ASSIST LINKED ALCOHOL SCREENING AND BRIEF INTERVENTION IN WORKPLACE: A FEASIBILITY STUDY FROM A TERTIARY HOSPITAL OF NORTH INDIA
Jaison Joseph, Karobi Das, Sunita Sharma, Debashis Basu

Abstract
Introduction: The World Health Organization (WHO) developed Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) as a simple scale for rapid screening of substance users to stratify them into three levels of risk severity (mild, moderate and severe). The moderate and high risk substance users can be provided an ASSIST-linked Brief Intervention package (ASSIST-BI), again developed by WHO, aimed at reducing the risk level of substance use. Aim and objectives: In this study, we evaluated the feasibility of applying the ASSIST-BI in the workplace setting for harmful drinking among class C employees of a tertiary hospital of north India. Methods: A sample of thirty nine such workers with moderate or high risk level of substance use was identified by randomly screening 125 employees. These 39 moderate-high risk users have been administered ASSIST-BI. Results and Conclusion: This work found that it is feasible to use ASSIST for workplace screening to identify moderate-high risk-level substance users and to use ASSIST-BI for their brief intervention at workplace itself. Key words: ASSIST, alcohol, harmful use, screening, brief intervention, workplace

INTRODUCTION
Substantial evidence exists between harmful drinking and its negative impact at a societal level. The harmful use of alcohol is a major determinant for neuropsychiatric disorders, non-communicable diseases and accounts for 2.5 million deaths each year (WHO, 2011). More than half of all alcohol drinkers in India fall into the criteria for hazardous drinking and alarmingly “average age of initiation” of alcohol use had dropped from 19 years to 13 years in the past two decades (Prasad, 2009). While considering the paramount nature of global disease burden resulting from harmful drinking, World Health Organization (WHO) developed Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) as a simple scale for rapid screening of substance users to stratify them into three levels of risk severity in terms of mild, moderate and severe (WHO, 2002, 2010; Humeniuk, 2008). There is a convincing empirical data that suggests if the screening is linked with a brief intervention will help in the reduction of harmful drinking pattern in the primary care population (Wilk et al., 1997; Poikolainen, 1999; Moyer et al., 2002; Ballesteros et al., 2004; Bertholet et al., 2005; Kaner et al., 2007, 2009; Sullivan et al., 2011).

Brief intervention is “a treatment strategy in which structured therapy of short duration (typically 5-30 minutes) offered with the aim of assisting an individual to cease or reduce the use of a psychoactive substance to deal with other life issues” (WHO, 1994). ASSIST-linked brief intervention incorporates FRAMES (Feedback, Responsibility, Advice, Menu, Empathy, Self-efficacy) and motivational interviewing techniques with an aim to move participants through the stages of change (Bien et al., 1993; WHO, 2010). However little empirical data is available about screening and brief intervention in the workplace (Richmond et al., 1999; Watson et al., 2009; Hermansson et al., 1998, 2011).

Since the evidence base for delivery of screening and brief intervention in workplace settings is limited a study was undertaken to explore its acceptability and feasibility in a tertiary hospital of north India.

METHODOLOGY
In this cross sectional study, semi skilled male manual labourers of the hospital (hospital and sanitary attendants) between the age group of 18 to 55 years and having moderate risk & high risk on ASSIST score were included. WHO ASSIST V3.0 questionnaire, WHO ASSIST feedback report card are employed for screening while WHO ASSIST brief intervention record was used for the brief intervention. WHO ASSIST questionnaire is the first international screening test and an 8 item questionnaire that covers the use of all psychoactive substances and associated problems over the last 3 months. Clients scoring between 11 and 26 are at moderate risk of health and other problems due to alcohol use and may be experiencing some of the
problems at the same time. A score of ‘27 or higher’ for any substance suggests that the client is at high risk of dependence or is dependent on that substance and is probably experiencing health, social, financial, legal and relationship problems as a result of their substance use. Brief intervention record is a vivid description of the length and participation of the intervention with a session engagement semantic differential scale of score ranging from 6-42.

