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Addressing Alcohol

Alcohol Prevention in Swedish Primary and Maternity Health Care and Occupational Health Services

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*Failure requires effort.
That's why some people never fail.*
Bengt Anderberg

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ABSTRACT

Alcohol consumption in Sweden has reached its highest levels of the past 100 years in the wake of the country's entry into the European Union in 1995. Increased alcohol prevention efforts in Swedish health care settings have been given high priority by the authorities. The Swedish parliament's national action plan up to 2010 emphasises that public health must be protected by achieving reductions in alcohol consumption and limiting the negative physical, psychological, and social effects of alcohol.

This thesis aims to investigate various aspects related to the current alcohol-preventive activity in 2006 among health care professionals in three important health care settings: primary health care (PHC), occupational health services (OHS), and maternity health care (MHC). The thesis includes four studies based on a total population mail questionnaire survey.

Results from the studies show that alcohol issues in both PHC and OHS were addressed less frequently than all other lifestyle issues, i.e. smoking, physical activity, overweight, and stress. Important barriers to alcohol-preventive activity in these settings were perceived lack of time, scepticism regarding the effectiveness of addressing the issue of alcohol, fear of potentially negative patient responses, uncertainty about how to ask, uncertainty about how to give advice regarding alcohol, and uncertainty concerning where to refer the patient.

OHS professionals generally considered themselves more skilful than their PHC counterparts in achieving change in patients' alcohol habits and more knowledgeable about providing advice to patients with risky alcohol consumption. The overall frequency of initiating discussions about alcohol with patients in PHC and OHS was positively associated with self-assessed skills, knowledge, and education for all professional categories.

Slightly more than one-third of the MHC midwives used a questionnaire to assess the woman's alcohol intake before the pregnancy; AUDIT was the most commonly used questionnaire. Their perceived knowledge concerning alcohol and pregnancy matters was generally high, but the midwives considered

themselves less proficient at detecting pregnant women with risky alcohol consumption before the pregnancy.

MHC midwives had participated in more continuing professional education in handling risky drinking than all other categories investigated. PHC nurses was the category that had the highest proportion of professionals who lacked education in handling risky drinking. Professionals in PHC, OHS, and MHC to a large extent believed that provision of more knowledge about counselling techniques to use when alcohol-related symptoms are evident could facilitate increased alcohol intervention activity.

LIST OF PAPERS

This thesis is based upon the following studies, which are referred to in the text by Roman numerals:

- I.** Asking patients about their drinking – A national survey among primary health care physicians and nurses in Sweden (Holmqvist, M., Bendtsen, P., Spak, F., Rommelsjö, A., Geirsson, M., Nilsen, P., 2008. *Addictive Behaviors* 33, 301–314).

- II.** Towards increased alcohol intervention activity in Swedish occupational health services (Holmqvist, M., Hermansson, U., Nilsen, P., 2008. *International Journal of Occupational Medicine and Environmental Health* 21(2): 1–9).

- III.** Alcohol prevention activity in Swedish primary health care and occupational health services (Holmqvist, M., Hermansson, U., Bendtsen, P., Spak, F., Nilsen, P., 2008. *Nordic Studies on Alcohol and Drugs* 25, 489-504).

- IV.** Addressing alcohol in Swedish maternity health care. (Holmqvist, M., Nilsen, P., in press. *Midwifery*, accepted 19 October 2008).

1 INTRODUCTION

The last three decades have seen a paradigm shift with regard to alcohol prevention. The earlier disease model of alcoholism has been expanded to include a continuum of alcohol-related conditions that encompasses a large proportion of the population. It has been recognised that the majority of alcohol harm that occurs on a population level is attributable to the large group of risky (or hazardous) drinkers rather than individuals with severe alcohol-related problems or alcohol dependence (Fleming and Graham, 2001; Rossow and Romelsjö, 2006).

The paradigm shift has led to an increased demand on health care professionals to become more involved in identifying and intervening with drinkers whose consumption exceeds recommended levels and who thereby experience increased risk of physical, psychological, and social harm. “Brief intervention” emerged in the 1980s as a strategy to provide early intervention, before or soon after the onset of alcohol-related problems, with the aim of moderating drinking rather than necessarily achieving complete abstinence from alcohol (Babor et al., 2007). Since then, the efficacy and effectiveness of the brief intervention strategy has been well established. However, numerous studies have demonstrated that alcohol is rarely addressed in routine health care with non-treatment-seeking patients, as health care professionals tend to be reluctant to inquire about alcohol consumption unless patients themselves raise the issue (Nilsen et al., 2008b).

