Effectiveness of SMS appointment reminder and defaulter tracking system in Lagos State, Nigeria

Submission date	Recruitment status No longer recruiting	Prospectively registered		
03/05/2020		☐ Protocol		
Registration date	Overall study status Completed	Statistical analysis plan		
19/05/2020		[X] Results		
Last Edited	Condition category	[] Individual participant data		
02/12/2020	Other			

Plain English summary of protocol

Background and study aims

Most of the essential health services are not one-time services but required regular follow-ups. These follow-ups have been a major issue affecting the coverages of some health services in the Lagos State, Nigeria.

The Primary Health Care Board (PHCB) under the auspices of Lagos State Ministry of Health collaborated with Japan International Cooperation Agency (JICA) developed an SMS reminder system to the clients who are required to return health facility and to complete a full course of service/regimen.

The purpose of this study is to assess the effectiveness of short text reminder messages (SMSs) to clients through mobile technology in their continuous return for ANC, FP and child immunization including routine Vitamin A supplementation.

Who can participate?

All clients who have appointments at the 33 PHCs in Lagos state for antenatal care (ANC), family planning, and child immunization including routine Vitamin A supplementation during the study period.

What does the study involve?

All clients who visited the 33 PHCs for antenatal care (ANC), family planning, and child immunization including routine Vitamin A supplementation are registered for the study with verbal consent. They are randomly allocated to intervention and control groups. The intervention group receives a short text reminder message two days before their appointment while the control group do not receive an SMS reminder message. If clients in the intervention group do not return to the health facility, they receive another reminder message seven days after the appointment day. As part of the standard of care, nurses will inform the clients in both intervention and control groups of the next appointment dates.

What are the possible benefits and risks of participating?

The benefit of participating in this study is receiving the SMS reminder on their appointments only. There is no risk of participating in this study since as part of the standard of care, nurses

informed the clients in both intervention and control groups of the next appointment dates at the service provision

Where is the study run from? Lagos State (Nigeria)

When is the study starting and how long is it expected to run for? October 2018 to November 2019

Who is funding the study?

Japan International Cooperation Agency

Who is the main contact? Dr Hirotsugu Aiga, hirotsugu.aiga@nagasaki-u.ac.jp Mr Yoshito Kawakatsu, yoshitok@uw.edu

Contact information

Type(s)

Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

LSMH/4168/VII

Study information

Scientific Title

Effectiveness of SMS appointment reminder and defaulter tracking system in Lagos State, Nigeria: A randomized controlled trial

Study objectives

SMS reminder would improve health facility attendance by reminding the appointments of vaccines, antenatal care, and family planning

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 13/12/2016, Health Research and Ethics Committee at Lagos State University Teaching hospital (1-5, OBA AKINJOBI ROAD, IKEJA, LAGOS, P.M.B. 21005, NIgeria; +234 - 1 - 471-0670; dcst@lasuth.org), ref: LREC /06/10/766

Study design

Randomized controlled trial

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

Attendance at appointments at local health centre for vaccination, ANC, and family planning

Interventions

A client in the intervention group received a short text reminder message two days before the scheduled appointment day (appointment reminder) while a client with an appointment under the control group (service as usual) did not receive an SMS reminder message. Clients in the intervention group who did not show up for their appointments received another reminder message seven days after the appointment day (patient-tracking message). As part of the standard of care, nurses informed the clients in both intervention and control groups of the next appointment dates.

The duration of the intervention was 6 months, with 4 months of follow up.

Randomization of participants was performed daily for all appointments two days hence, with groups matched in terms of the dates that the appointments were created.

Intervention Type

Behavioural

Primary outcome(s)

The return status of the appointments for the three health services (i.e. ANC, FP, and child immunization including routine Vitamin A supplementation) measured for the duration of the study using patient records. If a client returns to a health facility for her appointment, they were categorized as returned cases, while if do not return, they were categorized as a defaulter

Key secondary outcome(s))

Timing of receiving vaccination, ANC and FP measured for the duration of the study using patient records

Completion date

30/11/2019

Eligibility

Key inclusion criteria

1. All clients who visited the 33 PHCs in Lagos state for antenatal care (ANC), family planning, and child immunization including routine Vitamin A supplementation

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

9368

Kev exclusion criteria

- 1. Clients with the appointments of other services (e.g., HIV/TB care)
- 2. Clients without a mobile phone or accessible phone number

Date of first enrolment

14/01/2019

Date of final enrolment

Locations

Countries of recruitment

Nigeria

Study participating centre Adeniyi Jones PHC

Lagos Nigeria N/A

Study participating centre Ajeabo PHC

Lagos Nigeria N/A

Study participating centre Ajibulu / Mafoluku PHC

Lagos Nigeria N/A

Study participating centre Akinwunmi Ambode PHC

Lagos Nigeria N/A

Study participating centre Akowonjo PHC

Lagos Nigeria N/A

Alapere PHC

Lagos Nigeria N/A

Study participating centre Alausa PHC

Lagos Nigeria N/A

Study participating centre Ashogbon PHC

Lagos Nigeria N/A

Study participating centre Ayantuga PHC

Lagos Nigeria N/A

Study participating centre Ejire Phc

Lagos Nigeria N/A

Study participating centre Festac PHC

Lagos Nigeria N/A

Ifako Ijaye PHC

Lagos Nigeria N/A

Study participating centre Ijora Oloye PHC

Lagos Nigeria N/A

Study participating centre Ikate PHC

Lagos Nigeria N/A

Study participating centre Ikosi PHC

Lagos Nigeria N/A

Study participating centre Ilasa PHC

Lagos Nigeria N/A

Study participating centre Ipaja PHC

Lagos Nigeria N/A

Ipinlerere PHC

Lagos Nigeria N/A

Study participating centre lwaya PHC

Lagos Nigeria N/A

Study participating centre IYANA EJIGBO PHC

Lagos Nigeria N/A

Study participating centre Ketu (Mascara) PHC

Lagos Nigeria N/A

Study participating centre Layeni PHC

Lagos Nigeria N/A

Study participating centre Ogudu PHC

Lagos Nigeria N/A

Ojodu PHC

Lagos Nigeria N/A

Study participating centre Ojokoro PHC

Lagos Nigeria N/A

Study participating centre Ondo St West PHC

Lagos Nigeria N/A

Study participating centre Orisunbare PHC

Lagos Nigeria N/A

Study participating centre Palm Avenue PHC

Lagos Nigeria N/A

Study participating centre Rauf Aregbesola PHC

Lagos Nigeria N/A

Simpson PHC

Lagos Nigeria N/A

Study participating centre Sura PHC

Lagos Nigeria N/A

Study participating centre Ogba PHC

Lagos Nigeria N/A

Study participating centre Ohekenu PHC

Lagos Nigeria N/A

Sponsor information

Organisation

Japan International Cooperation Agency

ROR

https://ror.org/022es3t03

Funder(s)

Funder type

Government

Funder Name

Japan International Cooperation Agency

Alternative Name(s)

Agence Japonaise de Coopération Internationale, Agencia de Cooperación Internacional del Japón, JICA

Funding Body Type

Government organisation

Funding Body Subtype

Local government

Location

Japan

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to the ownership of the data. The dataset used in this study belongs to the Lagos State Ministry of Health. Without permission from the Ministry, we cannot share raw data with anybody.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	29/09/2020	02/12/2020	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes