

A feasibility study of a mobile phone supported family-centred ADL intervention, F@ce™, after stroke in Uganda

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Background

- Barriers to rehabilitation services in Uganda
 - long distance,
 - poor infrastructure
 - shortage of professionals
 - Poor economic situations of people
 - Lack of knowledge about rehabilitation



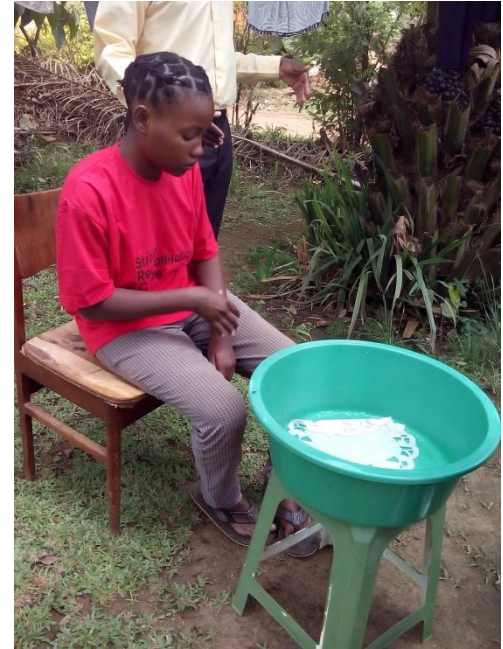
The aim of the study

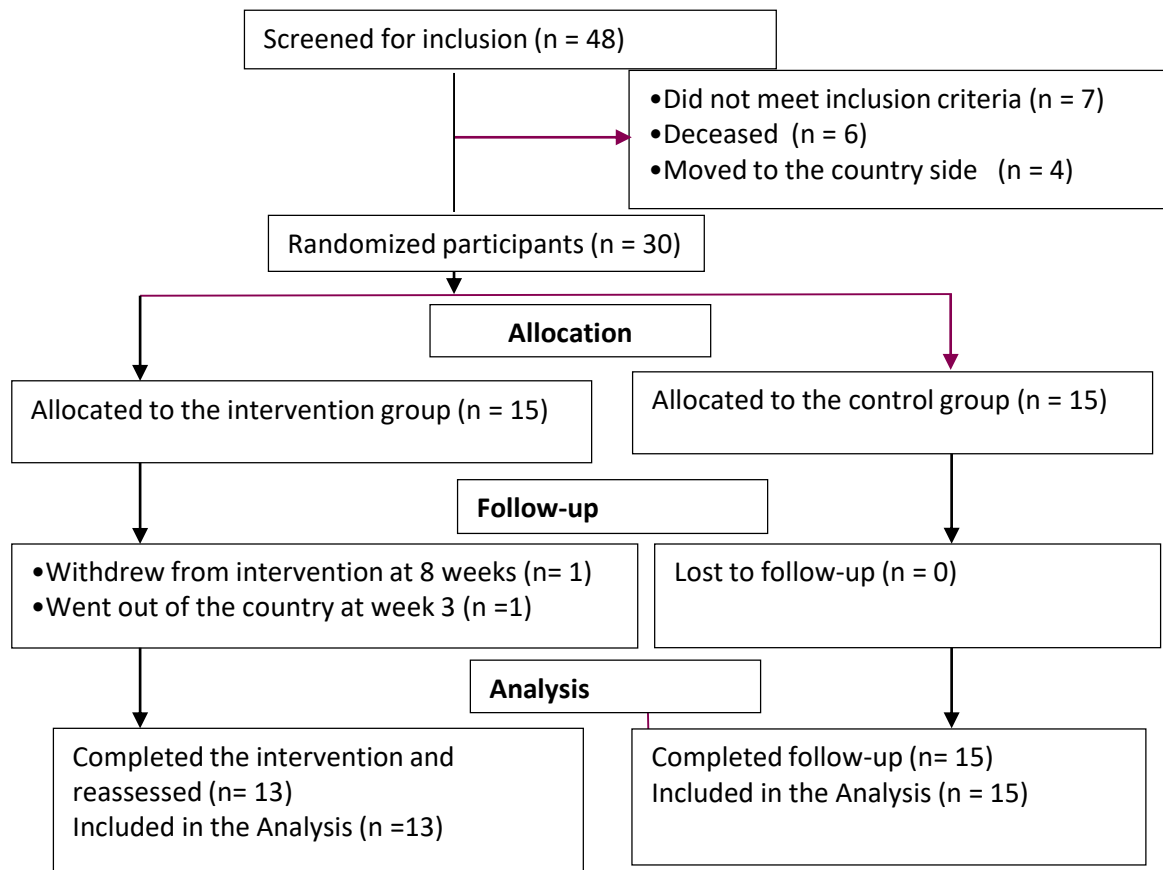
To evaluate the feasibility of:

- i) F@ceTM,
- ii) The study design for evaluating the effect of the intervention on
 - Perceived impact of stroke
 - Perceived participation
 - Self-Efficacy

Methods

- A pre-post design with an intervention group (IG) receiving the F@ce™ and a control group (CG).
- IG; n=13
- CG; n=15





Data collection

- **Primary outcome measures**
 - Self-efficacy
 - Canadian Occupational Performance Measure
 - Stroke Impact Scale 3.0 Uganda version
- **Secondary outcomes measures**
 - Barthel Index
 - Occupational Gaps Questionnaire



Analysis

- Descriptive statistics
- Differences in outcome measures within & btm groups were explored using Mann Whitney U-Test.



F@ce™ /Mobile phone supported family centred ADL intervention.



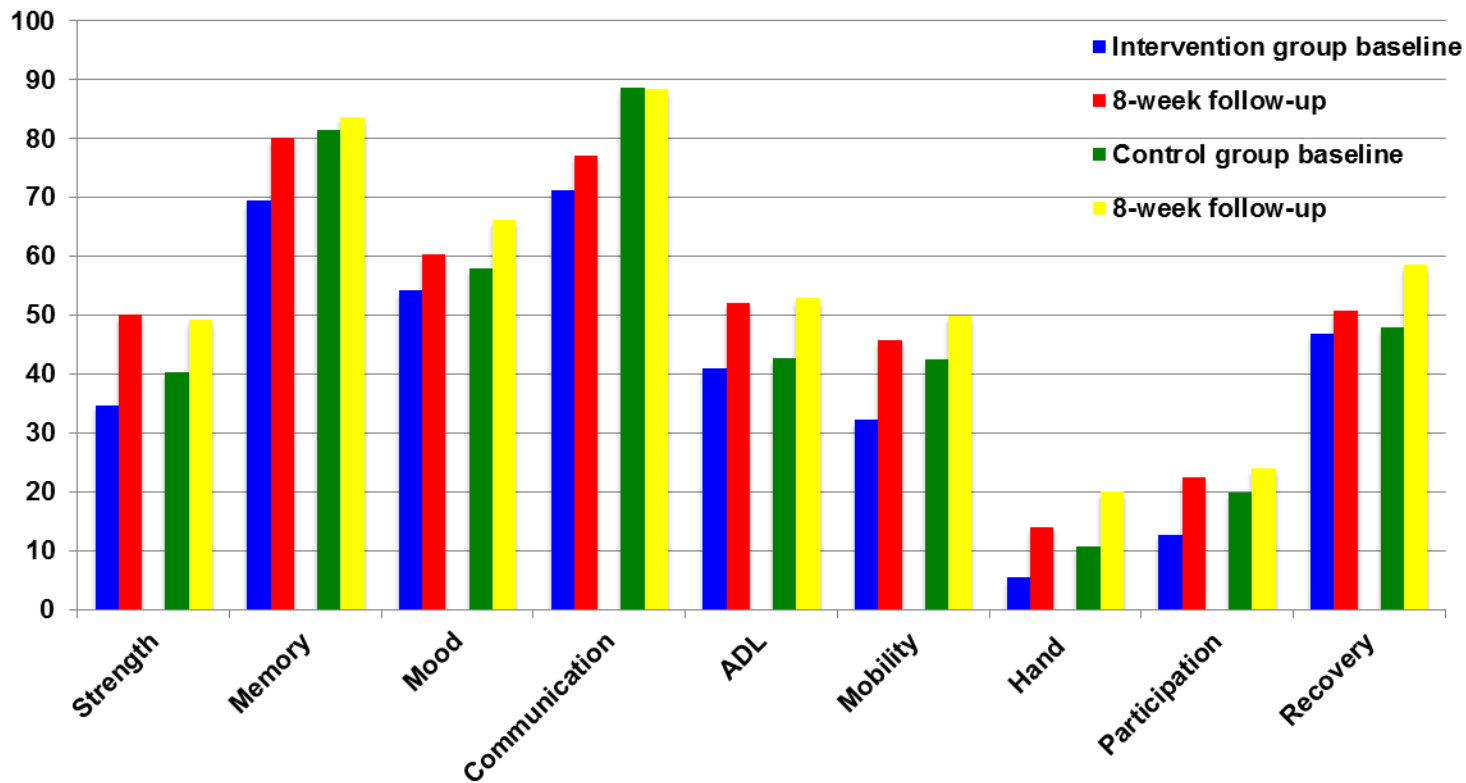
	Intervention	Activity for the client	Activity for the therapist	Activity for the researcher
F Face-to-face meeting at hospital/ clinic (Before week 1)	First meeting client, family member and OT. Create a relationship. Planning for next session.	Signs the consent form. Performs according to mRS. Provides contact details. Berkas: Rektangulan Klipp		Screen client using inclusion criteria Explain to the client the purpose of the contact. Sign the consent form. Make appointment with client and OT for baseline assessment and intervention Fill out the demographic protocol and mRS
@ Assessments 1 st visit at home (week 1)	Involve family members. Train the use of mobile phone. Try out an activity such as putting on a t-shirt. Choose 3 activities Use the COPM. Video tape one activity.	Involves the family member. Tries to send and retrieve a text message (SMS). Calls someone Chooses 3 activities according to COPM. Practices the activity performance, Practices scoring of the activity Performs baseline assessment using Demographic protocol, SSS, BI, SIS, Self-efficacy, OGQ	Grades the activity, identifies the level of performance Involves the family members Demonstrates scoring of activity using COPM	Updates information of the client if needed. Observe performed activities Video tape activities Uses COPM to assess the client level of performance and satisfaction on the 3 activities. Collects data at base line using Demographic protocol, SSS, BI, SIS, Self-efficacy, OGQ.
