

# Research

## Are Alcoholic Women More Likely to Drink Premenstrually?

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### Abstract

A retrospective questionnaire study of alcoholic women attending a clinic for abstaining alcoholics, a voluntary agency and a drop-in centre for people with alcohol problems was conducted over a 2-year period. The women were asked whether they experienced premenstrual symptoms based on Halbreich et al.'s Premenstrual Assessment Form (PAF) (Halbreich et al. (1982) *Acta Psychologica Scandinavica* 65. 46-65) and were also administered the severity of Alcohol Dependence Questionnaire (SADQ). The results showed that one-third of women drank more premenstrually than at other times of the month. It is concluded that knowledge of high-risk times of the month can aid counselling for this group of women.

### Introduction

Several authors have noted a relationship between levels of drinking and the menstrual cycle in women (Belfer et al., 1971; Harvey and Beckman, 1985), although their findings are markedly disparate, with some (Belfer et al., 1971) finding an increase and others (Harvey and Beckman, 1985) finding a decrease in the premenstruum. Others (Sutker et al., 1983; Charette et al., 1990) have not found this to be the case. It is also unclear whether the aetiology is likely to be hormonal or psychosocial. A problem with much of this work is that, with the exception of the study of Belfer et al. (1971), which included alcoholic women, the subjects were healthy. The relationship between drinking and the menstrual cycle in alcoholics has been much less investigated. Belfer et al.'s (1971) study was carried out on a population of 34 female alcoholic and 10 non-alcoholic women in the United States over 20 years ago. The study described in the present paper takes as its population alcoholic women from three different sources: women attending a National Health Service (NHS) abstinence-based unit, women attending a voluntary sector unit for people with alcohol problems and women using a drop-in centre for people with alcohol problems.

### Methods

Questionnaires were distributed to women attending the Robert Smith Unit (an NHS unit in Bristol for abstaining alcoholics referred by another agency) via their key workers or the researcher over a period of 2.5 years. Questionnaires were left to be picked up by women attending the Avon Council on Alcohol and Drugs Centre (a shop front voluntary agency open to self-referral) over a period of 1.5 years and distributed by a co-researcher to women attending the Fitzhamon Day Centre run by the South Glamorgan Council on Alcohol in Cardiff over a period of 6 months. No

verbal instructions were given with the questionnaire, which stated the purpose of the research in writing and explained that it was anonymous. Details collected from everyone were the age of the client, the length of time she had been drinking regularly and the drinking pattern over the last year (binge or steady). The respondent was then asked an open question as to whether there was any particular time of the month when she was more likely to drink more or binge (depending on what type of drinker she had said she was). The respondents were then asked whether they had menstrual periods and if not why. If they did not, they were asked to complete the Severity of Alcohol Dependence Questionnaire (SADQ), but were then excluded from the study. Those who had menstrual periods were asked whether they were currently menstruating so as to compare data with the study by Belfer et al. (1971), which distinguished between the responses of women who were or were not menstruating at the time of the research. They were asked whether they were on the oral contraceptive pill and whether they took any medication for premenstrual symptoms. As a check against the open question about whether they were more likely to drink at any particular time of month, respondents were asked a closed question about when they wanted to drink more. The choices they were given were: before, during or after menstrual periods, or not related to menstrual periods. They were then asked to indicate which of the 20 most frequently encountered symptoms in Halbreich et al. 's (1982) Premenstrual Assessment Form (PAF) they suffered from in the days leading up to their menstrual periods. They were then asked to fill in the SADQ (Stockwell et al., 1979).

## **Results**

Fifty-five completed questionnaires were returned; two were from relatives of clients who picked up the questionnaire in error from the Avon Council on Alcohol and Drugs Centre and were thus not entered into the study. Five women no longer had menstrual periods, of whom three stated that this was due to the menopause and the other two were aged 64 and 68 years. These five were also excluded from the study. A number of abstinent women indicated that they had answered the questionnaires with reference to a time when they were still drinking, and others who asked were encouraged to do this as it was felt that a long-standing pattern was being looked at by virtue of the wording of the questionnaires. The ages of the respondents varied from below 20 to 50 years. They had been drinking for periods of <1 year to >21 years. All the women had SADQ scores indicative of moderate to severe alcohol dependence (Stockwell et al., 1979). Of the 48 respondents entered into the study, 30 (63%) described themselves as binge drinkers and 23 (48%) as steady drinkers. Clearly there was some overlap here. Sixteen respondents (33%) indicated that they drank more alcohol premenstrually. Six who described themselves as steady drinkers and eight who characterized themselves as binge drinkers stated that they drank more premenstrually in response to the open question. A further two women who did not feel that they were either binge or steady drinkers stated, in response to the closed question relating to this topic, that they drank more before their periods. Of the women who indicated that they drank more premenstrually, one had not filled in the sections of the questionnaire about menstruation at all and was therefore excluded from the numbers when premenstrual symptoms were calculated. Women who indicated that they drank more premenstrually had higher scores on the PAF than those who did not. The results for these two groups were analysed by calculating the SEM and the significance (P) value was found to be >0.1, indicating absence of

statistical significance between the two groups. SADQ scores for the group of women who drank more premenstrually were also found to be higher than for those who did not do so. The SADQ results for these two groups were also analysed statistically and found not to be significantly different. None of the women who drank more premenstrually was on the contraceptive pill. One took hormone replacement therapy and one nonsteroidal anti-inflammatory drugs for premenstrual symptoms. Three women who suffered premenstrual symptoms and three who did not were having a menstrual period at the time that they filled in the questionnaire.

## **Discussion**

Belfer et al. (1971), in the most significant study so far of drinking behaviour in alcoholic women, found that 59% were likely to start or increase their drinking in the premenstrual phase of their cycle. This contrasts with the findings of Sutker et al. (1983) and Charette et al. (1990), who looked at female social drinkers and found that they were not at greater risk of drinking during the premenstrual phase. It is also at odds with Harvey and Beckman (1985), who found that social drinkers actually reduced their alcohol intake in the premenstruum. The sample in the current study is somewhat larger than in Belfer's study and the severity of the alcoholic symptoms has been confirmed by a recognized scale, the 'SADQ' (Stockwell et al., 1979). There is no universally recognized scale for measuring premenstrual symptoms and at the time the present study began, Halbreich's Premenstrual Assessment Form (Halbreich et al., 1982) seemed to be the best available, based as it is on his research, though since our study began another one has been put forward (Condon, 1993). In addition since our study began, DSM-IV research criteria for Premenstrual Dysphoric Disorder (American Psychiatric Association, 1994) have been produced. They include many of Halbreich's suggested symptoms, but not those physical ones which he found most common in his sample. A third of the women in the present study drank more premenstrually than at other times of the month. Statistical analysis shows that this cannot be attributed to them suffering more severe premenstrual symptoms. Nor can this group of women be shown to be statistically more alcoholdependent than the group who did not increase their alcohol intake premenstrually. This latter finding is interesting, given research which shows that women attending a clinic for premenstrual symptoms were more likely to abuse alcohol than those attending with other complaints (Halliday et al., 1986). The practical import of the findings in the present study is that those counselling and treating alcohol-dependent women should be aware that they may be at increased risk of relapse or worsening drinking patterns at certain times of the month. The implications of this are that counsellors should be trained to ask directly about premenstrual drinking patterns and thereafter to work with the woman to reduce the risk by whatever means possible. These may include formal medical treatment for premenstrual symptoms as well as encouragement to make lifestyle changes to minimize stress at this time.

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