

study both in preventing health problems and facilitating the planning and provision of appropriate care.

Research Instruments and Data Sources

Questionnaire: The principal research instrument was a paper-and-pencil questionnaire administered in face-to-face interviews (Appendix). They averaged 37 minutes in duration.

In broad terms, the interview schedule tapped sociodemographic, health and lifestyle characteristics, circumstances that precipitated the ER visit, visit characteristics, and information on psychoactive drug use, abuse, dependence, and need for treatment.

To enhance intrastate and interstate comparability, the questionnaire drew substantially upon items employed in the TAODNA survey, ER surveys conducted by the ARG, the Tennessee SANTA Survey of new arrestees, and the National Technical Center's Telephone Substance Dependence Needs Assessment Questionnaire. Where practical, the survey utilized standardized questions. Since a major component of this study was assessment of the need for AOD treatment, the intent was to compile evidence of drug dependence consistent with DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders*, 4th edition)¹⁵ and ICD-10 (*International Classification of Diseases*, 10th revision) criteria.¹⁶ DSM-IV clinical diagnostic criteria were used to assess AOD dependence for this report. They indicate tolerance, withdrawal, frequent excessive use, persistent desire or unsuccessful attempts to curtail use, much expenditure of time and effort to secure drugs, disruption of important activities attributable to use, and continued use despite awareness of adverse physical and psychological consequences.

AOD Testing: Rapid assay saliva and urine tests provide efficient screening methods for alcohol and other drugs. In the present study, saliva testing was used to determine ethanol (alcohol) levels. Interviewers requested a saliva specimen for testing. The specimen was taken on a sterile swab and transferred to the test kit, Q.E.D.TM A350, on the end of a dipstick. In this type of test, alcohol dehydrogenase catalyzes ethanol to acetaldehyde, a metabolic byproduct of ethanol ingestion. Nicotinamide adenine dinucleotide (NAD) at the same time is metabolically reduced in conjunction with acetaldehyde. The test measures the presence of ethanol through an alkaline pH shift, combined with an acetaldehyde trapping agent, to spur a subsequent chemical reaction. It is this process that generates one mole of nicotinamide adenine dinucleotide hydrogenase (NADH) per mole of alcohol present in the saliva specimen. The oxidation of NADH produces a colored substance, the amount of which is directly proportional to a specimen-based ethanol concentration measured up to a maximum reading of 0.35 grams percent (grams percent represents the number of grams of ethanol that would be contained in 100 milliliters of blood). Q.E.D.TM results correlate highly with those obtained through gas chromatography, a standard confirmatory test.¹⁷