

Volume 1, Number 1, August, 2023 https://iaherijournal.maaun.edu.ng

ISSN (Paper): 2817-1673; ISSN (Online): 2817-1683

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Effect of Covid-19 on Nursing Management of Under Five (0-5) Year Patient on Adherence to Antiretroviral Therapy in Gwarzo General Hospital Kano Art Treatment Center

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Abstract

Ensuring adherence during the COVID-19 pandemic is a big task as such this research work evaluates some social and behavioral factors, which may influence adherence, and identify individual's needs for intervention. under 5yrs patients/caretaker experience on art medications adherence were sorts well as their expectations about treatment art treatment regimen during the Covid-19 pandemic. To achieve optimum adherence status in less than 5yrs patient on art treatment regimen assessing art medication adherence status of caretaker or other household members is very important. A retrospective, transversal, comparative study was conducted.

Keyword: Anti-retroviral therapy, Anti-retroviral, Drug Adherence

Introduction

Adhering to Antiretroviral theray has help in prolonging life of children sufering from hiv and on arv medication, according to the World Health Organization (WHO), Children below 5yrs mortality rate (C5MR) has decreased by 58%, from an estimated rate of 93 deaths per 1000 live births in 1990 to 39 deaths per 1000 live births in 2017 globally Sub-Saharan Africa (SSA), child mortality still a public health problem with the U5MR at 76 deaths per 1,000 live births in 2017. This translates to 1 child in 13 dying before his/her fifth birthday, which is 14 times higher than the average ratio of 1 in 185 in high-income countries and 20 times higher than 1 in 263 in the region of Australia and New Zealand WHO (2017). Human immunodeficiency virus (HIV) infection affects child mortality directly through vertical transmission and indirectly through HIV associated maternal death and/or ill health/psychosocial status. 2% of global mortality among under-five-year-old children (UFC) was attributed to HIV infection in 2013. According to (UNICEF 2021) the successful roll-out of the program for the vertical transmission prevention of HIV has led to fewer infants and children becoming infected with the virus each year.

Purpose of the Study

Purpose of this study is to assess nursing intervention on adherence to antiretroviral therapy among patient below 5yr receiving antiretroviral drugs [ARV] in the HIV treatment centers at Gwarzo specialist hospital of Kano state Nigeria.

The study is designed to: assess the adherence to antiretroviral therapy of patient less than 5yrs receiving antiretroviral drugs at Gwarzo specialist hospital of Kano state Nigeria.

The specific objectives were:

To evaluate the effect of the COVID-19 pandemic and health care system treatment related factor on the nursing management of under-five (0-5)yrs adherence to ART treatment regimen



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Research Question

Based on the purposes of this research, the researcher seeks to provide answers to the following research questions which serves as a guide:

what are the best barrier nursing intervention during covid-19 pandemic that will improve adherence to antiretroviral therapy of under 5yrs children at Gwarzo General hospital of kano state Nigeria.

Research Hypothesis

On the basis of the above research questions, the following null hypotheses are formulated to provide direction to this study:

There is no significant relationship between covid -19 pandemic, health care system, arv therapy related factor and under 5yrs patient adherence to ART at Gwarzo General hospital of Kano state Nigeria.

Background to the Study

In the context of the COVID- pandemic, many patients avoided moving from their homes, even to acquire essential drugs, such as antiretroviral therapy (ART). High adherence (more than 95%) is essential to acquire viral suppression and is associated with reduced mortality and morbidity.

Furthermore, poor ART adherence is the first cause of therapeutic failure in HIV patients and HIV drug resistant strains. During this crisis, it is difficult for clinicians to alert patients of potential adverse effects of ARV drugs (e.g., nausea, headaches, abdominal discomfort, sleep disturbances), explain how they can be managed, and emphasize the importance of adherence. When there are concerns about adherence, the adolescent should be seen and/ or contacted frequently (over the phone, text messaging, email, and social networking, as allowed within the context of legal and regulatory requirements) to assess adherence and determine the need for strategies, which can improve and support ART adherence. Adherence can be optimized using social and community support services. Patient and caregiver education are essential components of establishing good medication adherence in adolescents. Educating families about adherence should begin before initiating or changing ART medications, and should include a discussion about the goals of therapy, importance of optimizing adherence, and specific plans for supporting and maintaining patient's medication adherence.

