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Alcohol Consumption and the Workplace: Prospects for Change?

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The staff from the head office of a major multinational company sited in London, were surveyed about their levels of alcohol consumption and attitudes towards its use. The findings indicated a sizeable minority (28%) believed it would be difficult for them to give up drinking alcohol should this be required for health reasons. Similar proportions were also found to be drinking above the recommended levels set by the Medical Royal Colleges (29.5% men, 22.7% women). Respondent's attitudes toward alcohol use in general were prodominantly negative but tended to be positive with respect to their own use. Many of the respondents found acceptable, levels of lunchtime drinking which would undoubtedly impair work performance in the afternoon.

Introduction

Surveys of alcohol consumption and attitudes toward alcohol have in the past been predominantly concerned with estimating various indices in the general population at large.[1,2,3] Much of the research connecting alcohol and work has consisted of examining various indices of alcohol related harm (e.g. liver cirrhosis) in different occupational groups[4] or highlighting the factors which make some occupations more likely to be associated with heavier drinking than others.[5] This work has been useful. There is now increasing awareness that the majority of individuals with alcohol problems are in full time work and bring their alcohol problem with them to their place of work.[6] However, very few data have been collected on the normative attitudes and actual levels of alcohol consumption within a large workplace setting and how each of these reinforces the other.

Recently interest has developed in the workplace as a suitable setting for Alcohol Education[7,8,9] focusing on the idea of sensible and appropriate drinking. The current work with a major multinational employer situated in central London, forms part of a larger project whose aim has been to develop, implement and evaluate materials to be used in alcohol training at the workplace. Prior to deciding what form of action would most appropriately facilitate a more rational form of alcohol use (and indeed to find out if this was necessary), it was decided firstly, to ascertain the attitudes and reported levels of alcohol consumption within the workforce, and secondly, with an eye to future health

education initiatives, to develop various measures which might give an indication of how resistant to possible change these would be.

Subjects and Methods

A postal questionnaire was sent out to a major multinational company's entire population of staff based in central London. The questionnaire was devised on the basis of results already obtained from a series of pilot interviews conducted face to face with 43 randomly selected members of the staff, concerning their views on alcohol use and misuse. Alcohol consumption was estimated on the basis of the levels reported in the seven days prior to filling in the questionnaire. Because past experience of such surveys had indicated that making alcohol the sole subject of such a survey might lead to people feeling stigmatised, it was decided to co-operate with the 'Smoking at the Workplace' project, also based at King's College. Such a co-operation would provide the additional advantage of allowing us to compare a range of findings across different health issues.

Results

Out of a population of 3,000 who were surveyed, 1,473 completed questionnaires were returned (a response rate of 49.1%). Of these, 67% were male and 33% female. Response rates from different parts of the company did not differ significantly from their proportions in the total sample, so there are no reasons for concluding that the sample of respondents differs from non-respondents on these grounds.

Below the main findings from the survey are summarised. Emphasis will be placed upon those points which may have a bearing on any future health education/promotion initiatives with this employer and in industry generally.

1. Patterns of alcohol consumption

The workforce sample here contains a smaller proportion of non-drinkers than in other surveys. Amongst the sample, 93.3% reported currently drinking alcohol, with 6% declaring themselves to be abstainers. National figures obtained in other surveys indicate abstainers to comprise approximately 10% of the population.[1,3]

Significant differences were found in total weekly alcohol consumption between the sexes ($t=9.15$, $P<0.0001$). Of the different types of alcoholic beverage the only statistically significant difference was between beer consumption, with consumption for males being almost 5 times higher than for females ($t=13.37$ $P<0.0001$), and as can be seen from the table beer consumption accounts for most of the differences in total consumption between the sexes.

Table I Mean units* of alcohol consumed in previous week

	Type of beverage			
	Beer	Wine	Spirits	Weekly total
Men	10.34	5.21	2.33	17.88
Women	2.13	5.57	2.66	10.36
All	7.75	5.35	2.46	15.57

* 1 unit of alcohol is contained in a half pint of beer, one glass of wine, or a single pub measure of spirits.

As in other surveys the results in the present survey show the youngest age groups to have the highest reported levels.

Table II Alcohol consumption last week by age and sex

	Age group (years)				
	18–24	25–34	35–44	45–54	55–64
Men	22.09	18.38	16.47	14.83	15.61
Women	11.34	9.15	8.74	9.00	6.46
All	15.85	14.02	15.06	13.90	14.12

Table III below shows a comparison of the levels of weekly alcohol consumption in the present sample with those found by Wilson[1] in an earlier study. They differ markedly in the proportions of people drinking between 10 and 35 units/week.

Table III Alcohol consumption last week by sex (compared to national levels)*

Units	Males %	(Wilson 1980) %	Females %	Wilson (1980) %
Teetotal	4.67	6	8.84	11
Nothing in last week	1.93	18	2.88	32
1–5	13.29	20	31.48	34
6–10	19.69	14	22.02	10
11–20	30.36	16	22.63	10
21–35	20.30	13	8.84	2
36–50	5.58	8	1.64	0
51+	3.75	6	0.00	1
	units	units	units	units
Mean	17.88	19.6	10.36	7
Sample size	(985)	(933)	(486)	(1063)

* All figures given as percentages. Figures for England and Wales to nearest whole number only.

Besides weekly levels of alcohol consumption, figures for day by day consumption are also of interest. These are shown below.

Table IV Mean alcohol consumption each day (units)

	Day of week						
	Mon	Tues	Wed	Thur	Fri	Sat	Sun
Men	1.82	2.04	2.09	2.02	3.20	4.06	2.66
Women	0.98	1.15	0.88	1.17	1.88	2.60	1.68
All	1.55	1.75	1.71	1.75	2.80	3.60	2.34

Apart from a slight lull on Wednesday for the women and on Thursday for the men, the table shows a steadily rising pattern of alcohol consumption which peaks at the weekend. To what extent this is as a result of the actual number of days spent in work is not clear, although it remains an interesting possibility.

One aspect of these reported drinking levels, which deserves attention concerns those individuals ($n=397$, 27% of sample) who described their previous week's drinking as being untypical. Of these, 88.9% ($n=353$) said they normally drank less. Whilst this may be true, it seems quite likely that people are responding on the basis of the perceived social acceptability of drinking certain amounts, otherwise out of those who described their previous week's consumption as untypical one would have expected the proportions of people saying they normally drank more, and those saying they normally drank less, to be equal. This gives added reason to believe that the figures reported for consumption are under-estimates.

2. *Attitudes to alcohol consumption*

Overall subjects indicated a confused mixture of attitudes toward alcohol use. First of all they considered there to be considerably more negative than positive aspects to alcohol use (3.646 cf 2.434, $n=1473$, $t=23.47$, $P<0.0001$). (This was true for both men and women, but there were noticeable differences: the men considering there to be more positive aspects than the women (2.511 cf 2.286, $t=2.39$, $P=0.017$) and the women more negative aspects than the men (3.860 cf 3.536, $t=2.61$, $P=0.009$). Additionally one third of those who did drink ($n=500$, 33.9%) had at some time thought about reducing their alcohol intake. Of these, almost three-quarters ($n=368$, 73.6%) had actually tried to cut down. Eighteen per cent of respondents had experience of other people's drinking causing a problem at work.

Despite these evidenced concerns about drinking, many of the sample had very favourable views toward alcohol consumption.

(1) For example only 22.1% of the sample agreed with the proposition that 'it is sensible never to drink'.

(2) Despite the falling cost of alcohol in relation to inflation only 32.3% of the sample disagreed with the proposition that alcoholic drinks were too expensive.

(3) 73.4% of the sample agreed to sometimes having a drink just to be sociable.

(4) Finally 39.5% considered moderate drinking to be good for your health. Many respondents cited brandy and whisky as being of medicinal benefit.

In addition there were a number of indications that regular alcohol consumption during the working day was looked upon favourably (see below).

(1) 15.2% thought it would be tolerable for someone to regularly drink four pints at lunchtime.

(2) When it came to drinking two pints at lunchtime this figure rose to almost three quarters (73.1%).

(3) For a regular half bottle wine over lunch this figure reaches 73.9%.

(4) 14.5% thought that it would be tolerable to come into work regularly with a hangover.

3. *Resistance to changing behaviour*

A number of measures indicated subject's resistance to changing attitudes and/or behaviour with regard to alcohol use. These included:

(1) When asked whether they would be in favour of there being initiatives aimed at

improving health on a number of issues, people put stress (84.6%), smoking (77.5%), exercise (77.1%) and diet (75.7%), ahead of alcohol (67.5%). Alcohol was thus one of the least favoured issues on which people wished to change behaviour to improve health.

(2) Not only were a number of respondents reluctant to change their behaviour with regard to alcohol in relation to their health, evidence also indicated that they would find it very difficult to do so. When asked to rate on a 9-point scale how easy they would find it to abstain from drinking alcohol (1 = very easy, 9 = very difficult) should they be asked to do so by their G.P. for reasons connected with their health, 21% indicated that it would be difficult, with another 6.7% occupying the middle ground. Taken together we can take this to imply that 27.7% of respondents are cognisant that it would not be easy for them to abstain from drinking alcohol even if it was affecting their health. This perceived difficulty in abstaining was correlated significantly for both men ($r = 0.393$, $P < 0.0001$) and women ($r = 0.363$, $P < 0.0001$) with their weekly level of alcohol consumption.

(3) Respondents were also asked what they would do if for some reason it suddenly proved impossible to obtain alcoholic drinks in the usual manner. Approximately a quarter of respondents (22.3%) said they would make it themselves, and a further 5.7%, that they would make efforts to obtain alcohol elsewhere. In sum (28%) this denotes a very large fraction of the sample who are very resistant to giving up drinking alcohol. This concurs largely with the figure reported in (2) above.

(4) Further evidence of resistance to change can be seen in a comparison of subject's responses to questions concerning alcohol and tobacco use. A number of indices indicated that smoking was seen by respondents as being more detrimental to health. For example 74.8% considered that any cigarette consumption would pose a risk to health compared with only 8.4% for any consumption of beer. Despite this more people thought that there should be controls on the availability of alchohol at work, than on the availability of tobacco (57.3% v 45.1%).

Presumably alcohol is seen as a more negative influence on work than tobacco. This is interesting in that the company concerned are about to introduce a policy on smoking into the workplace ahead of any alcohol policy in response to pressure from the employees.

(5) Our data indicate, that smoking entails a more flexible behavioural set than drinking alcohol. First of all more people have ever tried it (98.7% have ever drunk v 45.7% who had been or currently are regular smokers), and fewer people have given it up (5.4% of the sample have given up drinking, 25.3% have done so with regard to smoking). Generally employees also demonstrated less confidence in dealing with problems caused by alcohol at work, as witnessed by the coming institution of the smoking policy in response to workforce pressure and the stated unwillingness to act on one's own initiative when asked what would they do if they suspected that one of their colleagues had a drinking problem. A common response to this question was to hope that someone senior would notice (35%). A further 12% admitted that they would do nothing. It is a distinct possibility that this may be because many employees have experience of someone senior to them having a fondness for drink. A number of respondents made reference to this in the space on the questionnaire which was left for any additional responses they cared to make.

Discussion

The results of this survey have shown levels of alcohol consumption in a large workforce population to be roughly comparable to what has been found in previous general population surveys. Figures observed in this study for male's weekly consumption are slightly less than those obtained by Wilson[1] (17.88 cf 19.6 units) but provide no grounds for

comfort as the levels of alcohol consumption for females in the present sample are higher (10.36 cf 7.0 units), although the female respondents in our sample are more concentrated in the younger age groups than the males, and so may in part reflect the relatively higher alcohol consumption that has been found in this and other surveys to be associated with younger adults. The constitution of the present sample differs from Wilson's with respect to these younger females and also in that it consists of a sample predominantly of Class I, II and III individuals (owing to the nature of the workforce sampled). However, data from Wilson's study do not lead us to expect levels of consumption for professional groups to differ greatly from the mean figure.