The importance of addressing alcohol in Swedish health care settings has been more widely recognised in the last decade. In the wake of the country’s entry into the European Union in 1995, alcohol consumption in Sweden has reached its highest levels of the past 100 years. Increased alcohol prevention efforts in Swedish health care settings have been given a high priority by the authorities. In fact, Sweden now invests more money per capita than any other European country on alcohol prevention in the health care system (FHI, 2008). The Swedish parliament’s national action plan up to 2010 emphasises that public health must be protected by achieving reductions in alcohol consumption and limiting the negative physical, psychological, and social effects of alcohol (Swedish Government, 2005).

The so-called Risk Drinking Project was launched in 2004 by the Swedish government as part of this concerted strategy to facilitate more alcohol prevention efforts in routine health care. The aim of the Risk Drinking Project is that alcohol “shall be a natural element in daily health care and welfare work, and integrated in such as way that it reflects alcohol’s importance as the source of different injuries and illnesses” (FHI, 2008). To achieve this goal, health care professionals receive training in interventions aimed at addressing alcohol use by patients, e.g. the use of screening questionnaires and motivational interviewing techniques).

Against the backdrop of increased alcohol consumption in Sweden and the need for increased alcohol prevention efforts in the health care system, this thesis aims to investigate various aspects related to the current alcohol-preventive activity in 2006 among health care professionals in three important health care settings: primary health care (PHC), occupational health services (OHS), and maternity health care (MHC). These health care settings reach a large proportion of the Swedish population and can play strategic roles in reducing the heavy burden that alcohol use places upon population health.

2 ALCOHOL EPIDEMIOLOGY AND PREVENTION

Excessive alcohol use increases the risk for many chronic and acute health consequences, although a certain pattern of regular light drinking may also have some beneficial health effects. This chapter provides an overview of research findings concerning the negative and positive physical, psychological, and social effects of alcohol.

2.1 The public health burden of alcohol

The World Health Organization (WHO) uses Disability-Adjusted Life Years (DALYs) to assess the magnitude of alcohol as a public health problem. This is a composite health summary measure that combines years of life lost to premature death with years of life lost due to disability from a given health condition or risk factor (Murray and Acharya, 1997). Using this method of assessing morbidity losses, alcohol is the third-leading risk factor for death and disability in the European Union (Figure 1). Only blood pressure and tobacco account for a greater morbidity toll. When comparing WHO data and Swedish data there were no major differences with respect to high BMI, physical inactivity, tobacco and alcohol (Agardh et al., 2008).

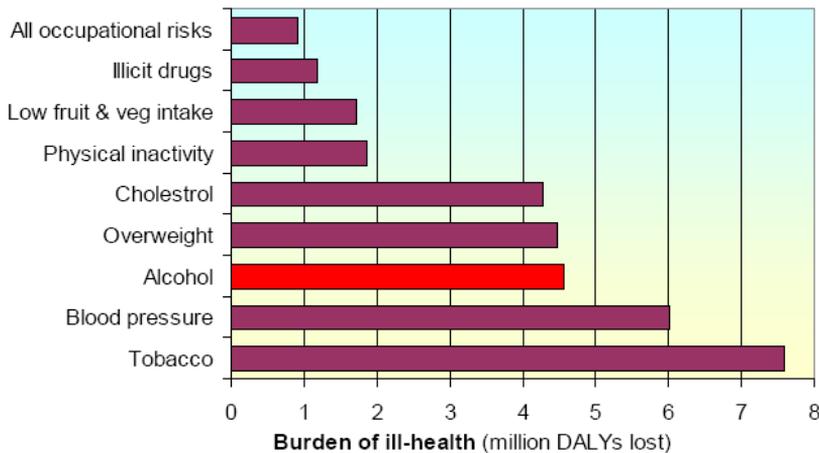


Figure 1: The top nine risk factors for ill-health in the European Union. Adapted from WHO's Global Burden of Disease study (Rehm et al., 2004).

