

Social determinants of Health and Alcohol consumption in the UK

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ABSTRACT

Addressing the social determinants of health (SDH) and health inequities are essential for successfully combating alcohol-related harm. In U.K, excessive consumption of alcohol is a huge public health concern. An estimated 9 million adults drink at level that increase the risk of harm to their health; 1.6 million adults in England have some degree of alcohol dependence; and of these some 250,000 are believed to be moderately or severely dependent and may benefit from intensive specialist treatment. To be able to devise effective action, it is essential to comprehend these inequities in the healthcare system. Health inequities are not solely related to access to health care services; there are many other determinants related to living and working conditions, as well as the overall macro-policies prevailing in a country. The key intention of this review was to critically analyse the degree to which social determinants have impacted on excess alcohol consumption. A comprehensive approach to reduce inequities in alcohol-related harm requires action that includes mix of long- and short-term impacts, addressing the consequences and the root causes of inequities, and acting on both individuals and environments. Whereas, consequences of harmful alcohol use are more severe for those already experiencing social exclusion. We suggest that (1) the effective legislation, (2) modifying marketing strategies, (3) enhancing cooperation with regional organizations, (4) more effectively implementing existing regulation and (5) consulting expert will enhance SDH for this vulnerable population.

Key words: Health, Alcohol, Social determinants, United Kingdom

INTRODUCTION

In central Asian and central European countries, alcohol use is the second most important risk factor, and across western European countries it is the fourth leading risk factor for the overall disease burden [1]. Historically the

consumption of alcohol in the UK has been a part of the culture but the current change in the alcohol consumption habits have resulted in extensive public health issues [2]. This change in the past 80 years alcohol consumption implies that other factors may be influencing the drinking habits of the nation; this review will critically explore the degree to



which social determinants have impacted on excess alcohol consumption significantly [3]. With due consideration of bio-medical influences in relation to inequalities in the excess consumption of alcohol, this review will also comparatively examine the evidence for a range of social influences which may identify that bio-medical aspects are negligible in comparison to social influences [4]. Simultaneously, we have recommended steps to mitigate the risk associated with this public health issue.

Social determinants are defined as a collective set of conditions in which people are born, grow up, live and work. These include housing, education financial security, and the built environment as well as the health system. The world health organization [5] notes that, these conditions are shaped by powerful overriding set of forces; economics, social policies and politics. This will be presented in the changes of social structure according to gender and age, the marketing and availability of the products, the general perception of the consumption and the implications to health [6]. The main purpose of this review was to explore the degree to which social determinants have impacted on the significant excess alcohol consumption

METHODS

We searched electronic databases including Medline, Scopus, PubMed, CINAHL, and Cochrane to review published literature in this area to ensure a comprehensive assessment of relevant studies. Electronic searches were limited to Alcohol consumption and Social determinants. Boolean operators were used for searching of relevant articles. Keywords include Health, Alcohol, Social determinants, and United Kingdom. The inclusion criterion was limited to only those clinical trials published in English. With the help of eligible criteria, most relevant and appropriate study has been identified.

Post World War II change in SDH

A major consideration in the changing social structure is the place of women in society which has changed over the past 80 years and has resulted in their personal and society's attitude to their place in society both culturally and financially [7]. This was also identified by Farran and Segura, [8] who noted that the men were the major consumers of alcohol in the 19th Century. However, during World War-II the men went to war and women were employed in manufacturing and other commercial and manufacturing roles, the social aspect of alcohol changed as women who now had financial independence began to go to public houses and consume alcohol without their male escorts [9]. This identifies the social determinants as highlighted of living and working conditions, level of education and financial independence [10].

