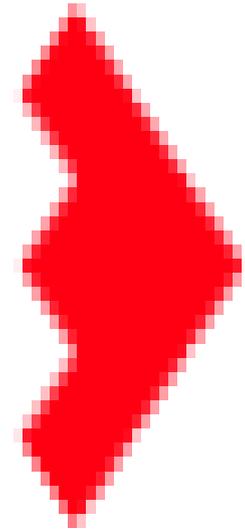


COGNITIVE STIMULATION THERAPY
AS A LOW-RESOURCE INTERVENTION
FOR DEMENTIA IN SUB SAHARAN
AFRICA (CST-SSA): ADAPTION FOR
RURAL TANZANIA AND NIGERIA

BY
MKENDA et al (2016)

ELIZABETH CASSON TRUST



FURTHERING OCCUPATIONAL
THERAPY ACROSS THE GLOBE

Co - Authors

1. Sarah Mkenda: Kilimanjaro Christian Medical University College, Moshi, Tanzania
2. Olaide Olakehinde: University of Ibadan, Ibadan, Nigeria
3. Godfrey Mbowe: Kilimanjaro Christian Medical University College, Moshi, Tanzania
4. Akeem Siwoku: University of Ibadan, Ibadan, Nigeria
5. Aloyce Kisoli: Kilimanjaro Christian Medical University College, Moshi, Tanzania
6. Stella-Maria Paddick: Northumbria Healthcare NHS Foundation Trust, North Tyneside General Hospital, North Shields, UK; Institute of Neuroscience, Newcastle University, Newcastle upon Tyne, UK
7. William K Gray: Northumbria Healthcare NHS Foundation Trust, North Tyneside General Hospital, North Shields, UK
9. Catherine L Dotchin: Northumbria Healthcare NHS Foundatio
10. Akinpelumi Adebisi: University College Hospital (University of Ibadan), Ibadan, Nigeria
11. Richard W Walker: Northumbria Healthcare NHS Foundation Trust, North Tyneside General Hospital, North Shields, UK; Institute of Health and Society, Newcastle University, Newcastle upon Tyne, UK
12. Declare Mushi: Kilimanjaro Christian Medical University College, Moshi, Tanzania
13. Adesola Ogunniyi: University College Hospital (University of Ibadan), Ibadan, Nigeria

INTRODUCTION

- In sub-Saharan Africa (SSA), recent evidence suggests dementia prevalence is equivalent to that found in high-income countries (HICs) (George-Carey et al., 2012).
- In this low-resource setting, where coverage of health care services can be limited, outcomes for people with dementia are often poor with substantial disability and high carer burden (Dotchin et al., 2014; Kisoli et al., 2015; Wang, Xiao, He, Ullah, & De Bellis, 2014).
- 2011)

- Unfortunately, healthcare and human resources to address the problem are almost completely absent.
- There are an estimated 200 times fewer trained mental health workers per head of population in SSA than in most HICs (Saxena, Thornicroft, Knapp, & Whiteford, 2007), and across the continent, there are very few trained neurologists, geriatricians or psychiatrists (Bower & Zenebe, 2005; Dotchin, Akinyemi, Gray, & Walker, 2013; Eaton et al.

Study sites

- This study was part of a bigger project on the Identification and Interventions for Dementia in Elderly Africans (IDEA) study.
- The IDEA study had two study sites: the Hai district of Northern Tanzania, East Africa and Lalupon, Oyo State, Nigeria, West Africa.
- Both sites were rural but differ in educational background, health systems, language and lifestyle.

- Tanzania is a low-income country while Nigeria a lower middle-income country.
- The Hai district of northern Tanzania is located on the slopes of Mount Kilimanjaro, close to the town of Moshi.
- The main occupation are farming and keeping animals.