2.2 Negative effects of alcohol

Excessive alcohol use has been linked to more than 60 diseases with short- and long-term consequences. Adverse health effects of alcohol use have been observed in nearly every organ of the body (Gutjahr et al., 2001; Rehm et al., 2003b; Room et al., 2005). Table 1 summarises the relationship between alcohol consumption, social problems and the risk of ill-health for some of the more important conditions.

When assessing the impact of alcohol on health, two aspects of drinking should be considered: the volume of alcohol consumed and patterns of drinking. The same overall volume of alcohol can be consumed in small quantities regularly or in large quantities on a few occasions. Both consumption dimensions have been shown to influence alcohol-related burdens of disease (Rehm et al., 2003b). Although the volume of alcohol consumption has been the usual measure linking alcohol to disease, the importance of measuring patterns is now also generally recognised (Bobak, 2005; Tolstrup et al., 2004). Volume and drinking patterns appear to work as independent risks for certain conditions, with drinking patterns also sometimes mediating the effect of volume on harm (Anderson and Baumberg, 2006).

Alcohol-related disorders can be categorised as acute or chronic. Brief and intense drinking, i.e. drinking a large amount on one occasion, may lead to health problems due to the *acute effects* of alcohol; long-term drinking may cause conditions related to *chronic effects* of alcohol (Last, 2001). There can be considerable overlap between acute and chronic exposures and between acute and chronic effects for individuals and for certain conditions.

2.2.1 Volume of alcohol consumption

The average volume of alcohol consumed works as a risk factor mainly through biological and biochemical effects to produce long-term health consequences (Rehm et al., 2003b). There is a dose–response relationship for many chronic diseases and conditions, with risk of the disease increasing with higher alcohol consumption (Anderson, 2003; Anderson et al., 1993; Rehm et al., 2003b; Rehm et al., 2008; Room et al., 2005).

There is strong evidence that alcohol increases the risk of female breast cancer (one of the most frequent causes of death among younger women) in a dose-dependent manner at all ages (Collaborative Group on Hormonal Factors in Breast Cancer, 2002). Meta-analyses show a linear increase of risk of breast cancer with increasing average volume of consumption (Bagnardi et al., 2001; Ellison et al., 2001; Smith-Warner et al., 1998).

Further examples of linear relationships between consumption and health outcomes are depression and anxiety, with increasing prevalence of symptoms related to greater alcohol consumption (Alati et al., 2005). Additionally, dose-dependent relationships are seen between alcohol and blood pressure and alcohol and hypertension (Beilin et al., 1996; Curtis et al., 1997; Grobbee et al., 1999; Keil et al., 1997; Klatsky, 1996, 2001).

2.2.2 Patterns of drinking

Data on the influence of patterns of drinking on the alcohol-related burden of disease are less available than data on overall consumption, but evidence is accumulating that patterns of drinking affect the link between alcohol and disease (Damström Thakker, 1998; Rehm et al., 2003b). There is a relationship between the use of alcohol, largely in the short term, and the risk of fatal and

non-fatal injuries (Brismar and Bergman, 1998; Cherpitel et al., 1995; Macdonald et al., 2005; Smith et al., 1999). Heavy episodic drinking, also referred to as heavy or binge drinking, i.e. drinking a large amount on one occasion, leads to increased risk of injuries, even after adjustment for average volume of consumption (Rehm et al., 2003a).

Patterns of drinking have been linked not only to acute health outcomes such as injuries, but also to chronic diseases. Heavy episodic drinking measured as ≥ 5 standard drinks per occasion for men or ≥ 4 standard drinks per occasion for women have been shown to be associated with a prospective risk of many types of harm (Dawson et al., 2008). Thus, heavy episodic drinking increases the risk of heart arrhythmias and sudden coronary death, even in people without any evidence of pre-existing heart disease (Robinette et al., 1979; Suhonen et al., 1987). Heavy episodic drinking has been shown to lead to detrimental cardiovascular outcomes, after adjustment for average volume (Rehm et al., 2003a).

Furthermore, patterns of alcohol consumption are an important determinant of social problems (Damström Thakker, 1998). High volumes of drinking per occasion predict negative social consequences independently of overall drinking volume (Rehm and Gmel, 1999; Room, 1998).

Table 1: The harm done by alcohol to the individual drinker. Source: Anderson and Baumberg (2006).

