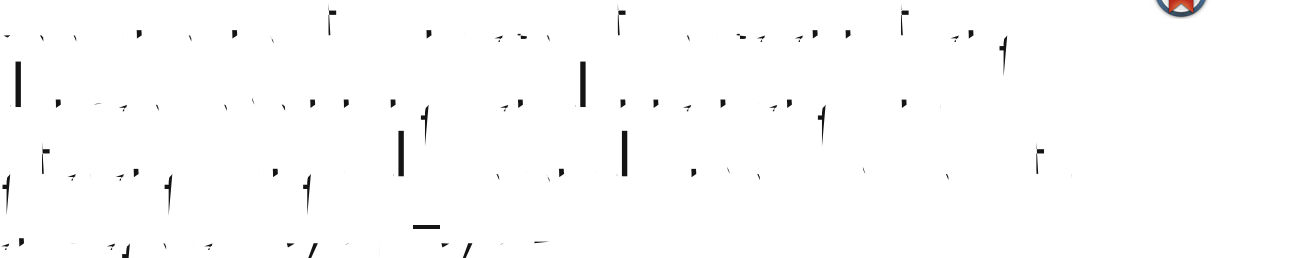


RESEARCH

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Abstract

B : Supportive supervision is one of the interventions that fosters program improvement by way of imparting knowledge and skills to health workers. The basic challenge in supportive supervision is the availability of data in real time for timely and effective feedback. Thus, the main objective of this study was to determine the contribution of real-time data collection during supportive supervision for timely feedback and generation of evidence for health intervention planning.

M : We analyzed supportive supervision records collected through handheld devices employing the open data kit (ODK) platform from July 2015 to June 2016. Supervision was conducted across the country by 592 World Health Organization (WHO) officers. The availability of real-time data and the distance of health facilities to the community were analyzed.

R : During the study period, 90,396 health facilities were supervised. The average time spent during supervision varied from 1.53 to 3.78 h across the six geopolitical zones of the country. The average interval between completion of the supervisory checklist and synchronization with the server varied from 3.9 h to 7.5 h. The average distance between the health facility and a ward varied from 5 to 24 km.

C : The use of handheld devices for supportive supervision provided real-time data from health facilities to state and zonal levels for analysis and feedback. Program officers used the findings to rectify process indicators in time for a better outcome.

K : Real-time data, Supportive supervision, Timely feedback, Health facility distance

Background

Supportive supervision is one of the interventions that fosters program improvement by way of imparting knowledge and skills to health workers. The basic challenge in supportive supervision is the availability of data in real time for timely and effective feedback. Thus, the main objective of this study was to determine the contribution of real-time data collection during supportive supervision for timely feedback and generation of evidence for health intervention planning.

We analyzed supportive supervision records collected through handheld devices employing the open data kit (ODK) platform from July 2015 to June 2016. Supervision was conducted across the country by 592 World Health Organization (WHO) officers. The availability of real-time data and the distance of health facilities to the community were analyzed.

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The use of handheld devices for supportive supervision provided real-time data from health facilities to state and zonal levels for analysis and feedback. Program officers used the findings to rectify process indicators in time for a better outcome.

Real-time data, Supportive supervision, Timely feedback, Health facility distance

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Table 1 Average time of supportive supervision verses time to submit to server, July 2015 to June 2016, Nigeria

Zones	Average time of supervision in the field (h)	Average time submitted to server (h)
North-central zone	2.42	4.5
Northeast zone	2.05	7.5
Northwest zone	1.53	7.3
Southeast zone	2.76	4.3
South-south zone	3.78	4.2
Southwest zone	2.57	3.9
National	1.99	5.28

Methods

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Table 2 Proportion of supportive supervision conducted with government counterparts, July 2015 to June 2016, Nigeria

Month	Proportion of joint supervisions
July 2015	55%
August 2015	54%
September 2015	53%
October 2015	51%
November 2015	51%
December 2015	48%
January 2016	56%
February 2016	54%
March 2016	56%
April 2016	54%
May 2016	54%
June 2016	57%

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Conclusions

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AFP: Acute flaccid paralysis; GPS: Global positioning system; LGA: Local Government Area; ODK: Open data kit; RED: Reaching every district; WHO: World Health Organization

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All data generated and/or analyzed during this study are included in this published article. The data are available from the corresponding author on request.

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SGT, FB, FS, and PM conceived and led the design of the study and drafting of the article. SGT, TBE, AA, ODR, and AGU conducted data extraction and analysis and a review of the first draft. NA, AK, MAI, YGY, CW, UA, ED, PN, DGV, and WA conducted a systematic review of the literature retrieval of data, extraction and analysis, and wrote the first draft. All authors have read and approved the final version of this manuscript.

E

Secondary data was used for the study. Therefore, consultation of an ethics committee and consent to participate is not required. The data are available on the WHO server and permission was given by the WHO country office to for its use in this study.

C

Not applicable.

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The authors declare that they have no competing interests.

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