Methodology

A retrospective, transversal, comparative study was conducted between 2019 and 2020. Under five (0-5) yrs HIV patients receiving ART at Gwarzo General Hospital of kano state Nigeria were included. Exclusion criteria were: those patient above 5yrs old receiving arv therapy, deaths, initiated ART during or after the research in 2020, and transfer to another apex tertiatryrefferer hospital in the state capital.

To measure adherence, dispensing records were analyzed. Registered variables were sex, side effects of the medication factors that could compromise adherence and pill numbers. Data were obtained from the medical records office patient folder, self-report by the care taker. For the statistical analysis, the paired t test was used to determine if there were differences in patient adherence before and after the COVID-19 pandemic. Results 50 patients were analyzed during the study period, with an average age of 0.9 ± 4.3 years and 51% were men. ART adherence was 57% in 2019 (57% male non-adherent) whereas in 2020 it was 33% (48% male non-adherent). Comparing both years, there was a decrease of 14% in the adherence rate, which was significant



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(p=0.006). The main reasons for this reduction were: rescheduling of doctor appointments or blood tests, mandatory confinement due to COVID-19 or fear of using the hospital facilities. lack of transport fees to the treatment center due to poverty and logistics problems as a result of covid-19 pandemic restriction.

Results

The study results suggested that more nurses/ medics should be recruited to increase quick accessibility to the arv treatment center and care.

The COVID-19 pandemic; affected HIV patient adhce due to the caretaker inability to access treatment center as a result of Covid-19 pandemic restriction. Access to medical facility (arv treatment center) and coordinated home visit was difficult due shortage of manpower and covid-19 restriction. nurses/medics could not carry out effective communication (teleconsultation) to due to poor network services. It is important that Nurses/medics continue to promote arv therapeutic adherence on treatment regimen through organizing health talk (health education) about the effect of COVID-19 and how to access treatment center. Home visit and the use of electronic communication devices should be encouraged and restore to maintain the chain of arv adherence therapy which will in turn promote good health and reduce under five (0-5) mortality rate

Discussion

The main limitation was logistics problem which disrupted one of the nurse's intervention tools (home visit) which is to maintain continue care.

Second was the reduced sample used. It is highly important to monitor and educate patients/caretaker on ART to ensure their adherence rate and to understand how and why the COVID-19 pandemic affected their treatment.

Further research is needed on the impact of COVID-19 pandemic on the nursing intervention to improve under five (0-5) yrs patients and their guidance on art adherence regimen

Conclusion

When we heard of the spread of COVID-19 pandemic in Wuhan China it looks far from us here in Africa Nigeria Kano and Gwarzo community in particular. Now, that it is here, and we are experiencing deaths of loved one of COVID-19, the medics tend to forget about many other diseases that are deadly. Chronic patients are told that because of underlying diseases, they are susceptible to be infected and dying from COVID-19.

In all discussions, deadly illnesses, such as HIV and AIDS that require adherence to treatment, are not the focus of health institutions, including Gwarzo General Hospital art clinics, where most of the under 5 (0-5) yrs born with HIV access their treatment. Health workers are also affected by COVID-19 them self, leaving the art clinics closed., and no action put in place to support the under 5yrs born on art treatment regimen. Their main challenges are their trusted healthcare workers die or struggling to survive the effect of COVID-19. In addition, due to COVID-19, their caretaker is expected to study online to update or access arv regimen information which is a challenge as they have spent a good amount of time standing at a clinic hoping to access ARV. All these challenges require psychological support, which is normally not prescribed as a part of treatment to support the expected normal development of under 5yrs patient on adherence to art regimen.



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