Unemployment

The position of men both culturally and in the society was changed dramatically during the 21st century due to the countrywide prolonged high rate of unemployment [7]. This has led to their spending a higher proportion of their time in the home to which they are culturally unprepared for, as their role in society changed. This is highlighted by Bosque-Prous at al. [11] and by Anderson at al. [12] who explained that unemployment can lead to drinking in the home and also be easily influenced by advertising and escapism, which often eventually leads to crime and violence committed by men. Anderson at al. further argues that socio-economic class and education plays a significant role in binge drinking. It has also been identified by Virtanen, Lintonen et al. [13] that the male population are most likely to consume alcohol in excess if they had been unemployed for a significant length of time. This was reinforced by a study including self-esteem and relation to success failure in the male drinkers. The study used 120 male subjects, who were evaluated on an intellectual task and feedback. After the feedback, they self-regulated their alcohol intake and it was found that those who failed at the task drank more alcohol, which concludes to low self-esteem contributing to excessive alcohol consumption [14].

Advertising code of practise

Despite the advertising Code of Practise, the industry continues to associate alcohol with the social and sexual success. The activities which are particularly popular with the teenagers, including sports and music events, the product placement in the films, and TV programmes, which are still unregulated [3, 12]. This advertising targets teenagers and contribute in enhancing drunkenness as suggested by a survey of secondary school pupils [15]. This survey showed that in the Scotland school 20% of the boys and girls reported being drunk within the previous four weeks. Increase drinking is associated with the age as 11% of 11-12-year old and 61% of 15 year old reporting being drunk. In addition to this aspect there is the legal selling of alcohol to underage consumers which is highlighted in a report from [16] "Although it is illegal to sell alcohol to under-18s, a 2008 survey of 13 and 15 year old pupils in Scotland showed that pupils who attempted to purchase alcohol from a shop were more likely to be sold alcohol than to be refused and the most common way of buying alcohol was through a friend or relative, 23% of 15 year olds surveyed in Scotland who had consumed alcohol reported buying it from a shop." The social segments of the family of children can also affect their behaviour towards alcohol, if in the family unit there are negative expectancies in social and self-esteem as identified and few changes were predicted [17].



Deregulation

During the past two decades there has been deregulation of the criteria for the granting of operating licences to sell alcohol resulting in the increased ease of purchase. The reasons for this was to reduce the culture in the UK of heavy drinking and by extending the hours of opening and the venues; thereby, copying the habits of the culture of European countries. The failure of this is widely accepted as some of the results have been the creation of 'entertainment precincts' in metropolitan areas including restaurants, cafes, pubs, bars, nightclubs and the consequences being the attraction of these areas as leisure locations [18]. Additionally, there has been 65% increase in competition promoting the affordability of alcohol in England Between 1980 and 2006, and restrictions on the opening hours of pubs, bars and nightclubs have also been relaxed, this trend is reflected throughout the UK [19].

Vulnerable youth

In addition to the increased availability of alcohol the relaxing of the marketing of the products has developed to encourage the consumption of it to target as previously identified vulnerable sections of society. A European wide report [20] concluded that alcohol marketing is poorly regulated and that young people who are commonly targeted are particularly vulnerable to both alcohol and alcohol advertising. Youth culture, through music, fashion and the media, often links alcohol with 'having a good time'. As our consumption of alcohol has increased our attitudes have changed. Drunkenness is not only increasingly tolerated but for some, has become a desired effect [21].

Myth with drinking

Although alcohol has been part of culture for hundreds of years and its place in society is established, currently the consumption has been influenced as previously stated by its availability and marketing. In addition to these factors the General Household survey [22] explained that there are 2 main misconceptions of the excess consumption of alcohol, the first one being that a little is "good for your heart" which was disproved by European Comparative Alcohol Study [23]. The other is the perception of consumption which is related to the estimation of that consumption by the consumer. This is affected by the difference between drinking at home and in public licensed premises as the measure in the home is invariably larger than in "pubs" [24].

DISCUSSION

This has been established in above mentioned context that social determinants are significant in the excessive consumption of alcohol and later it will be described some of the consequences of the change in these determinants to health and wellbeing of the individuals, community and its effects to the society and a country, burden to public and critically discuss recommendations to tackle this issue in future.

