ASSOCIATIONS BETWEEN INCIDENT DRUG OVERDOSE AND SOCIODEMOGRAPHIC FACTORS AMONG PEOPLE WHO USE OR INJECT DRUGS IN MYANMAR'S DRUG PRODUCTION REGIONS: A CROSS-SECTIONAL STUDY

Authors:
Kyaw YH[1], Lin TH[1], Yu Naing A[1], Shwe Yee N[1]

[1]Asian Harm Reduction Network (AHRN) Myanmar

Background:
The persistence of high-risk drug use and drug overdose deaths poses a major public health challenge in Myanmar, compounded by limited data and scarcity of evidence. This study investigated the influence of sociodemographic factors on incident drug overdose among people who use or inject drugs (PWUD/PWID) in three drug production regions in Myanmar.

Methods:
Routine client registration data from 2019 to 2023 were retrieved and linked with overdose incident database using clients' unique identifiers. Of 97,025 registered clients, 79,667 registered as PWUD or PWID were included in the analysis. Pearson's Chi-square test was utilized to test the overall associations between overdose incidents, and categories of each sociodemographic factor: age, sex, marital status, education, and occupation. Multivariate logistic regression was computed by simultaneously fitting sociodemographic factors as predictor variables, and incident overdose as the outcome. Adjusted odds ratios (AORs) and 95% confidence intervals (95%CI) were reported.

Results:
Among the 79,667 registered clients, 331 had a history of overdose events, and their median (interquartile range) age was 31 (27 to 38) years. Chi-square tests revealed significant associations of incident overdose with age, education, and occupation. Multivariate logistic regression revealed that clients who were within the age range of 45 to 59 were 69% (AOR=0.31, 95%CI=0.18 - 0.57) less likely to experience incident overdose, compared to those 25 years and under. Among nine job categories, individuals who were unemployed (AOR=2.34, 95%CI=1.19 - 4.58), working in salaried blue-collar jobs (AOR=3.03, 95%CI=1.50 - 6.11), and employed in unspecified random jobs (AOR=3.07, 95%CI=1.76 - 5.35) had significantly higher odds of experiencing overdose incidents compared to those working as jade or gold miners/scavengers.

Conclusion:
This study indicates the significant association between incident overdose and specific sociodemographic factors (age, education and occupation). Adapting existing overdose prevention and management services to target PWUD/PWID with high-risk sociodemographic characteristics may enhance effectiveness.

Disclosure of Interest Statement:
AHRN receives funding from Access to Health Fund (AHF), and U.S. Agency for International Development (USAID) for research activities. Funding agencies had no involvement in the study's design, data collection, analysis, and interpretation of findings.