- Lalupon is located in the Lagelu local government area of Nigeria in Oyo state.
- It is some 20 miles north of the city of Ibadan, the state capital.
- The majority of people come from the Yoruba ethnic group. The predominant occupations are farming and trading.
- The educational level in older people is similar to that reported in Hai, with around one-third of the population aged 65 years and over having no any formal education.

CST in HICs

- The theoretical basis of cognitive stimulation involves consideration of cognitive reserve and neuroplasticity.
- Cognitive reserve relates to the observed reduction in dementia risk in highly educated individuals and those engaging in complex mental activities in advanced age (Prince et al., 2012).
- It is hypothesised that engaging in cognitively demanding activities results in the development of more numerous neuronal connections allowing a degree of compensation for neuronal loss in old age.



- Cognitively stimulating activities are designed to promote learning through formation of new neuronal connections (Hall, Orrell, Stott, & Spector, 2013).
- There is research evidence of cognitive improvements following these activities in people with dementia (Baglio et al., 2015; Breuil et al., 1994; Young, Camic, & Tischler, 2015).
- CST is a highly structured, manualised programme of 14 twice-weekly therapy sessions (Spector, Thorgrimsen, Woods, & Orrell, 2006).
- It combines cognitively stimulating activities with principles of reality orientation, reminiscence and validation therapy (Spector et al., 2003).



Adaption of CST for use in SSA

- As a framework for adaptation of CST for use in SSA, the formative method for adapting psychotherapy (FMAP) was used (Hwang, 2009).
- This collaborative and community-led adaptation method is recommended for the adaption of CST to other cultures (Aguirre et al., 2014).

The FMAP consists of five phases:

The FMAP consists of five phases:

Phase I: Generating knowledge and collaborating with stakeholders.

Phase II: Integrating generated information with theory and empirical and clinical knowledge.

Phase III: Reviewing and revising the initial culturally adapted intervention with stakeholders.

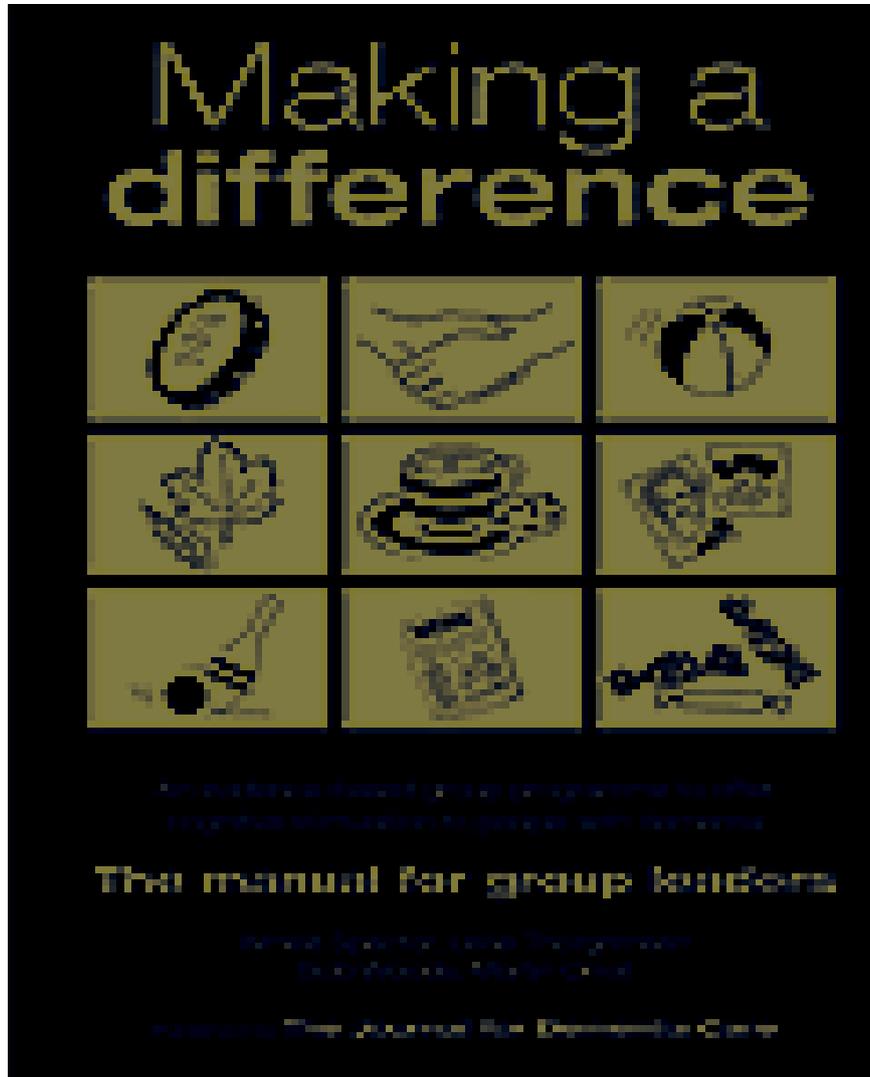
Phase IV: Testing the culturally adapted intervention.