C Collaboration (From week 1 – week 8)	TARGET-PLAN-PERFORM-PROVE as a problem--solving strategy. Perform the 3 activities using the strategies for 8 weeks. Reminders with text message. Activity tracking by text message and calls from OT. Family member involvement	Formulate the targets and add strategies together with OT Involve the family member Practices and performs the agreed 3 activities using the strategies. Receives reminders of the targets every morning and evening. Grades the 3 different activities using a predesigned scale (0–5). Responds to the evening reminders by sending the rated score to a server.	Introduces a problem-solving strategy i.e. TARGET-PLAN-PERFORM-PROVE on the 3 chosen targets. Identifies the strategies. Calls the client 2 times a week for eight weeks. Receives text message from the server if the client scored 0. Calls the client the following day when receives red flag on his/her phone Writes field notes whenever communicating with client.	Demonstrates to the client self-scoring of 3 different activities using a predesigned scale from (0 -5). Hands over the scale to client to be used during 8 weeks of intervention Uploads OT and clients telephone contacts to the server in order to initiate connection between the two. Sends Airtime every day to clients to send text message with rated scores to the server. Collects data from activity tracking Makes an appointment for follow-up assessment. Write field notes. Monitors client text message activities on the serve
E Evaluation (8 th Week)	Perform and evaluate the TARGETS with COPM.	Performs activities again to identify the difference in performance and satisfaction.		Fill out follow-up assessment protocols. COPM, SSS, BI, SIS, Self-efficacy, OGQ Videos tape the activity when performing.