	Condition	Summary of findings
Social well being	Negative social consequences	Risks for getting into a fight, harming home life, marriage, work, studies, friendships or social life; the risk of harm increases proportional to the amount of alcohol consumed
	Reduced work performance	Higher alcohol use results in reduced employment and increased unemployment and reduced productivity
Intentional and unintentional injuries	Violence	There is a relationship between alcohol consumption and the risk of involvement in violence, which is stronger for heavy episodic drinking than for overall consumption. The higher the alcohol consumption, the more severe the violence
	Drinking and driving	The risk of drinking and driving increases with both the amount of alcohol consumed and the frequency of high volume drinking occasions. There is a 38% increased risk of accidents at a blood alcohol concentration level of 0.5 g/L
	Injuries	There is a relationship between the use of alcohol and the risk of fatal and non-fatal accidents and injuries. People who usually drink alcohol at lower levels, but who engage periodically in heavy episodic drinking, are at particular risk. Alcohol increases the risk of attendance at hospital emergency rooms in a dose-dependent manner
	Suicide	There is a direct relationship between alcohol consumption and the risk of suicide and attempted suicide, which is stronger for heavy episodic drinking than for overall consumption
Neuropsychiatric conditions	Anxiety and sleep disorders	Over one in eight individuals with an anxiety disorder also suffer from an alcohol use disorder. Alcohol aggravates sleep disorder
	Depression	Alcohol use disorders are a risk factor for depressive disorders in a dose dependent manner, often preceding the depressive disorder, and with improvement of the depressive disorder following abstinence from alcohol
	Alcohol dependence	The risk of alcohol dependence begins at low levels of drinking and increases directly with both the volume of alcohol consumed and a pattern of drinking larger amounts on one occasion. Young adults are particularly at risk
	Nerve damage	Clinical studies find that between one-quarter and one-third of alcohol-dependent patients have damage to the peripheral nerves of the body, with the risk and severity of damage increasing with lifetime use of alcohol
	Brain damage	Heavy alcohol consumption accelerates shrinkage of the brain, which in turn leads to cognitive decline. There appears to be a continuum of brain damage in individuals with long-term alcohol dependence
	Cognitive impairment and dementia	Heavy alcohol consumption increases the risk of cognitive impairment in a dose-dependent manner
Gastrointestinal, metabolic and endocrine conditions	Liver cirrhosis	Alcohol increases the risk of liver cirrhosis in a dose-dependent manner. At any given level of alcohol consumption, women have a higher likelihood of developing liver cirrhosis than men
	Pancreatitis	Alcohol increases the risk of acute and chronic pancreatitis in a dose dependent manner
	Type II diabetes	Although low doses decrease the risk compared with abstainers, higher doses increase the risk
	Overweight	Alcohol contains 7.1 kcal/g and is a risk factor for weight gain. In very heavy drinkers alcohol can replace calories due to meal skipping and lead to malnutrition

	Condition	Summary of findings
	Gout	Alcohol increases the risk of high blood levels of uric acid and gout in a dose dependent manner
Cancers	Gastrointestinal tract	Alcohol increases the risk of cancers of the mouth, oesophagus (gullet) and larynx (upper airway), and to a lesser extent, cancers of the stomach, colon and rectum in a linear relationship
	Liver	Alcohol increases the risk of cancer of the liver in an exponential relationship
	Breast	Alcohol increases the risk of female breast cancer in a dose dependent manner
Cardiovascular diseases	Hypertension	Alcohol raises blood pressure and increases the risk of hypertension, in a dose dependent manner
	Stroke	Alcohol increases the risk of haemorrhagic stroke with a dose-response relationship. The relationship with ischaemic stroke is J-shaped, with low doses reducing the risk and higher doses increasing the risk. Episodic heavy drinking is an important risk factor for both ischaemic and haemorrhagic stroke, and is particularly important as a cause of stroke in adolescents and young people
	Irregularities in heart rhythms	Heavy episodic drinking increases the risk of heart arrhythmias and sudden coronary death, even in people without any evidence of pre-existing heart disease
	Coronary heart disease (CHD)	Although light drinking reduces the risk of CHD, beyond 20 g a day (the level of alcohol consumption with the lowest risk), the risk of heart disease increases, being more than the risk of an abstainer after 80 g a day. The reduced risk is much less in very old age, where over-reporting of CHD on death certificates also occurs
	Cardiomyopathy	Over a sustained period of time, a high level of alcohol consumption increases the risk of damage to the heart muscles (cardiomyopathy) in a dose dependent manner
Immune system		Alcohol can interfere with the normal functions of the immune system, causing increases susceptibility to certain infectious diseases, including pneumonia, tuberculosis and possibly HIV
Lung diseases		People with alcohol dependence have a two- to four-fold increased risk of acute respiratory distress syndrome (ARDS) in the presence of sepsis or trauma
Post-operative complications		Alcohol increases the risk of post-operative complications and risk of admittance to intensive care in a dose-dependent manner
Skeletal conditions		There appears to be a dose-dependent relationship between alcohol consumption and risk of fracture in both men and women that is stronger for men than for women. At high doses, although in a dose-dependent manner, alcohol is a cause of muscle disease
Reproductive conditions		Alcohol can impair fertility in both men and women
Total mortality		It has been estimated, at least in the UK, that in younger people (women under the age of 45 years and men under the age of 35 years), any level of alcohol consumption increases the overall risk of death in a dose dependent manner

