NIMHANS Journal

The Validity of Self Reports by Alcoholics

Volume: 03 Issue: 01 January 1985 Page: 21-24

Reprints request

- Department of Psychiatry, National Institute of Mental Health & Neuro Sciences, Bangalore 560 029, India

K Sekar &, - Department of Psychiatric Social Work, National Institute of Mental Health & Neuro Sciences, Bangalore 560 029, India

D K Subbukrishna, - Department of Biostatistics, National Institute of Mental Health & Neuro Sciences, Bangalore 560 029, India

Abstract

Forty male alcoholics and their close relatives were interviewed on various parameters of alcoholism. The patient's account was compared with the relative's version for the purpose of establishing validity. Most of the information was in agreement with the relative's account and hence valid.

Key words -Alcoholics, Self report, Collateral's report, Validity

Often the diagnosis of alcoholism solely depends on the information provided by the respondent. The validity of self report data, i.e., the accuracy of the information obtained frequently is a neglected area in alcoholism research. Researchers in their effort to measure the extent of validity, have concentrated on alcohol problems and amount of consumption. Validity of self reports can be obtained by comparing the reports by significant others, referred often as collateral reports. The findings generally reported a high degree of agreement between patients and collaterals [1], [2], [3], [4], [5], [6]. Survey on general population yielded similar findings [7]. Summers [8] and Skoloda et al, [9] however found that the alcoholics themselves minimise the problem and the drinking histories as given by them cannot be regarded as valid. Polich et al [5] found that items in which there were less agreement tended to be symptoms which may be inherently distorted by the degree of contact between the respondent and the collateral. Certain authors have also checked the responses against official records, events such as arrests, hospital records. It was found that the alcoholics were more likely to overestimate their arrest and hospitalisation records [2], [3], [4]. Babor and Mendelson [10] conducted two experiments to correlate self reports and observed behaviour. Both their studies reported a high agreement between self report an observed drinking. However, Polich et al [5] and Orrengo et al [11] reported inconsistency when blood alcohol estimation or breath analysis were attempted.

In the Indian context many researchers have looked into various aspects of alcoholism. Most of the studies have relied on the patients' self reports. However, we are unable to see any published report on the aspect of validity of the information

Article

provided. To accomplish this task we studied various parameters of alcoholism to determine the agreement between the patient's version and that of the relative.

Material and Methods

The design of the study involved a single rater (K. S.) who interviewed all the alcoholic subjects and their key informants.

Subjects

They were alcoholics admitted to three male closed wards and two male open wards in our hospital. Altogether forty inpatients according to ICD 9 (admission criteria) and 40 key informants (Spouse-23, Parent-9, brothers-7, son-1) were interviewed. Each subject was interviewed once (P1) within 48 hours of admission in a sober state and a second time (P2) after 2 weeks of the initial interview. The relatives (r) were interviewed within 3-7 days after admission.

The semi-structured interview schedule had 47 questions. Twenty four questions were from the Michigan Alcoholism Screening Test (MAST) [13]. The proforma also contained items regarding family history and the additional questions needed to make a RDC diagnosis of alcoholism developed by Spitzer's et al [14].

Results

All the 40 subjects could be diagnosed as definite alcoholics as per RDC criteria. Twenty four (60%) subjects were in the age group of 36-45 years. Thirty nine were married. Twenty three (58%) were educated upto S.S.L.C. and 6 (15%) were illiterate. Thirty four (85%) were from urban area. For the purpose of reliability Inter Class Correlation Coefficient (ICC) and Kappa values (K) were calculated [15]. Alcoholics themselves gave reliable history as evident from high ICC (0.83 & 0.91) and K values (lowest being 0.64) on all the items (P1 vs P2). R values (ICC) of MAST scores and duration of drinking (P1 vs R & P2 vs R) were high and was in agreement with the relatives version (Table 1). K was found suitable as the rater had examined all the patients. K values (P1 vs R) was high (Table 2) except one or two items: "Have you been drinking the same quantity since the beginning" and "When did you have your last drink?". The values dropped to 0.36 and 0.2 respectively. K values (P2 vs R) however improved on the first question. A large number of relatives reported that the patient in mind had his last drink on the day of admission

Table I - Validity of Drinking HistoryTable I - Validity of Drinking History

Table II - Validity of Drinking HistoryTable II - Validity of Drinking History

Responses to other three questions (Table 3) were very variable and a paired 't' test was applied. The relative's version (P1 vs R) was discrepant for the first two questions, though not during P2 vs R. Most

relatives reported that drinking started at an earlier age. (Mean and S.D :P1-26.91 \pm 5.99, P2-26.51 \pm 6.16, R-25.5 \pm 5.5).

