











# Feasibility and Acceptability of an mHealth Psychoeducational Intervention for Support of Nigerian Women with Breast Cancer Receiving Chemotherapy

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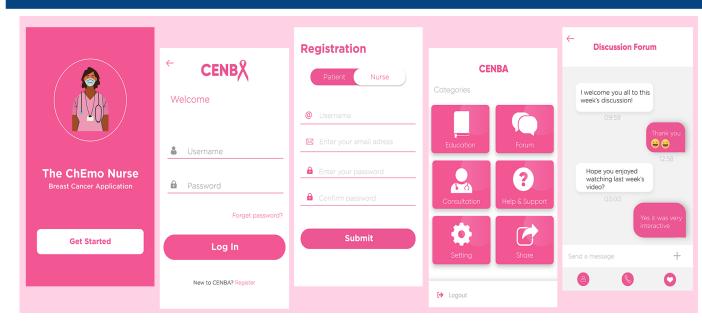
#### Introduction

- Breast cancer (BC) is the most common malignancy globally, and Nigeria has the highest mortality of BC in Africa [1].
- Chemotherapy, one of the major treatment modalities widely used for BC, is accompanied by psychoeducational needs.
- •mHealth psychoeducational intervention (mPEI) has been suggested to address the psychoeducational needs of women with BC receiving chemotherapy, but the evidence is limited

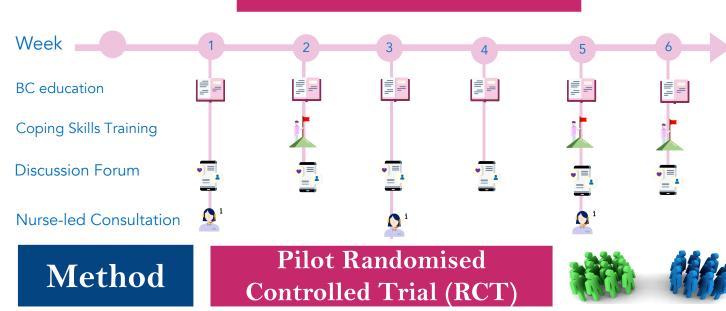
#### Aim

- This study aimed to test the feasibility and acceptability of a newly developed mPEI, called the ChEmo-Nurse Breast cancer App (CENBA) programme to provide psychoeducational support for Nigerian women receiving chemotherapy for BC.
- The programme was designed according to the findings of a systematic review and an exploratory qualitative study conducted by the research team [2,3].

# **CENBA Programme**



#### **Intervention Schedule**



- assessor-blinded pilot RCT.
- Study setting: Lagos State University Teaching Hospital (LASUTH) Lagos and University Teaching Hospital (LUTH), Nigeria.
- Participants: 30 Nigerian women diagnosed with BC receiving chemotherapy.

- Research design: Prospective, Intervention group: 6-week CENBA programme
  - Control group: Standard care (15-minute health talk during the clinic).
  - Data **Analysis:** Whitney-U test to compare the outcome variables between the intervention group and the control group from pre- to post-intervention.

# Method

Semi-Structured Interviews

**Thematic** Analysis



- Individual in-depth interviews.
- 14 women who completed the

# Acceptability

All the participants unanimously agreed that they found the programme easy to use and that they had not encountered any difficulties while using the app.

**Preliminary** Effectiveness

The intervention group had a statistically significant higher self-efficacy (p=.002), problem-focused (p=.000), and emotion-focused coping (p=0.003) and social wellbeing domain of quality of life (p=0.013). No significant effects were found for anxiety, depression, symptom distress, symptom interference and quality of

Recommendations from participants

Participants recommended that reminders to join the discussion sessions should be given through phone calls or text messages. They also stressed the need for financial support for internet subscription.

### Conclusion

- This study suggests that the CENBA programme is feasible and acceptable for effectively providing psychoeducational support in a low and middle-income country.
- Recommendations from this study should be considered when designing an RCT with a larger sample size with modifications of the intervention according to the pilot RCT results.

#### References

- 1. Ntekim A, Oluwasanu M, Odukoya O. Breast Cancer in Adolescents and Young Adults Less Than 40 Years of Age in Nigeria: A Retrospective Analysis. Int J Breast Cancer. 2022 Jul 29;2022:9943247. doi: 10.1155/2022/9943247.
- 2. Akingbade O, Nguyen KT, Chow KM. Effect of mHealth interventions on psychological issues experienced by women undergoing chemotherapy for breast cancer: A systematic review and meta-analysis. J Clin Nurs. 2022 Sep 27. doi:
- 3. Akingbade O, Adediran V, Somoye IE, Alade AS, Chow KM. Perceived feasibility and usefulness of mHealth interventions for psychoeducational support among Nigerian women receiving chemotherapy for breast cancer: a focus group study. Support Care Cancer. 2022 Dec;30(12):9723-9734. doi: 10.1007/s00520-022-07403-w.



Excluded (n= 4)

Lost to follow-up (n= 1)

Reason: Could not be contacted

Allocated to control group (n=15)

Received usual care (n= 15)

Analysed (n=15)

Results

Analysis

intervention were interviewed

Enrollment

Received the CENBA programme (n=14)

Did not receive the CENBA programme

Lost to follow-up (n=0)

Analysed (n=15)

due to faulty phone (n=1)

# Mann- Feasibility

The participants found programme useful in improving knowledge, providing their psychological support, group interaction and an opportunity to clarify misconceptions.