There is overwhelming evidence that the excessive consumption of alcohol has severe impact on individuals which in turn affects the nation socially and culturally [25]. There are 2 degrees of damage which the excess consumption of alcohol can have on the human body, acute (immediate) and chronic (longer term). A list of complications which burdened the healthcare due to excessive consumption of alcohol is depicted in Table 1. The function of the liver is a major factor in this level of consumption as the liver detoxifies it as it cannot be retained but the effects are very quick although they do vary according to age and sex. "Alcohol is a potentially addictive psychoactive substance" [26] which effects brain function very quickly as it is absorbed into the bloodstream and can cause mental and physical health issues, people who are dependent on alcohol are at a greater risk of serious diseases such as coronary heart disease, stroke and liver disease and may need specialists help to regain control of their drinking and reduce the accompanying health damage [27].

TABLE 1. Complications of Alcoholism

Liver Disease	Alcoholic hepatic steatosis, Cirrhosis, Hepatocellular Carcinoma
Digestive Disorders	Esophageal ulcers, varices, cancer
Pancreas Disease	Pancreatitis, Cancer
Cardiac Disease	Hypertension, Dilated cardiomyopathy, Arrhythmias (Holiday heart syndrome)
Immune Suppression	Pneumococcal meningitis, pneumonia
Birth defects	Fetal Alcohol Syndrome, Craniofacial anomalies, growth retardation, learning disabilities
Neurological Disorders	Cerebrovascular Disease, Wernicke encephalopathy, Korsakoff Syndrome, Marchiafava-Bignami disease, Dementia
Eye Disorders	Nystagmus



The consequence of alcohol consumption effect mental health and slow reaction time that result in approximately 1,000 suicides per year, approximately 70% of admissions to accident and emergency department, and 44% of violent crime including over 50% of domestic violence [28]. A proportion of youth are "lost" to the society as there are at a higher proportion of acute harm in this vulnerable population. Therefore, they become inactive members of the society, simultaneously burdened the healthcare with acute diseases [29]. Moreover, the personal effect the consumption of alcohol in excessive quantities impacts on the NHS and police force in the UK. In a nutshell, excessive use of alcohol can damage every part of an individual's life, including family, work and personal relationships. In pertaining to family problems: Arguments over someone's drinking habits can cause family and relationship problems that may lead to break up and separation hence a strong family bound break down, which comes up in a society with uncertainty in community and family. In relation to work problems: Drinking alcohol at work or going to work with excessive alcohol and hangovers can lead to poor performance and accidents at work, along with the violation of working laws, while illness can result in absenteeism and a bad feedback on individuals career repot. In regards to legal problems: Drink-driving may lead to fines; loss of license and even imprisonment, individual may be risk to self and to others on road [30].

According to the Office for National Statistics [31] and Public Health England [28] over 40% of health problems are result of excessive drinking. Additionally the physical aspects of the results of this level of "Binge Drinking caused by the slower reaction times and loss of inhibitions often resulting in accidents and physical assaults which effects the closer family and wider community and consequently has a huge impact on society and the culture of the nation. This reports concludes some of the key findings such as: 9 million adults drink at levels that increase the risk of harm to their health; 1.6 million adults show some signs of alcohol dependence; alcohol is the third biggest risk factor for illness and death; alcohol problems are widespread; alcohol misuse leads to many deaths ,21,485 people died from alcohol related causes in 2012; a quarter of all deaths among 16-24 year old men are attributable to alcohol: alcohol misuse harms families and communities: almost half of violent assaults, 13% of road fatalities; 27% of serious case reviews mention alcohol misuse; $\frac{1}{2}$ of domestic violence and marital breakdown; majority of physical, psychological and behavioural problems for children of parents with alcohol problems [31].