There is definite cause for concern about the levels of alcohol consumption observed if we relate the current data to the recently recommended sensible limits set by the medical Royal Colleges. In the recent publication by the Royal College of Physicians[10] recommended sensible limits of drinking are not more than 21 units/week for men and not more than 14 units/week for women (see Table II). These figures were exceeded by 29.5% of the men and 22.7% of the women.

If the results are viewed in relation to the H.E.A[11] guidelines they show that approximately 10% of both men and women are drinking at levels which are increasingly likely to damage their health (above 35 units/week for men and 21 units for women).

If people's attitudes toward alcohol are now considered, the evident conjuncture of favourable and unfavourable views toward alcohol is in need of explanation. The apparent incongruity between being aware of more negative than positive aspects to alcohol use, and yet having favourable opinions/views as to its use, may be reconciled if one proposes that people are considering the potentially negative consequences of drinking to be things that only happen to other people. In agreement with Hunt and Macleod[12] this would suggest that providing people with information about the effects of alcohol, will not on its own be sufficient to produce behavioural change, as the relevant items of information will not have been internalised into core belief structures about their own behaviour. Hunt and Macleod also pointed to the wealth of material documenting the ineffectiveness of current attempts to change behaviour which affect health. This they argued is because previous efforts have failed to discover the context and function which the behaviour in question fulfils. This is one direction which future work in this area could take, in pursuit of the hope that people's ingrained drinking practices can be made amenable to change. Both in Health Education at the workplace and for the public at large, it is optimistic in the extreme to assume that an approach aimed uniformly at everyone will be successful.

Additionally the survey has indicated that smoking and drinking at work are seen very differently; that there is greater resistance to changing attitudes and/or behaviour regarding drinking than is the case for smoking, and that employees have greater confidence in dealing with the problems caused by smoking at work than those caused by drinking.

The results reported here have a number of implications for the workplace in which they were obtained, and also raise questions concerning the levels of alcohol consumption in workplaces throughout the country. Besides the fact that large numbers of employees of both sexes are drinking at levels above those recommended by the Royal Colleges, and at levels which could be detrimental to health, it is evident that lunchtime drinking is tolerated by a very large section of employees, at levels which almost certainly will have detrimental effects upon work performance in the afternoon. Attitudes present in the workforce indicate that it will be no easy matter to bring about a change in current drinking practices. These are no doubt supported by a whole range of factors, including, the sex-role norms prevalent in the outside world, norms established within the workplace, and the attitudes themselves which have arisen from and now support the current levels of alcohol

consumption. Finally the results provide no confidence that employees will feel confident to tackle other colleagues whose problems with alcohol have become noticeable at work.

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References

1. Wilson, P. (1980). Drinking habits in the United Kingdom. *Population Trends*, **22**, 14–18.
2. Wood, D. (1986). *Beliefs about Alcohol*. Health Education Council.
3. Blaxter, M. (1987). *Alcohol Consumption*. Health and Lifestyles Survey, 109–119.
4. Office of Population Censuses and Surveys (1978). *Decennial Supplement England and Wales 1970–1972 on Occupational Mortality*. London: HMSO.
5. Plant, M. (1981). Risk Factors in Employment. In Hore, B. D. & Plant, M. (eds.) *Alcohol problems in Employment*. Croom Helm.
6. Braine, B. (1977). *Report of the Working Party on Alcohol and Work*. National Council on Alcoholism.
7. Randall, J., Wear, G. & McEwen, J. (1984). *Health Education in the Workplace*. H.E.C.
8. Cyster, R. & McEwen, J. (1986). *Problem Drinking at the Workplace – A Seminar on the Management of Alcohol Problems in Employment*. H.E.C.
9. Cyster, R. & McEwen, J. (1986). *Alcohol Education at the Workplace*. Final Report to the Health Education Council.
10. Royal College of Physicians (1987). *The Medical Consequences of Alcohol Abuse*. Tavistock.
11. Health Education Authority (1987). *That's the Limit*.
12. Hunt, S. & Macleod, M. (1987). Health and Behavioural Change: Some Lay Perspectives. *Community Medicine*, **9**(1), 68–76.