Results

- Feasibility of the methodology was viable
- The consent rates were high
- Interest of receiving intervention were good
- COPM performance and Self-Efficacy showed significant differences between IG and CG

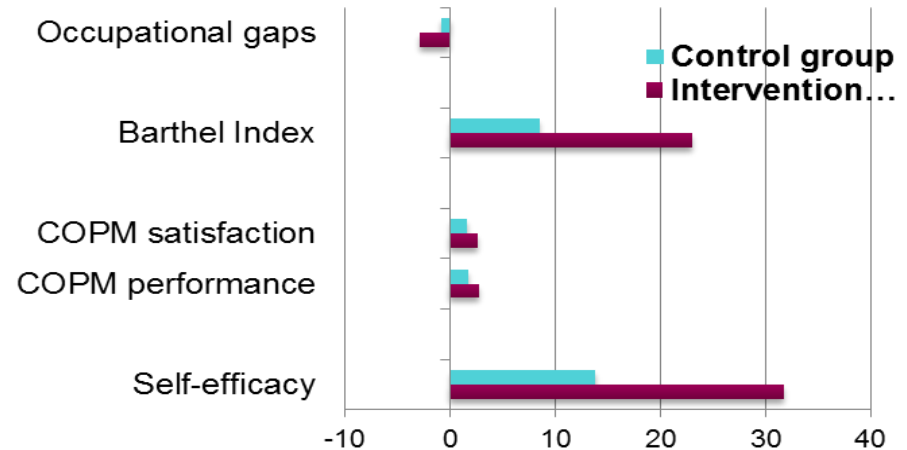
	Baseline			After 8 weeks			Mean difference		
	F@ce n=13	Control n=15	Pv	F@ce n=13	Control n=15	Pv	F@ce n=13	Control n=15	Pv
Primary outcomes									
COPM performance	2.9	3.4	0.10	5.7	5.8	0.368	2.8	1.6	0.050
COPM satisfaction	3.0	3.3	0.471	5.7	4.9	0.256	2.7	1.6	0.122
Self-efficacy	52.7	67.4	0.807	84.5	81.2	0.345	31.8	13.8	0.038
Strength	34.6	40.4	0.45	50.0	49.1	0.756	15.4	8.7	0.498
Memory	69.5	81.4	0.17	80.2	83.6	0.365	10.1	2.14	0.200
Emotion	54.3	58.0	0.53	60.3	66.3	0.746	5.98	8.3	0.596
Communication	71.2	88.6	0.06	77.2	88.3	0.072	6.04	-0.24	0.0654
SIS ADL	41.0	42.7	1.00	52.1	53.0	0.871	11.1	10.3	0.817
Mobility	32.3	42.4	0.65	45.7	49.8	0.645	13.5	7.4	0.310
Hand	5.4	10.7	0.24	13.9	20.0	0.408	8.5	9.3	0.960
Participation	12.7	19.8	0.33	22.4	24.0	0.444	9.6	4.2	0.403
Recovery	46.9	48.0	0.38	50.8	58.7	0.243	3.9	10.7	0.0483
Secondary outcomes									
Occupational Gaps	14.0	11.0	0.057	11.1	11.1	0.100	-2.9	-0.9	0.391
Barthel Index	58.1	72.3	0.187	81.2	80.8	0.888	23.1	8.5	0.060

Stroke Impact Scale, domain scores at baseline and 8-week follow-up



Results

- COPM satisfaction, OGQ and Barthel index did not show significant differences between groups but showed consistent improvement



Conclusion

- The trial design can be replicated in a larger trial with improvements in recruitment, allocation concealment, randomization and blinding of data collectors.
- The family-centred mobile phone supported intervention (F@ce™) is feasible in the Ugandan context and increases participation in occupations of people with stroke.

THANK YOU



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