2.3 Positive effects of alcohol

Low levels of alcohol consumption have been associated with positive effects on the cardiovascular system, although different studies have found varying levels of evidence. In general, higher-quality studies (based on a quality score composed by a grading of the study design, alcohol consumption data collection methods and data analysis) have found less of a protective effect than lower-quality studies (Corrao et al., 2000). Corrao et al.'s (2000) review of 28 cohort studies found that the risk of coronary heart disease decreased to 80% of the level of non-drinkers at 20 g of alcohol per day (RR=0.80; 95% CI 0.78, 0.83). However, the protective effect appears to be reduced in very old age. Most of the reduction in risk occurred at the level of one drink every second day. Up to 72 g of alcohol per day was still significantly protective (RR=0.96; 95% CI 0.92, 1.00); 89 g a day increased the risk of coronary heart disease (RR=1.05; 95% CI 1.00, 1.11).

The protective effect of alcohol is greater for non-fatal heart attacks in men and particularly for men living in Mediterranean countries. The type of alcohol (wine, beer, spirits, etc.) consumed has no significance for the positive health effects (Andréasson and Allebeck, 2005). There is a J-shaped relationship between alcohol consumption and risk of ischaemic stroke, with low doses of alcohol consumption (up to 24 g per day) (a small glass of wine (15 cL) contains 12 g alcohol) decreasing the risk (Anderson and Baumberg, 2006). A reduced risk for gallstones, type II diabetes, vascular dementia, and Alzheimer's disease has also been seen for study participants who drink low amounts of alcohol. However, these findings are not consistent across all studies (Anderson and Baumberg, 2006).

2.4 Alcohol sales and consumption in Sweden

Since the mid-1800s, alcohol sales in Sweden have ranged between 3 and 9 L of 100% alcohol per person aged 15 years and older (see Figure 2) (CAN, 2007). Sales were very high during the last four decades of the 19th century. However, the first four decades of the 20th century saw a dramatic decrease,

with sales reaching the lowest figure in 1941 (3.2 L per capita) during the Second World War when there were problems of supply and rationing was in place (wine was not rationed). In 1917 AB Vin- & Spritcentralen was formed and took over all wholesale distribution in Sweden. A ration book for spirits was used between 1919 and 1955.

Between 1965 and 1977, medium-strong beer “IIB” (maximum percentage of alcohol 3.6%) was allowed to be sold in grocery shops, which has been attributed to the increase in sales during this period (CAN, 2008). Since the 1980s, alcohol sales have remained fairly constant (at 6–7 L per capita). Sweden’s entry into the European Union in 1995 has not affected alcohol sales in Sweden.

