



BABCOCK
UNIVERSITY

ILISHAN-REMO, OGUN STATE, NIGERIA

COLLEGE OF POSTGRADUATE STUDIES

2022/2023 PhD Thesis Abstract

Department of Nursing Science

RFN: Zaccheus Opeyemi OYEWUMI

RD: Nursing Science

RS: Nursing Sciences

RE: oyewumi0218@pg.babcock.edu.ng

RAE: zooyewumi@lautech.edu.ng

RP: 08037689685

RT: Effectiveness of WHO Combination Treatment Regimen in the Management of Diarrhoea among Under-Five Children Attending Primary Health Care Centres in Oyo State, Nigeria

MS: Dr. Ngozi O. OKAFOR

ME: okafor@babcock.edu.ng

SP: 08035273775

CS: Nil

CE: Nil

CP: Nil

AB: Diarrhoea is one of the childhood diseases that could result in high mortality globally. The World Health Organization (WHO) recommended combination treatment regimen of Oral Rehydration Salts (ORS) and zinc supplement for the management of this disease. Studies showed that high number of children with diarrhoea do not receive the combination regimen, rather they receive ORS alone or zinc supplement. Records in most of the Primary Health Care Centres in Oyo State on the management of under-five diarrhoea is tilted towards either the use of ORS or zinc supplement and the children often returned with more episodes of diarrhoea. Therefore, the main objective of this study was to assess the effectiveness of WHO combination treatment regimen in the management of diarrhoea among under-five children attending Primary Health Care (PHC) centres in Oyo State, Nigeria.

The study adopted quasi-experimental one group pretest-posttest design. Purposive sampling technique was used to recruit a total of 60 eligible participants from the population of 147 reported cases in the PHCs. The participants of the study were children aged three months to sixty months with diarrhoea who fulfilled the inclusion criteria on admission. WHO observational check-list on assessment of diarrhoea was used for pre- and post- data collection. The reliability of the instrument was established using inter-rater method at $r = 0.88$ and 0.89 for both the dehydration and diarrhoea respectively. Hence, the instrument was said to have high inter-rater reliability. WHO combination treatment regimen was administered for the first 24 hours while the ORS was continued for at least three days and

zinc supplement for the next 14 days. Post-intervention data were collected at 24 hours, two and four weeks intervals. Data analysis was done using both descriptive (frequency and percentage) and inferential (t- test and chi-square) statistic at 5% level of significance. SPSS Version 25 and Microsoft Excel 2013 was used.

The findings showed that 21(35.0%) were aged from 13 to 24 months and 18(30.0%) were aged 3 to 12 months. At pre-intervention, 52(86.7%) of the participants had moderate diarrhoea and 47(78.3%) had moderate dehydration. Twenty four hours post intervention, diarrhoea status was 51(85.0%) and dehydration status was 46(76.6%). Two weeks post intervention, 56(93.3%) of the participants had no diarrhoea and dehydration status was 52(86.7%). Data at four weeks post-intervention was 57(95.0%) for diarrhoea status and 60(100%) for dehydration status. There were significant differences throughout the periods of evaluation for post-intervention for both diarrhoea and dehydration status; 24 hours ($t = 14.82, p < 0.05; t = 16.26, p < 0.05$), two weeks ($t = 14.01, p < 0.05; t = 16.90, p < 0.05$) and four weeks ($t = 15.03, p < 0.05; t = 15.62, p < 0.05$) intervals respectively.

The study concluded that WHO ORS and zinc combination treatment regimen was effective in the management of diarrhoea among under-five children. Hence, the use of this combination treatment regimen should be encouraged in the management of diarrhoea among under-five children in PHC facilities.

Keywords: Combination treatment regimen, Diarrhoea status, Oral Rehydration Salt, Primary Health Care Centres, Under-five dehydration Status, Zinc supplement

Word Count: 491

Abbreviations: RFN: Researcher's Full Name, RD: Researcher's Department, RS: Researcher's School, RE: Researcher's Email, RAE: Researcher's Alternate Email, RP: Researcher's Phone Contact, RT: Registered Title, MS: Main Supervisor, ME: Main Supervisor's E-mail Address, SP: Main Supervisor's Phone Contact, CS: Co-Supervisor, CE: Co-Supervisor's E-mail Address, CP: Co-Supervisor's Phone Contact, AB:Abstract

Suggested Citation: Oyewumi, Z.O., and Okafor, N.O. 2023. Effectiveness of WHO Combination Treatment Regimen in the Management of Diarrhoea among Under-Five Children Attending Primary Health Care Centres in Oyo State, Nigeria. PhD Thesis Abstract, College of Postgraduate Studies, Babcock University. [https://doi.org/10.61867/pcub.1\(5\).179](https://doi.org/10.61867/pcub.1(5).179)