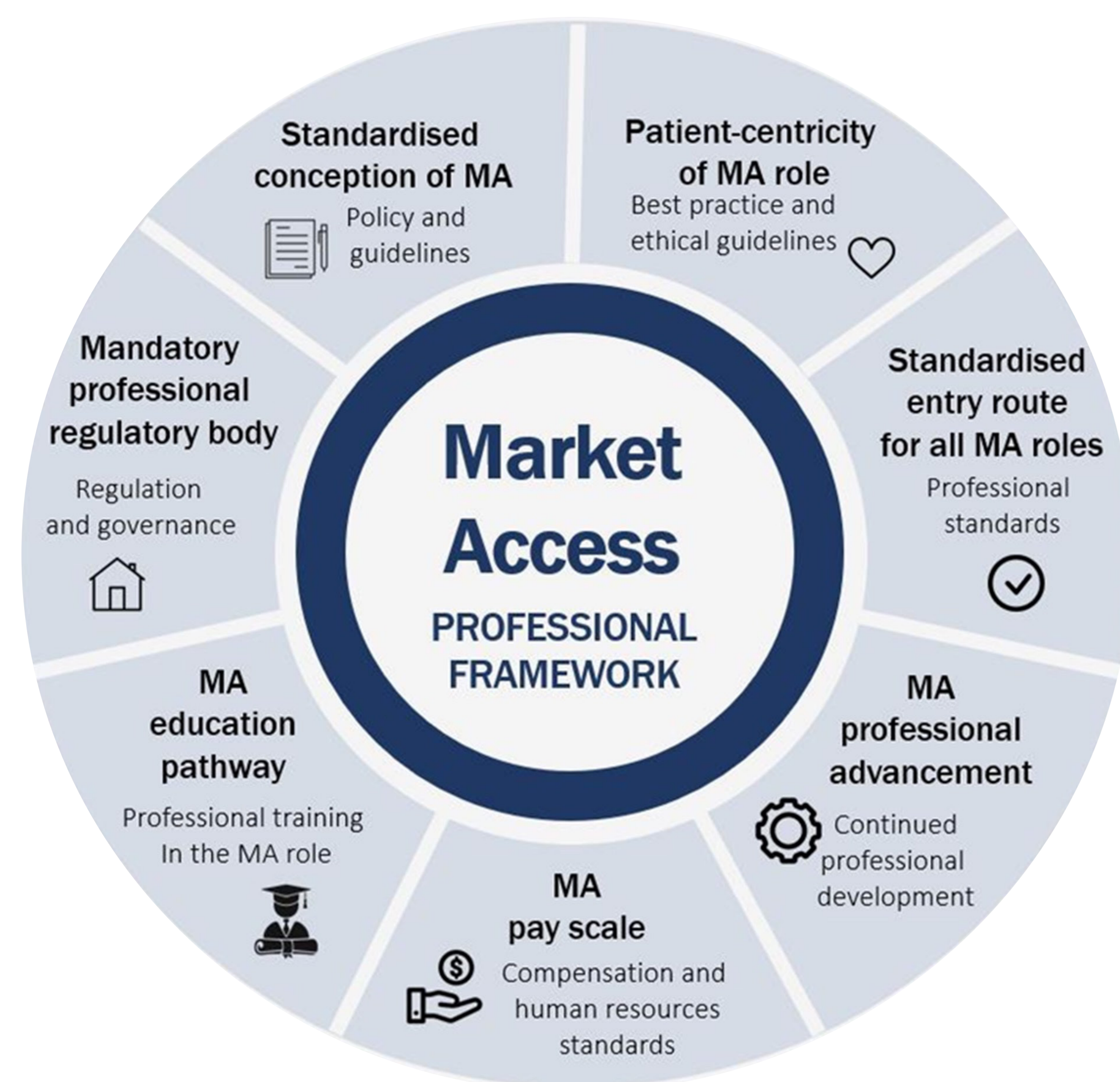
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## Introduction

Market Access (MA) is a critical component of Pharma, ensuring patients have access to the appropriate medicines and other innovative products needed by the patients. Despite the strategic importance of MA in Pharma, the roles and responsibilities of MA professionals vary significantly across organisations and geographies, leading to unclear expectations, diverse career paths, and limited training opportunities. The study aimed to develop a professional framework for Pharma to facilitate patient access to pharmaceutical products.