- A feasibility assessment of CST was held at both study sites using the adapted manual.

Phase V: Finalizing the culturally adapted intervention.

- After the feasibility study, the CST manual was further adapted based on the findings and finalised.

Original manual



Adapted manual
Identification and
Interventions for
Dementia in
Elderly Africans
(The IDEA Study)
2013 Adapted
Cognitive
Stimulation
Therapy manual

Outcomes and data collection during the feasibility study

The main aims of the feasibility study were:

1. To assess the feasibility of conducting CST sessions in rural SSA
2. To assess the acceptability of the adapted CST sessions to people with dementia and their carers
3. To identify any areas for further adaptation.

Results

Phases I, II and III – Information gathering, adaptation and critical appraisal

- During phases I, II and III, the CST manual was adapted for use in SSA.
- The following key issues were identified
 - The role of older people in society.
 - Lifestyle and work arrangements.
 - Other cultural issues

Phase IV: Testing the culturally adapted intervention

- Following adaptation during phases I–III, a full CST programme of 14 sessions was completed at both sites.
- In Hai, of seven participants recruited, one refused to attend and one experienced rapid cognitive deterioration between recruitment and the start of the sessions and was unable to attend.
- So only 5 participated in the feasibility study

Outcomes from the feasibility assessment.

- During informal feedback, carers noted that their relative appeared more active and more interested in activities and that they had noticed some general improvements in memory.
- There were no negative feedback comments from carers.
- Participants all stated that they had enjoyed the group and would have liked to attend for longer.



Discussion

- We successfully adapted CST for use in low-resource settings in SSA (CST-SSA).
- The FMAP proved a useful framework for the adaptation and ensured that the adapted manual retained the same basic elements and structure as the original CST programme.
- The FMAP framework allowed a structured approach to ensuring cultural acceptability.



Conclusions

- CST was successfully adapted for use in SSA and feasibility assessed in rural Tanzania and Nigeria.
- CST appears to be a potentially feasible non-pharmacological intervention to help manage dementia in this setting.
- Despite drop-outs, the response to the CST sessions by participants was overwhelmingly positive.

ACKNOWLEDGEMENT

- I would like To Extend My Sincere Gratitude For **Elizabeth Casson Trust** for sponsoring me to attend this Prestigious Conference For First Time
- The group I worked with in the IDEA project
- Grand Challenges Canada who sponsored the IDEA study
- All people who inspired me to become and love OT
- Rosemary Crouch and Herma Grossmann

PEOPLE &

EVENTS



➤ Founder of Tanzania Occupational Therapy Association (TOTA) and the School of Occupational Therapy at Kilimanjaro Christian Medical Centre (KCMC), Ms Herma Grossmann (left), in a joyous mood with the head of the school, Ms Sarah Mkenda after she handed over an appreciation certificate to recognise her effort in developing the sector. (Photo by Our Correspondent)

