U21 Health Sciences Group

A PILOT STUDY: ASSESSMENT OF WATER, SANITATION AND HYGIENE CONDITIONS IN WARD 2 VILLAGES OF BOLOBEDU AREA, LIMPOPO PROVINCE

Authors: Mapula Molewa¹, Tobias Barnard², Nisha Naicker¹

- Department of Environmental Health, Faculty of Health Sciences
- 2 Water and Health Research Centre, University of Johannesburg

Keywords: Water, waste, sanitation, hygiene, diarrhea, rural areas.

Annual Meeting

2021

Introduction

Worldwide, it is estimated that 1.5 million children pass away due to diarrheal diseases annually.¹ Diarrheal diseases have been associated with the use of lack of unsafe water, inadequate sanitation and poorly hygiene conditions. Also, poor sanitation and hygiene standards can provide a conducive environment for invasion of cockroaches and other disease transmitting vectors by being the source of food, water and harbourage.²

Aim: The study aimed to assess water, sanitation and hygiene (WSH) conditions in ward 2 villages of Bolobedu Area, Limpopo Province.

The objectives of this study were to describe the proportion of the households with access to water and sanitation services, to describe adherence of households to particular hygiene practices, to determine the prevalence of the households which has cockroaches as well as the prevalence of the households which reported episodes of diarrhoea for the past 12 months.

Methodology

A cross-sectional descriptive pilot study was conducted in February 2021. A random sampling technique was used to sample rural area households in Ward 2 villages in Bolobedu under the Greater Letaba Municipality (GLM), Limpopo Province.

Ethical clearance was from the University of Johannesburg Ethics Committee and Greater Letaba Municipality. Data was collected using structured questionnaires, captured and analyzed using Statistical Package for the Social Science (SPSS) version 27 software.

Results

Household Characteristics

Thirty respondents participated in the study. The sum of the total population for the participated household was 176 with the mean of



Access to Water Services

Atleast 14 (47%) of household had access to the source of water within the households and 16 (53%) of household had no access to the source of water within the households. About 27 (90%) households use water containers which have lids and also close without leaving gaps.

Access to Sanitation Services About 27 (90%) use pit latrine toilets, 2 (7%) flush toilets and 1 (3%) used both pit latrine and flush toilet within the household.

Waste Management

All participants (100%) relied on dumping the waste within the facilities. About 7 (27%) households temporarily store waste in trash cans within the household. household 19 (63%) tie the plastic for lining trash cans before disposal of stored waste. 12 (40%) household empty the trash can when only full. About 13 (43%) household have no outdoor trash trashes accumulating within their household facilities.



Pest control

Twenty-eight participants have the presence of cockroaches in the household. Half of the household 15 (50%) use pest control measures to control cockroach infestation.

Household hygiene practices

Most household 23 (77%) have hand washing facilities with soap and 7 (23%). Five (17%) never keeps clutter in the kitchen and 9(30%) washed dishes immediately after use. Twenty-three (77%) always wash hands with soap and water after toilet use.

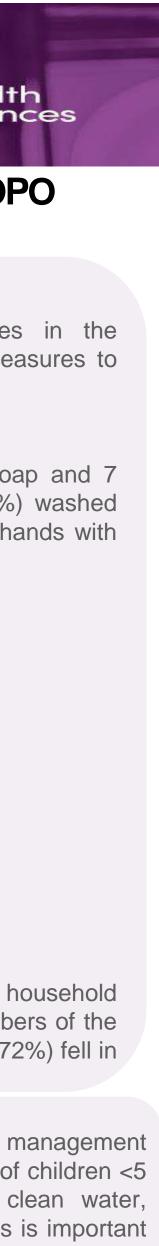


Twelve (40%) household (40%) had never had members of their household experiencing diarrhoea in the past 12 months. Amongst the members of the household who experienced diarrhoea in the past 12 months, 13 (72%) fell in the age category of between 0-5 years.

Conclusion

Despite poor access to water services (53%) and poor waste management (100%), good hand hygiene practices were adhered to with 57% of children <5 likely vulnerable to diarrheal diseases. Therefore, access to clean water, sanitation, waste management and hygiene (WSWH) in rural areas is important for human health and well-being. This survey results can be used by government and other stakeholders when implementing and monitoring WSWH Programme.





U21 Health Sciences Group

Annual Meeting 2021

Biography of Mapula Molewa



Mapula Molewa is a qualified Environmental Health Practitioner currently practicing as an Occupational Health & Safety Practitioner in the public sector. She is also a PhD candidate in Environmental Health Studies at the University of Johannesburg, South Africa. She is passionate about safeguarding the health and safety of the population as well as of the environment. In her spare time she does fashion design work, sew and watch TV.

Contact details:

Email: molewa.mapula@gmail.com Tel: (+27) 76 701 7528



FecSalud Escuela de Medicina Ciencias de la Salud