## Methods

A multi-methods approach was used, including a scoping review, document analysis, and semi-structured interviews. The scoping review explored how MA was conceptualised and its role defined within Pharma. A document analysis was used to investigate the role of MA professionals within Pharma through the compilation of UK MA job advertisements. Semi-structured interviews were conducted to gain an in-depth understanding of the role of MA professionals in Pharma. The findings of the three studies were triangulated leading to the proposed professional framework.



## Results

These studies found MA roles were patient-centric, enhancing patient access and the uptake of pharmaceutical products. They focused on ensuring that the unmet needs of patients were identified and addressed in a timely and affordable manner. It was also found that MA was an emergent profession characterised by heterogeneous roles, titles, and entry pathways and requirements.

## Conclusion

This is the first professional framework tailored to MA professionals within the Pharma sector. The proposed framework provides opportunities for industry-wide competency development, standardised job taxonomies, and educational guidelines to inform MA training curricula. The study findings may help facilitate effective collaborations among relevant stakeholders for the development and implementation of MA strategies. Thereby, facilitating efficient healthcare resource allocation to optimise patient access to Pharma products, improving health outcomes.

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**Contact:  
Clara Fatoye**

Email: [Cfatoye@globalbanking.ac.uk](mailto:Cfatoye@globalbanking.ac.uk)

Email: [Clara.fatoye@stu.mmu.ac.uk](mailto:Clara.fatoye@stu.mmu.ac.uk)

# TRANSLATION AND PSYCHOMETRIC EVALUATION OF THE YORUBA VERSION OF IBADAN LOW-BACK PAIN DISABILITY QUESTIONNAIRE

**Bolanle Nottidge, MSc, PhD<sup>1</sup>, Chidozie Mbada, MSc, PhD<sup>2</sup>, Christiana Oguntuyi, BMR PT<sup>3</sup>, Aanuoluwapo Afolabi, MSc, PhD<sup>4</sup>, Clara Fatoye, MA<sup>2</sup>, Tadesse Gebrye, MPH, MSc<sup>2</sup>, Francis Fatoye, MBA, MSc, PhD<sup>2</sup>**

**<sup>1</sup>University of Uyo Teaching Hospital, Akwa Ibom, Nigeria, <sup>2</sup>Manchester Metropolitan University, United Kingdom, <sup>3</sup>University of Medical Sciences, Ondo, Nigeria**

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## Introduction

- Culturally adapted outcome measures are critical to ensure valid and reliable clinical assessment across diverse populations.
- The Ibadan Low Back Pain Disability Questionnaire (ILBPDQ) is widely used but currently lacks a version in Yoruba, limiting its applicability for Yoruba-speaking patients.

## Purpose

- This study aimed to translate and psychometrically evaluate the ILBPDQ-Yor.

## Methods

- Translation process: The ILBPDQ-Yor was developed following Beaton's standardized translation protocol.
- Study participants: Psychometric evaluation conducted among 100 patients with low back pain (LBP).
- Validity assessment: Construct, convergent, and divergent validity were examined using the Roland Morris Disability Questionnaire (RMDQ), SF-12, and demographic variables.
- Data analysis: Used descriptive statistics and psychometric testing.
- Reliability assessment: Construct validity and test-retest reliability were assessed using Intra-class correlations (ICCs).
- Correlation analysis: Convergent and divergent validity examined through correlations with related measures.
- Agreement evaluation: Bland-Altman analysis was used to assess agreement between measures.

### ÒDÌWỌN FÚN ÀBÁJÁDE ÈYÌN DÍDÚN ÌBÀDÀN

Àlàyé: A sètò àtọjọ ibeèrè yìí láti ràn wá lówọ fun mimọ bí èyìn didùn se n fa idiwọ fun àwon akitiyan òòjọ yin kòòkan tí a tọka sí ní isalẹ̀ yìí. Jọwọ tọka sí bí o se n ní idiwọ tó minú síse èyikéyìí àwon nńkan wọnyí nipa lilo òdìwọn isalẹ̀ yìí:

0 – Kò sí idiwọ rára pàápàá    1– Idiwọ ránpẹ    2 – Idiwọ niwontunwonsi  
3– Idiwọ tí ó pọ̀ gan-an    4– N kò lẹ̀ se ohun kankan

S/ N	Akitiyan	Kò sí idiwọ rára pàápàá	Idiwọ ránpẹ	Idiwọ niwontunwonsi	Idiwọ tí ó pọ̀ gan-an	N kò lẹ̀ se ohun kankan
1	Rírìn ní ita fun isẹ́jú méeédógún sí ogún isẹ́jú (kilómítà kan)					
2	Jijókóó lóri aga fun igbà pipẹ (wakáti kan tabi jù bẹ̀ẹ̀ lo)					
3	Gbigbé nńkan wiwo (iwọn ogún sí méeédógbon lita tabi garawa omi)					
4	Didúró fun igbà ránpẹ (isẹ́jú méeédógún sí ogún isẹ́jú).					
5	Titeriba láti fo aṣo ní ilẹ̀lẹ̀					
6	Gigun ori okè					
7	Kíkí agbalagbà (didòbalẹ̀, kíkúnlẹ̀, lílòsòò, abbl.)					
8	Jijókóó ní ilẹ̀lẹ̀ (lóri kápẹ̀tí tabi eni)					
9	Sise isẹ̀ oko (gbigbin nńkan, kikorẹ̀) àwon isẹ̀ inu ogbà					
10	Didúró fun igbà pipẹ (wakáti kan tabi jù bẹ̀ẹ̀ lo)					
11	Pipon omi láti inu kánngà					
12	Lilòsòò láti lo salànga omihò					
13	Didide láti ilẹ̀lẹ̀ (láti ori kápẹ̀tí tabi eni)					

## Results

- Mean score: ILBPDQ-Yor showed a mean of 42.89 ± 21.77.
- Construct validity: Excellent, with ICC = 0.967 (item range 0.939–0.945).
- Convergent validity: Acceptable with RMDQ (r = -0.026 to 0.700).
- Divergent validity:
- SF-12 physical domain: r = -0.026 to 0.219 (one item significant at p = 0.03)
- ▶ SF-12 mental domain: r = -0.336 to -0.518 (all p = 0.01–0.001)
- ▶ Test-retest reliability: Strong, ICC = 0.944 (95% CI 0.926–0.958).
- Agreement analysis: Bland-Altman limits showed no systematic bias (upper = 15.69, lower = -13.63, mean = 0.74).

## Conclusion

The excellent reliability and validity of the ILBPDQ-Yor support its use as a culturally appropriate tool for accurately identifying and monitoring LBP-related disability in Yoruba-speaking populations, thereby enabling targeted interventions, to improve health outcomes and reduce the overall burden associated with LBP.

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## Contact:

Professor Francis Fatoye BSc, MSc (SportMed), MSc, PhD, MBA  
Department of Health Professions  
Manchester Metropolitan University, M15 6GX, UK  
Email: f.fatoye@mmu.ac.uk

# MISSED APPOINTMENTS IN STROKE CARE: PATTERNS, IMPACT ON RECOVERY, COSTS, AND CLINICAL EFFICIENCY

Taiwo Ologun, MSc, DPT<sup>1</sup>, Chidozie Mbada, MSc, PhD<sup>2</sup>, Adedayo Ayodeji, MSc, PT<sup>3</sup>, Clara Toyin Fatoye, MA<sup>2</sup>, Tadesse Gebrye, MPH, MSc<sup>2</sup>, Francis Fatoye, MBA, MSc, PhD<sup>2</sup>

<sup>1</sup>Wesley Guild Hospital, OAUTH, Nigeria, <sup>2</sup>Manchester Metropolitan University, United Kingdom, <sup>3</sup>University of Medical Sciences, Ondo, Nigeria.

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## Introduction

- Missed appointments are a common challenge in stroke rehabilitation, potentially delaying recovery and reducing the effectiveness of interventions.
- These absences can also increase healthcare costs and disrupt the efficiency of clinical services.
- Examining the patterns and consequences of missed appointments among stroke survivors is essential to inform strategies that improve adherence, ensure efficient resource allocation, and enhance patient outcomes.

## Purpose

- This study examined the patterns and impact of missed appointments among stroke survivors on cost, recovery, and clinical efficiency.

## Methods

- Conducted a 10-year retrospective review of 256 stroke survivors attending outpatient physiotherapy at a Nigerian tertiary hospital (2015–2024).
- Data collected included missed appointments, age, gender, occupation, location, and mode of payment.
- Financial impact: Total revenue loss from missed appointments was calculated by multiplying the number of missed appointments by the cost per session.
- Clinical efficiency: Assessed using the ratio of current assets to current liabilities.
- Recovery outcomes: Recovery times for patients were estimated to evaluate the effect of missed appointments.



## Results

- Total missed appointments: 2,108 over the 10-year period.
- Peak periods: Highest rates in December/January and in 2022.
- Patient characteristics: Greatest proportions among ischaemic stroke patients (88.9%) and those with left-sided affectation (54.2%).
- Clinic efficiency: Overall efficiency was 0.65.
- Economic impact: Cumulative revenue loss of ₦4,216,000 (~ \$2,903).
- Clinical impact: Estimated 34.8% of missed visits could delay recovery by 4,216 days (using a 2-day delay per missed session).

