Literature Review

Alcohol

Identification & brief advice

Drinking alcohol is generally recognised as an established part of British culture, with large numbers employed in production, retail and the hospitality industry (Fuller, 2009a; Department of Health, 2010a). However, misuse of alcohol has become a serious and worsening public health problem (Faculty of Public Health, 2008). In the UK, the alcohol consumption per capita (15 yrs and over) has increased by 19% from 1980 to 2007, while during the same period of time the OECD average is a decrease by 13 % (OECD, 2009). In recent years, policy makers, health professionals and the general public have been increasingly concerned about the damage caused by excessive drinking to individuals, communities and society as a whole (Fuller, 2009a).

In the UK, most adults drink alcohol, at least occasionally (Fuller, 2009a; Office for National Statistics, 2011). The current NHS recommendations[1] for daily alcohol intake are that it should not regularly exceed three to four units per day for men and two to three units per day for women. Results of a recent survey (Fuller, 2009a) revealed that, 43% of men and 31% of women had drunk more than the recommended maximum on at least one day in the last week. This includes 25% of men and 15% of women who had drunk more than twice the recommended maximum (Fuller, 2009a). In another survey (Lader & Steel, 2010), only 44% of respondents new the correct guidelines for men and 52% knew the guidelines for women.

In England, about quarter of all adults (aged 16-64) are regularly drinking over recommended levels and have an alcohol use disorder: 23% of the adult population drink at hazardous[2] or harmful[3] levels, and 3.6% is showing signs of alcohol dependence (Drummond et al., 2005). The first ever national needs assessment found considerable regional variation in the levels of alcohol misuse amongst the population in England (Drummond et al., 2005); the prevalence of hazardous/harmful drinking varied across regions from 18% to 29%, whilst alcohol dependence ranged from 1.6% to 5.2%. In addition, there are differences in consumption levels between population groups, e.g. men and younger age groups are more likely to drink excessively (Deacon et al., 2010; Drummond et al., 2005; Fuller, 2009a).

Excess alcohol consumption is among the major causes of premature death dominated by 'diseases of lifestyle' (Department of Health, 2010b). Alcohol is a causal factor in wide range of medical conditions, e.g. mouth, throat, stomach, liver and breast cancers, diabetes mellitus, hypertensive disease, cirrhosis and preterm birth complications (Rehm et al., 2010). It is also directly linked to health issues such as mental ill-health, accidental injury, violence, and

[1] http://www.nhs.uk/livewell/alcohol/pages/effectsofalcohol.aspx (accessed 12th January 2011)

[2] Those who drink 15 to 35 units per week for females and 22 to 50 units for males (Drummond et al., 2005), (according to new terminology 'increasing risk'; NICE, 2010)

[3] Those who drink over 35 units per week for females and over 50 units for males (Drummond et al., 2005), ('higher risk'; NICE, 2010)

sexually transmitted infections (Faculty of Public Health, 2008; Taylor et al., 2010). No level of consumption is safe in terms of risk of injury. For most types of injury, even consumption of a generally accepted moderate dose (3 units or 24g pure alcohol/day) almost doubles the odds of injury (Taylor et al., 2010).

Alcohol also contributes to death and disability through accidents and injuries, assault, violence, homicide and suicide, and was estimated to cause more than 2 million deaths (3.8% of all deaths) worldwide in 2004 (OECD, 2009; Rehm et al., 2009). In 2005, 3.1% (14,982) of all deaths in England were estimated to be attributable to alcohol consumption (Jones et al., 2010). Alcohol-related deaths vary with age and gender. Men are at greater risk of harm from their alcohol consumption than women (McCartney et al., 2011), and young people are disproportionately affected by their alcohol use. For example, over a quarter of all deaths in 16-24 year old males were estimated to be attributable to alcohol consumption compared to 1.4% among those aged 75 and over (Jones et al., 2010).

