

USE AND RISK PERCEPTION OF NITROUS OXIDE (LAUGHING GAS OR BALLOONS): A CROSS-SECTIONAL SURVEY AMONG ADOLESCENTS AND YOUNG ADULTS LIVING IN FEDERAL CAPITAL TERRITORY, NIGERIA

Authors:

Agbo C¹, Chima U², Agbo J³, Mosanya A⁴

¹ Federal Road Safety Corps Abuja, ² Person-Centered HIV Research Team, Department of Clinical Pharmacy and Pharmacy Management, University of Nigeria, ³ Enugu State University Teaching Hospital, ⁴ Pharmaceutical Sciences, University of Nigeria Nsukka.

Background:

Nitrous oxide (N₂O) has garnered attention for its recreational use, prompting concerns about potential health and safety risks among adolescents and young adults (AYA) in Nigeria. This study aimed to evaluate the use and risk perception of N₂O among AYA in FCT, Nigeria.

Methods:

A descriptive cross-sectional survey was conducted from May 2024 to July 2024 among adolescents and young adults living in FCT, Nigeria. A 34-item, 3-section self-administered and validated questionnaire was used for this survey. Risk perception was rated on a 5-Likert scale of agreement. Descriptive statistics (frequency, percentage) and inferential statistics (Chi-square) were used to analyze the data with the significance level set at $p < 0.05$.

Results:

There were 424 participants in the survey of which 307 (72.4%) were aged 16-21 years and 147 (34.7%) attended University of Abuja. Only 65 (15.3%) reported to have ever used N₂O although 48 (73.8%) reported a *rare* use of N₂O. Nearly half, 198 (46.7%) had poor risk perception of N₂O use whereas more than half, 254 (59.9%) *agreed* that *"It is important for a relative or friend to suggest the cut down on excessive N₂O use."* More than half, 220 (51.9%) had a good risk perception of the negative consequences of N₂O of which 223 (52.6%) were *neutral* on the item: *"Vitamin B12 deficiency is a negative consequence of continuous use of N₂O"*. University ($\chi^2 = 16.439$, $p = 0.001$), ($\chi^2 = 40.827$, $p < 0.001$), and ($\chi^2 = 39.412$, $p < 0.001$) were significantly associated with use, risk perception of N₂O, and risk perception of negative consequences of continuous use of N₂O, respectively.

Conclusion:

Self-reported use of N₂O was low among AYA living in FCT, Nigeria. Nearly half of the participants had poor risk perception of N₂O use. There is a need for targeted education on the risks of N₂O use among adolescents and young adults living in Nigeria.

Disclosure of Interest Statement:

The authors declare there is no conflict of interest in the preparation of this abstract.