

Assessment of Knowledge, Attitude, and Practice and the Availability of Water, Sanitation and Hygiene (WASH) Facilities Among Secondary School Students in AMAC FCT, Abuja, Nigeria

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ABSTRACT

Access to adequate water, sanitation and hygiene (WASH) facilities is recognized as a basic human right and essential for public health, within schools where children spend a large portion of their day. Despite global efforts to improve WASH facilities worldwide, many regions continue to struggle with providing adequate access, especially in developing countries like Nigeria. This study aimed to assess the knowledge, attitude, and practice of secondary school students regarding Water, Sanitation and Hygiene (WASH) and to evaluate the availability of WASH facilities in secondary schools in Abuja, Nigeria. A cross-sectional study was conducted among secondary school students across 6 schools in AMAC, between August and September 2025. A multistage sampling technique was employed to select participants. Data were collected using a structured, close-ended, self-administered questionnaire to assess students' knowledge, attitude, practice, and availability of facilities. Data analysis was performed using IBM SPSS version 25 and R programming language. A total of 385 participants were included in the study. The findings revealed that 60% of respondents had good knowledge of WASH, particularly regarding safe drinking water sources (73.2%), proper handwashing (78.7%), and appropriate waste disposal (86.2%). Attitude toward WASH was highly positive among 99.2% of students and good hygiene practices were observed in 71.9% of students, with most washing hands with soap and water (64.4%) and properly disposing of waste (93.2%). Availability of WASH facilities was reported in 61.6% of schools, though soap and menstrual hygiene provisions were inadequate. The statistical significance was taken at p -value < 0.05 , and the odd ratios (OR) of the variables were examined. Knowledge was significantly associated with school attended ($p=0.003$), class ($p=0.020$), and school location ($p=0.012$). Additionally, students in rural areas were twice as likely to have poor knowledge (OR=2.174, $p=0.013$). Attitude correlated significantly with school location ($p=0.004$); rural students showed less positive attitudes and practice was associated with gender ($p=0.018$); males were 1.7 times more likely to have poor practices (OR=1.712, $p=0.019$). Availability of WASH facilities was linked to school and class ($p=0.040$ and 0.014 respectively). The study reveals generally good knowledge, positive attitudes, and fair practices toward WASH among students; however, gaps remain in facility adequacy and hygiene resource availability. Therefore, strengthening WASH infrastructure and continuous health education are recommended to promote sustainable hygiene practices in schools.

Keywords: Water, Sanitation, Hygiene, Knowledge, Practice, Attitude and Accessibility