Future direction

It is widely accepted and there is overwhelming evidence, which has been highlighted in this review that to be effective in the control of alcohol consumption, the whole population should be reached. This should include, focus on particularly vulnerable groups, including the young and older long-term alcoholics. Although there is legislation in place, its effectiveness will be increased by a more robust implementation of this rather than a voluntary application of the general "idea" on a local level [32] therefore it has been as detailed and suggested [29] that rigorous actions at national level are needed to advocate for:

- Legislation-to tighten regulation of the drinks industry and retailers regarding marketing, promotion, minimum pricing and deep discounting; price increases-above-inflation increases in the price of alcohol through higher rates of duty; the UK government and devolved administrations to work with employers to adopt policies in the workplace to reduce alcohol-related absenteeism and illhealth; public health and levels of alcohol-related harm when processing licensing applications.
- Labelling, Advertising & Drink-driving laws-comprehensive, unified and easy to understand system of alcohol content labelling; social marketing campaigns to change public attitudes to excessive alcohol consumption and to increase understanding of units consumed and awareness of alcohol related harm; laws around high risk behaviour such as drink-driving to be more effectively enforced through increased random breath testing, and the reduction of the legal blood alcohol limit for driving from the current 80mg/100ml to 50mg/100ml BAC (blood alcohol concentration).
- Public health & Partnership working- to ensure implementation of existing laws on sales of alcohol including to those underage, supported by introduction of education on alcohol-related issues at a younger age; development of a comprehensive set of the UK-wide indicators and monitoring systems for reductions in alcohol related harm across health, social, economic and criminal justice settings; public health issues including alcohol in needs assessments and strategic planning (joint strategic needs assessments in England, Wales & Scotland), to help in estimating the burden of alcohol misuse locally (including NHS and social costs, and lost productivity); opportunistic screening for alcohol misuse in primary-care and acute and mental health settings, with delivery of brief interventions and referral for treatment where appropriate.
- Regional action- by bringing together local expertise and key partner organisations to share knowledge and experience around what works in tackling the problem, and to develop and implement a multi-sector strategy to prevent alcohol misuse and deal with its consequences. (All Crime and Disorder Reduction Partnerships



(England) and Community Safety Partnerships (Wales) have a statutory duty to include a local alcohol strategy); deep discounting is a commercial marketing practice by larger operators in which products are sold at a much-reduced level in order to encourage customers to buy more items, more often.

Unlike in Scotland, the 2003 Licensing Act does not have public health as one of its objectives. This situation although serious now and will be in the future, the most significant determinant as it is predicted to be perpetuated. The sectors contributing to the consumption levels will remain unresolved from generation to generation according to the Theory of Planned Behaviour [33]. This theory covers human behaviour and decision-making processes and their connection with perceived behavioural norms for their family group leading to the conclusion that past socials determinants and perceived limitations will be followed. This behaviour is not planned and covers individuals' involuntary actions which cannot be explained by reason but explains the relationship between behavioural intention and actual behaviour "The theory of planned behaviour places the construct of self-efficacy belief or perceived behavioural control within a more general framework of the relations among beliefs, attitudes, intentions, and behaviour" [33].

Having established the relevance of the Theory of Planned Behaviour (TPB) to the continuation of a practice, including the excess consumption of alcohol, to be based on social determinants this can be further explained by examining the dynamics of social practice. According to [34] understanding these theories may contribute to the understanding of the processes involved in establishing social practices and possibly by so doing break the cycle of TPB. This could be linked to alcohol in the form of "binge drinking" which is often instigated by a set of circumstances and not repeated when they are not present. The situation of binge drinking can be used to illustrate the making and the breaking of pattern the circumstances including the price of alcohol; availability; social acceptability which of one was removed would prevent the completion of the "binge".

CONCLUSIONS

To sum up this vital public health matter, which interlinks an individual health and wellbeing to the society and country, the social changes which have determined the excess consumption of alcohol have been identified by age, gender and the cultural links. The impact of the consumption has been described and health consequences detailed as has the link between social groups and the targeting of advertising. Research has established that social determinants are significant in relation to health and the excess consumption of alcohol. The grade of "most" significant has been established by the application of

social theories of planned behavior and social practices as these establish the perpetuation of the social determinants and difficulties of resolving the situation. There have been many suggestions listed to "tackle" these issues, but the research suggests a gap in the application of social theories in these proposals. This health problem is at a critical level and deserving of an action

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