The sampling techniques are described as follows. The study used systematic sampling technique for the pilot study and screened 37 subjects from the target population (N=927) by selecting every twenty fifth person. Nine subjects (24%) were identified as moderate or high risk alcohol users as per ASSIST scores and brief intervention was provided for them. From this result the study population was estimated as 125 subjects in order to get a minimum sample size of 30 moderate or high risk alcohol subjects on ASSIST scores. This was achieved by using simple random sampling technique with the aid of computerized random number generators. ASSIST was administered to the total 125 subjects and immediate brief intervention was given for the 30 screen positive subjects with the aid of WHO ASSIST feedback report card and documented it in the WHO ASSIST brief intervention record. Ethical approval was obtained from the authorities and informed consent was taken from the subjects. Analysis was done using the SPSS version 14.0 for windows (Chicago, Illinois, USA). Frequencies with percentages were calculated for categorical variables and mean and standard deviation were calculated for continuous variables.

RESULTS

The sample consisted of 39 subjects including 9 subjects from the pilot study with the mean age of 33.4 year. Most of the subjects were literate (97.4%), married (84.4%) and about 20.3% of the subjects were doing part-time jobs along with their full time duty in the hospital. More than half of the participants (n=24, 59%) were high risk level users of alcohol and the remaining were (n=15, 41%) moderate risk level users on ASSIST scores. The feasibility of the brief intervention in the workplace was identified by using WHO brief intervention record and is reflected as a session engagement score of 34.44 in a normal score of 24-42. The mean ASSIST score was 27 with a standard deviation of 5.76 and the mean brief intervention time was 15.26 minutes with a standard deviation of 3.43.

Table 1: ASSIST linked Brief Intervention Feasibility Data

<table>
<thead>
<tr>
<th>Variables</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIST scores</td>
<td>15-38</td>
<td>27</td>
<td>5.76</td>
</tr>
<tr>
<td>Brief intervention time (minutes)</td>
<td>10-20</td>
<td>15.26</td>
<td>3.43</td>
</tr>
<tr>
<td>Brief intervention session engagement score</td>
<td>24-42</td>
<td>34.44</td>
<td>5.21</td>
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Acceptability of Screening and brief Intervention: The majority of respondents (n=32; 82.05%) indicated that they had been happy to provide personal information, whereas seven (17.95%) showed some resistance to share their personal details. All Subjects were given an opportunity to expand on their responses to the closed questions of the ASSIST scale. More than half of the participants (n=22) had shown surprise at their current level of alcohol use in terms of ASSIST risk scores, feedback report card information and the perceived health problems. Two of the participants were clearly pre-contemplative by expressing the view that they had not felt any problems in relation to their ASSIST scores. Several participants (n=25; 64.10%) were very positive about the content, clarity, conciseness of the brief intervention - ‘first cut down then check it out’ and commented that the intervention had raised their awareness of risks associated with alcohol use.

DISCUSSION

The results of the present study suggest that the workplace is amenable to screening and brief intervention. However the following issues was identified in terms of feasibility issues like the cumbersome task of screening process, resistance and work load problems of the participants as there is no room for keeping the confidentiality in the settings, drop out problems like job transfer for post work up assessment. A major feasibility issue that would face a full randomized controlled trial in the workplace is especially on the screening method - a rigorous screening process is needed to generate some statistical power calculations. In order to make the screening process more clearer and directional, the current study used probability sampling technique with randomization and identified 39 individuals as...
moderate and harmful drinkers, which represents 24% of those screened.

A feasibility study of brief intervention in the workplace (Watson, 2009) reported a poor response rates from the employees due to the use of electronic and postal methods for screening process. The clarity and more systematic nature of screening process of the present study is found to be helpful to get good response from the employees as it evokes active participation from face to face interaction. A recent action research (Piegel, 2013) recommended the routine practice of screening and brief intervention in the workplace as it was found to be feasible and helpful in early detection and referral to treatment services for harmful use of alcohol. The result of the present study is consistent with the latest update of the screening and brief intervention in the workplace.

Our study was the first study that implemented WHO's ASSIST linked alcohol brief intervention in the Indian workplace settings. The facility for a private consultation was not possible in these workplace settings. The single centered study with small sample size and reliance on self-reported measures limits its generalisation.

CONCLUSION

The present study found that ASSIST linked brief intervention is feasible in this workplace settings. There is a scope within the workplace for the delivery of a screening linked brief intervention by using a 'general health and life style survey model' than a 'substance screening model' to encourage an active participation and to deal the resistance of the employees.

It appears from the literature that periodic health checks are routinely conducted in the workplace of Scandinavian countries (Aalto et al., 1999; Hermansson et al., 2003) which is infrequent in our country. The present study further connotes the need for the incorporation of screening for substance abuse in the periodic health check up of the workforce as it promotes not only identification but also referral to treatment services of undetected cases in the general population.

REFERENCES


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