Alcohol misuse is associated with many types of violence including violence in public settings, sexual and domestic violence. Alcohol-related violence is a major public health issue placing considerable strain on health services and other public sector resources (Faculty of Public Health, 2005). In England and Wales, alcohol is estimated to play a part in almost half of all violent crimes, i.e. approximately 1.2 million incidents (Budd, 2003). Alcohol is estimated to be linked to 65% of all suicide attempts and 15-25% of all suicides in England and Wales (Appleby et al., 2001). Moreover, alcohol-related domestic violence can indirectly or directly influence children. They may develop behavioural and mental health problems, and may have alcohol and drug problems in later life (Faculty of Public Health, 2005).

In the ESPAD survey of 35 European countries, UK teenagers are among the most likely to report frequent and heavy consumption of alcohol, being intoxicated and experiencing problems caused by personal alcohol consumption (Hibell et al., 2007). In 2008, over half (52%) of children aged 11 to 15 in England had had an alcoholic drink with figures increasing from 16% at the age of 11 to 81% of those aged 15 (Fuller 2009b). There has been a decline from 2003 when 61% of 11-15 olds had consumed an alcoholic drink. During the same period, the proportion of pupils who had drunk alcohol in the last week has also been decreasing from 26% to 18% (Fuller 2009b). Despite the decrease, the figures are still alarming. Alcohol consumption can have major impacts on health and well being of the young in both the short and long term (British Medical Association, 2008; McArdle, 2008; Newbury-Birch et al., 2009; Phillips-Howard et al., 2010; Quigg et al., 2010). It can impair their intellectual development and affect school attendance and performance. Drinking alcohol in young age is also associated with overdose, injury, violence, risky sexual behaviour and sexual abuse and is associated with alcohol abuse in later life.

Alcohol misuse is estimated to cost £18-25 billion a year, including alcohol-related

disorders and diseases, crime, drink-driving, loss of productivity and health and social problems experienced by alcohol misusers (Cabinet Office, 2004). Harmful use of alcohol, including regularly drinking at increasing or higher risk levels, is estimated to place a financial burden of around £2.7 billion on NHS alone in hospital admissions, attendance at A&E and in primary care (Department of Health, 2008).

The number of hospital admissions for alcohol-related harm increased more than 8% each year between 2002/03 and 2006/07 in England. The total increase was 71%, from 473,529 to 811,443 admissions (Department of Health & NorthWest Public Health Observatory, 2008). In 2006/2007, the most prevalent alcohol-attributable reason for hospital admission of men was for chronic conditions, the rate being five times higher than rates of admission for acute conditions and almost three times higher than admission for mental and behavioural disorders. A similar pattern could be seen for women (Morleo et al., 2010). At peak times, 70% of admissions to accident and emergency departments are estimated to be alcohol-related (Cabinet Office, 2004).

Alcohol is one of the major avoidable risk factors for disease. Actions to reduce alcohol-related burden and costs should be urgently increased (Rehm et al., 2009). Currently, there is no system for routine screening and management of alcohol misuse in primary or secondary care settings in the UK. In both setting, alcohol screening and management occur opportunistically where clinically appropriate (British Medical Association, 2008). Primary care trusts that responded to a survey (National Audit Office, 2008) spend just 0.1% of their total budget on alcohol intervention and only about 58% of PCTs had an alcohol strategy. As Local Drug and Alcohol Action Teams mainly concentrate on offering specialist services for dependent users, harmful-hazardous drinkers remain largely overlooked if PCTs do not take lead in commissioning services for them (National Audit Office, 2008).

The use of alcohol screening questionnaires is an efficient and cost-effective method for identification of alcohol misuse (British Medical Association, 2008). Alcohol screening and brief interventions provided by NHS constitutes of opportunistic case identification of alcohol misuse and the delivery of brief advice (Identification and Brief Advice, IBA). Brief interventions are delivered by non-specialist personnel such as GPs and other primary healthcare staff, hospital physicians and nurses, social workers, probation officers and other non-specialist professionals in general community settings (Raistrick et al., 2006) such as community pharmacists. Being targeted to potential misusers, IBA can be administered to patients who do not primarily attend health service to discuss drinking problems and could be effective if their problems are not yet too severe (Cabinet Office, 2004).