Table III - Validity of Drinking HistoryTable III - Validity of Drinking History

Discussion

The most important finding of our study is that there were few disagreements between two versions of the patient and the account given by their relatives. It gives support to the notion that alcoholics do not necessarily falsify the clinical history. Quite a few previous studies support our findings [1], [2], [3], [4], [5], [6]. Closely aligned with validity issues is the notion that alcoholic deny their extent of involvement with alcohol. Denial can be discussed in two different ways: as defense mechanism or deliberate attempts to deceive and evade treatment. Reports of alcohol related problems will have varying rates of accuracy depending upon type of population studied, type of behaviour measured and the criterion utilized for validation. Validity of self reports is further established when compared against external objective parameter. In this regard tests measuring blood alcohol concentrations (BAC) have limitations. Only reports of recent consumption can be validated. Drinking patterns over time cannot be determined by BAC reading. In Indian set up, it is exceedingly difficult to get information from official records. Hence almost the sole criterion becomes validating against reports by collaterals. In a recent review on this area, Midani [16] commented that only a few highly visible problem can be realistically validated. He suggested that more emphasis should be placed on developing new ways to validate alcohol consumption and alcohol related problems. Sweat patch to measure alcohol consumption over long period of time is one such method [17].

1.Guze S B, Tuason S B, Steward M A & Picken B, The drinking history: A comparison of reports by subjects and their relatives

Journal of Substance Abuse Page: 24: 249-260, 1963

2.Sobell M B, Sobell L C & Samuels F H, Validity of self reports of alcohol - related arrests by alcoholics

Journal of Substance Abuse Page: 35: 276-280, 1974

3.Sobell M B & Sobell L C, Outpatient alcoholics give valid self reports

Journal of Nervous & Mental Diseases Page: 161: 32-42, 1975

4.Sobell M, Validity of self reports in three populations of alcoholics

Journal of Consulting & Clinical Psychology Page: 40: 901-907, 1978

5.Polich J M, Armor D & Braiker H B, *The course of Alcoholism: Four years after Treatment: The Rand corporation, Santa Monica*1979

6.Freedberg E & Jhonstan W, Validity and reliability of alcoholics' self reports of use of alcohol submitted before and after treatment:

Psychological Reports Page: 46: 999-1005, 1980

7.Bailey M B, Heberman P W & Sheinberg J, Identifying alcoholics in population surveys. A report on reliability

Journal of Substance Abuse Page: 28: 300-315, 1966

8.Summers T, Validity of alcoholics' self-reported drinking history

Quarterly J.Stud. Alcohol Page: 31: 972-974, 1970

9.Skoloda T E, Alterman A I, Cornelison F S & Gothali E, Treatment outcome in drinking decisions program

Journal of Substance Abuse Page: 36: 365-380, 1975

10.Babor T F & Mendelson J H, Empirical correlates of self report drinking measures. In: Gallanter M (Ed.)

Currents in Alcoholism Vol. 7. Grune & stratton Inc., New York Page: 161-168, 1980

11.Orrego H, Blendis L, Blake J, Kaur B & Israel Y, Reliability assessment of alcohol intake based on personal interviews in a liver clinic

Lancet Page: 22/29: 1354-1356, 1979

12.World Health Organisation, *The International Classification of Diseases. 9th revision, Geneva*1977 13.Selzer M L, The Michigan Alcoholism Screening Test. The quest for a new diagnostic instrument *American Journal of Psychiatry* Page: 127: 1653-1658, 1971

14.Spitzer R L, Endicott J & Robins E, The Research Diagnostic Criteria, R.D.C. - for a selected group of Functional Disorder

3rd Ed. Biometrics Research, New York State Psychiatric Institute1978

15.Bartko J J & Carpenter W T Jr., On the methods and theory of reliability

Journal of Nervous & Mental Diseases Page: 163: 307-317,

16.Midani K L, The validity of self reported alcohol consumption and alcohol problems: A literature review

British Journal of Addiction Page: 77: 357-382, 1982

17.Phillips M, Vandervoort R E & Beeker C, A sweat test for alcohol consumption

In: Seixas F A (Ed) Currents in Alcoholism. Vol 3, Grune & Stratton Inc., New York Page: 505-514, 1978