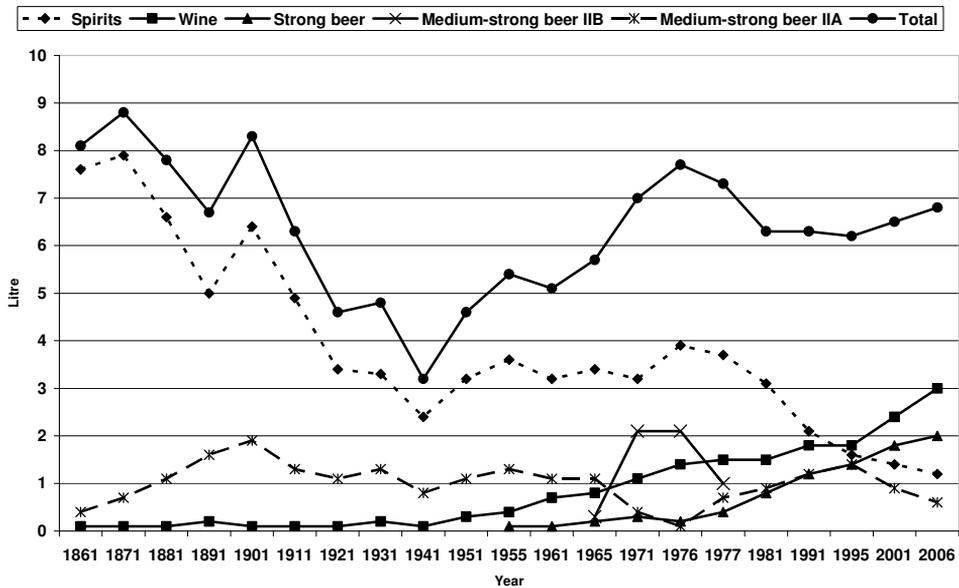


Figure 2: The sales of alcohol (litres of 100% alcohol per capita aged 15 years and over) by type of alcohol, 1861–2006. Source: CAN, 2008.

The sales of alcohol in Sweden do not constitute the *total* consumption. To estimate the true total consumption of alcohol, calculations must also include the number of private imports made during international journeys and the number of “black” spirits consumed, either via illegal distilling or smuggled spirits. Since 2000, alcohol consumption in Sweden has been assessed monthly

via telephone interviews with 1500 people, in a survey conducted by the Centre for Social Research on Alcohol and Drugs (SoRAD). The total consumption estimate consists of *recorded* consumption (alcohol sales included in official statistics consisting of sales reported by the Swedish alcohol retailing monopoly (Systembolaget), by restaurants, and sales in grocery shops of “medium-strength” beer) and *unrecorded* consumption (privately imported, smuggled and home-made alcoholic beverages).

Figure 3 shows the development of registered alcohol sales (recorded consumption) and the estimated total consumption from 1989 to 2006. Between 1990 and 2004, the share of unrecorded alcohol doubled from 18% to 38% of the total consumption, due to increasing volumes of privately imported alcohol. However, in recent years (2004–2006), the share of unrecorded alcohol has fallen by 5% as the retailing monopoly has regained market shares (CAN, 2006, 2008).

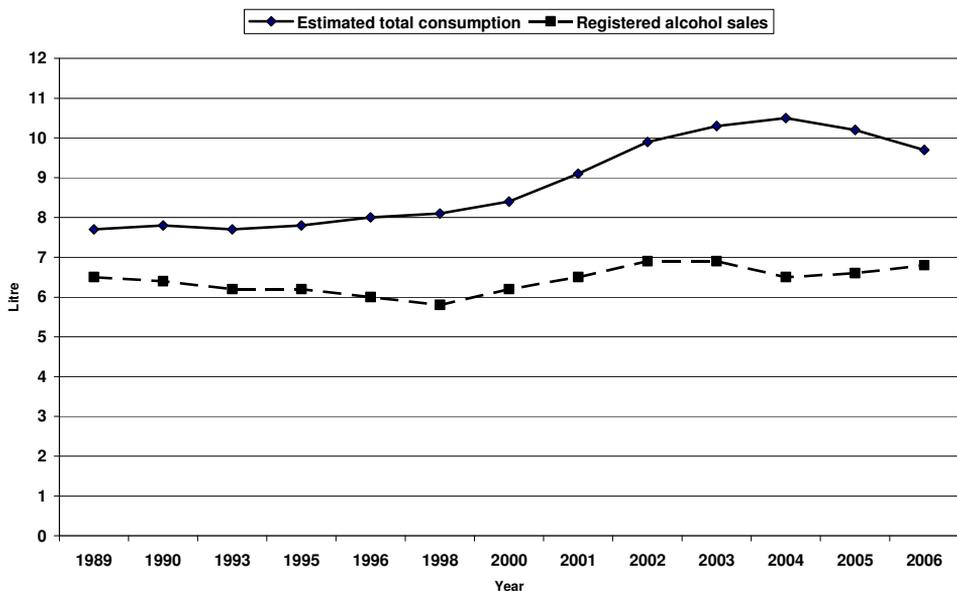


Figure 3: Estimated total alcohol consumption and registered alcohol sales, 1989–2006. Source: CAN (2007).