Not until the 21st century, alcohol misuse services were piloted and introduced to community pharmacies in the UK. At present, there is a lack of high quality studies on the effectiveness of alcohol misuse services provided by UK community pharmacies, although evidence from other primary care settings indicate the effectiveness of such

services (e.g. Anderson et al., 2009; Watson & Blenkinsopp, 2008), e.g. brief interventions reduce alcohol consumption in non-dependent drinkers (Bertholet et al., 2005; Kaner et al., 2009; Moyer et al. 2002; Nilsen, 2010; Raistrick et al., 2006). Unfortunately, GPs providing IBAs can miss as much as 98% of potential alcohol misusers (Kaner et al., 1999), and also other health professionals tend to fail to pay enough attention to patients' drinking habits (Raistrick et al., 2006). So far, not enough has been done to overcome the barriers of GPs' routine implementation of IBAs (Kaner, 2010a & b; Nilsen, 2010). Community pharmacists are willing to provide IBA service and have the potential to deliver the service to the large population of pharmacy customers (Dhital et al., 2010).

Identification of those drinking at harmful and hazardous levels, although not yet dependent drinkers, is particularly important. These people are in increased/high risk of physical and mental ill-health, and because of their numbers, interventions can result to considerable public health benefits (Drummond et al., 2005; Lavoie 2010) and savings in alcohol-attributable health costs. For example, early identification of people at risk of alcohol-attributable chronic conditions is essential in order to tackle the rising levels of related hospital admissions (Morleo et al., 2010). It has been estimated that with 10.5m people drinking on harmful and hazardous levels nationwide, an investment of £13.9m in IBA could yield savings of £59.9m in return (Department of Health, 2009).

With referral to specialist services, IBAs can be the first step on a treatment pathway (Moyer et al., 2002) that can result in further health, social and financial benefits. Therapy treatments for alcohol problems are both effective and cost-effective (e.g. UKATT Research Team 2005a & b). In a UK study comparing two therapies, there were substantial reductions in alcohol consumption, dependence, and problems, and better mental health related quality of life over 12 months (UKATT Research Team, 2005a). Moreover, every £1 spent on either therapy could result to net savings of £5 in expenditure on health, social, and criminal justice services (UKATT Research Team, 2005b). According to another estimate (Department of Health, 2009), with 1,1m dependent drinkers the savings could be almost £275m in return on investment of £88.7m in treatment.

Community pharmacy-based alcohol misuse services can be tailored to address local needs, e.g. by targeting interventions to special patient groups, such as adolescents or pregnant women, or people collecting or purchasing drugs related to alcohol problem or drugs with adverse effects when consumed with alcohol. Pharmacists can also refer patients to specialist services and participate in public awareness campaigns (Watson & Blenkinsopp, 2008). During a one-month campaign of Portsmouth Healthy Living pharmacies in 2010, over 3500 customers used a scratch card to do an alcohol audit, ca. half of them took a leaflet and brief advice on drinking levels, almost a quarter were given in-depth advice and consultation, and 29 individuals were referred to specialist services (Bowhill et al., 2010). In Birmingham, an alcohol screening programme

launched in July 2009 by Lloydspharmacy screened over 5000 people, of which over 50% were found to be drinking at increasing or high risk levels. Over 90% of patients contacted 4 weeks later told that they had found the service "useful" or "very useful". Moreover, 35% of them had decreased their alcohol consumption (Anon., 2010).

The first peer-reviewed study of pharmacy users' views on IBA interviewed 102 customers in Westminster, London (response rate of 43%; Dhital et al., 2010). In general, customers had positive attitudes towards pharmacy-based alcohol screening and brief interventions and were willing to utilise this service viewed as anonymous and accessible (Dhital et al., 2010). They also regarded pharmacists as supportive and as a reliable source of information. Moreover, pharmacy-based IBA seemed to access also less screened groups such as young male professionals (Dhital et al., 2010) with the highest proportion of excessive drinkers (Deacon et al., 2010).

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