## Conclusion

- Missed appointments for stroke survivors led to notable challenges, leading to increased costs, inefficiency, and delayed recovery.
- The economic burden of non-attendance underscores the need for targeted interventions to improve appointment adherence thereby improving health outcomes of stroke survivors.

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## Contact:

Professor Francis Fatoye BSc, MSc (SportMed), MSc, PhD, MBA  
Department of Health Professions  
Manchester Metropolitan University, M15 6GX, UK  
Email: f.fatoye@mmu.ac.uk

# EFFECTIVENESS OF A VIDEO-BASED TELEREHABILITATION FOR FALL PREVENTION IN OLDER ADU

Chizoba F. Igwe MSc, PhD PT<sup>1</sup>, Micheal O. Egwu MSc, PhD PT<sup>2</sup>, Clara Toyin Fatoye, MA<sup>3</sup>, Tadesse Gebrye, MPH, MSc<sup>3</sup>, Francis Fatoye, MBA, MSc, PhD<sup>3</sup>, Zalmi Hakimi, PhD<sup>4</sup>, Chidozie Mbada MSc, PhD<sup>3</sup>

<sup>1</sup>University of Lagos, Lagos, Nigeria, <sup>2</sup>Obafemi Awolowo University, Ile-Ife, Nigeria, <sup>3</sup>Manchester Metropolitan University, United Kingdom, <sup>4</sup>Sobi, Amsterdam, Netherlands

CO176

## Introduction

- Falls are a leading cause of injury and loss of independence among older adults, highlighting the need for effective prevention strategies.
- Exercise-based interventions, particularly those delivered via digital platforms, have shown promise in improving balance, strength, and confidence, potentially reducing fall risk.

## Purpose

- This study examined the effectiveness of a video-based exercise programme (VBEP) versus falls risk avoidance education pamphlet (FRAEP) on fall characteristics, functional and psychosocial outcomes.

## Methods

- Study Design: Quasi-experimental study with 70 retirees aged 65+, randomly assigned to VBEP or FRAEP (wait-list control).
- Assessment Timepoints: Baseline, week 4, and week 8.
- Psychosocial Outcomes: FES-I (fear of falling), GDS (depression), HRQoL (physical and mental health), PASE (physical activity), WHO-DAS (disability).
- Physical Performance Measures: 4-Stage Balance Test, 30-second Chair Stand, Timed Up and Go, Berg Balance Scale.
- Statistical Analysis: Repeated-measures ANOVA and Friedman's ANOVA to examine time and group differences.
- Significance Threshold:  $p < 0.05$ .



## Results

### • VBEP (Video-Based Exercise Programme):

- ▶ No change in Timed Up and Go (TUG), 30-second Chair Stand Test (30-SCST), or static balance ( $p < 0.05$ ).
- ▶ Significant improvements in physical activity (PASE) and quality of life (general health, physical health, role-emotional;  $p < 0.001$ ).
- ▶ Significant time effects for Berg Balance Scale ( $p = 0.023$ ) and GDS (depression;  $p < 0.001$ ).
- ▶ No significant change in Falls Efficacy Scale (FES-I) ( $p < 0.05$ ).

### • FRAEP (Falls Risk Avoidance Education Pamphlet):

- ▶ No significant changes in TUG or chair-stand performance ( $p < 0.05$ ).
- ▶ Significant improvements in 4-Stage Balance Test ( $p = 0.019$ ), physical activity (PASE;  $p < 0.001$ ), and QoL domains ( $p < 0.001$ ).
- ▶ Friedman's ANOVA confirmed gains in Berg Balance and GDS only.

### • Between-Group Comparisons:

- ▶ VBEP showed superior balance at week 4 and higher Berg Balance scores ( $p > 0.05$ ).
- ▶ FRAEP demonstrated better General Health scores at weeks 4 and 8, VBEP had higher physical activity (PASE) and Role-Emotional QoL scores ( $p > 0.05$ ).

## Conclusion

- Both programmes were beneficial but differed in impact, with VBEP showing greater benefits in balance, physical activity, and emotional outcomes, and FRAEP demonstrating stronger improvements in general health, highlighting the complementary value of targeted intervention selection.

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## Contact:

Professor Francis Fatoye BSc, MSc (SportMed), MSc, PhD, MBA  
Department of Health Professions  
Manchester Metropolitan University, M15 6GX, UK  
Email: f.fatoye@mmu.ac.uk