In 1996, the average annual alcohol consumption, as measured using 100% alcohol, was 8 L per person. By 2004, the average annual consumption of 100%

alcohol had grown to 10.4 L per person, an increase of 30%. Since 2004, the consumption has remained steady at about 10 L per person per year. This increase is usually attributed to Sweden's entry into the European Union in 1995. EU membership has led to a substantial weakening of the main policy instrument used since the 1950s, i.e. limited accessibility of alcohol due to high prices and a sales monopoly. Limitations related to alcohol production, wholesale, import and export monopolies were eliminated in 1995 and the limits on private import of alcohol were more or less removed in 2004 (Andreasson et al., 2006; Norstrom and Ramstedt, 2006).

The number of alcohol consumers in the total population has also increased in Sweden. In 2000, the proportion of adults who did not drink alcohol in the preceding 12 months was about 10%. In 1968 and 1979, 28% and 15%, respectively, had not drunk alcohol in the past 12 months.

Studies using questionnaire survey methodologies indicate that the proportion of high consumers of alcohol in Sweden has increased since the 1990s, among both men and women, and in most age groups. This development is primarily attributed to an increase in the number of drinking occasions, rather than an increase in the amount consumed on each occasion. In addition, findings also suggest that the number of heavy episodic drinking occasions, i.e. drinking at least the equivalent of a bottle of wine on a single occasion, has increased over the past decade (CAN, 2006).

A large proportion of the alcohol in Sweden is consumed by a relatively small minority of drinkers. One-tenth of drinkers in Sweden consumed about half of the total alcohol consumption and 30% consumed more than the mean consumption per capita (SOU, 2004:86).

Research has consistently shown significant differences in drinking patterns between men and women, between younger and older people, and between ethnic or religious groups (Babor et al., 2003). Swedish men drink more than twice as much as Swedish women in the same age category. In 2003, men consumed on average 14 L of 100% alcohol per person (15 years or older) compared to an average of 6 L per woman (15 years or older). Converted into liquor (40% by volume), this corresponds to about 70 cL per week for men and 30 cL per week for women. Further, if converted into wine (12% by volume), it corresponds to about 3 bottles per week for men and 1.3 bottles per week for women (SOU, 2004:86).

Social differences in alcohol habits among adults in Sweden have changed over the last 40 years. High consumption was previously more common among those with higher socio-economic status (SES) (Norstrom and Romelsjö, 1999). Today, however, high alcohol consumption among males is not differentiated to the same extent by SES and women have moved closer to each other in this respect. Heavy episodic drinking occurs more frequently among those with lower SES. The social inequalities in mortality from alcohol-related diseases are marked, however, and mortality rates related to alcohol are considerably higher among blue-collar workers and lower-paid white-collar workers, compared to higher income drinkers. The highest alcohol-related mortality rates are seen among the unemployed (CAN, 2007).

2.5 Prevention

Prevention is defined as the act taken to prevent ill health and disease, including reducing known risk factors, screening and immunisation (Naidoo and Wills, 2001). Traditionally, three levels of prevention have been identified: primary, secondary, and tertiary prevention. Table 2 describes the characteristics of the three prevention levels with regard to target groups, aims, and strategies.

Table 2: Characteristics of primary, secondary, and tertiary prevention. Source: Oldenburg and Burton (2004)

	Primary prevention	Secondary prevention	Tertiary prevention
Target group	<ul style="list-style-type: none"> • Healthy individuals 	<ul style="list-style-type: none"> • Individuals at risk or with the early stages of a condition 	<ul style="list-style-type: none"> • Individuals with the condition
Aim	<ul style="list-style-type: none"> • Prevent occurrence • Reduce incidence 	<ul style="list-style-type: none"> • Prevent progression • Slow progression • Minimise duration 	<ul style="list-style-type: none"> • Minimise complications • Optimise functioning • Minimise recurrence • Reduce disability
Strategies	<ul style="list-style-type: none"> • Promote healthy behaviours, healthy lifestyle, healthy environment, and healthy public policy 	<ul style="list-style-type: none"> • Screening • Early detection • Early intervention • Risk reduction 	<ul style="list-style-type: none"> • Rehabilitation • Reduce psychological, social, physical distress • Enhance support networks • Enhance self management

2.5.1 Primary prevention

The target population for primary prevention is people who have no signs or symptoms of a condition. The strategies are aimed at prevention of the presence of poor health in individuals, and thus reducing the incidence of these conditions in the population or ensuring that individuals do not begin certain risk behaviours (Oldenburg and Burton, 2004).

With regard to alcohol prevention, the purpose of primary prevention is to ensure that low-risk drinkers and abstainers do not exceed drinking at risk limits in the future (Botelho and Richmond, 1996). Sweden has a long tradition of primary alcohol prevention, with high alcohol taxes, a comprehensive state-owned alcohol retail monopoly, and municipal control over licensed alcohol premises. However, opportunities for primary prevention have been reduced following Sweden's entry into the European Union in 1995 (Andreasson et al., 2006).

2.5.2 Secondary prevention

The aim of secondary prevention is to avoid ill health or unwanted outcomes through detection of early signs of disease or individuals with risk behaviour, and, by early treatment, reduce or prevent future disease or premature death (Allebeck et al., 1998; Orth-Gomér and Perski, 2008).

Secondary alcohol prevention involves identifying, and intervening with, hazardous and harmful drinkers who do not show signs of alcohol dependence, to promote abstinence or drinking less than the recommended (non-risk) levels of alcohol consumption (Botelho and Richmond, 1996). *Risky or hazardous drinkers* are at risk (physical, psychological and social harm) from alcohol consumption that exceeds daily, weekly, or per occasion thresholds, whereas *harmful drinkers* are already experiencing physical, social or psychological harm due to their consumption (Modesto-Lowe and Boornazian, 2000; Reid et al., 1999; Sommers, 2005; Whitlock et al., 2004).

Hazardous drinking is defined in the WHO's 2005 lexicon of alcohol and drug terms as follows: "A pattern of substance use that increases the risk of harmful consequences for the user. Some would limit the consequences to physical and mental health (as in harmful use); some would also include social

consequences. In contrast to harmful use, hazardous use refers to patterns of use that are of public health significance despite the absence of any current disorder in the individual user.” The term is used currently by the WHO but is not a diagnostic term in International Classification of Diseases (ICD-10) (WHO, 2008).

The level of alcohol consumption defined as hazardous varies considerably between countries, cultures, and authors. The Swedish National Institute of Public Health (Andréasson and Allebeck, 2005) defines risk or risky drinking in terms of an average weekly measure and/or the existence of heavy episodic drinking, i.e. drinking a larger amount on one occasion, as follows:

>14 standard drinks¹ per week or ≥ 5 standard drinks per occasion (men)

>9 standard drinks per week or ≥ 4 standard drinks per occasion (women)

The term *risky drinking* is used in this thesis instead of *hazardous drinking* in the context of Swedish alcohol prevention, as this is the term most frequently used by practitioners.

In contrast to hazardous drinking, harmful alcohol consumption is usually not defined as consumption above a certain level. Harmful drinking is defined by WHO (2005) as follows: “A pattern of psychoactive substance use that is causing damage to health. The damage may be physical (e.g. hepatitis following injection of drugs) or mental (e.g. depressive episodes secondary to heavy alcohol intake). Harmful use commonly, but not invariably, has adverse social consequences; social consequences in themselves, however, are not sufficient to justify a diagnosis of harmful use. The term was introduced in ICD-10 and supplanted ‘non-dependent use’ as a diagnostic term. The closest equivalent in other diagnostic systems is substance abuse, which usually includes social consequences.” (WHO, 2008).

2.5.3 Tertiary prevention

Tertiary prevention involves measures to prevent further development of a disease (Allebeck et al., 1998). Tertiary alcohol prevention is directed at individuals who are alcohol abusers or who have developed alcohol dependence. The aim is to help them reduce or stop drinking in order to limit

¹ In Sweden one standard drink is equivalent to 12 g of alcohol.

further adverse effects due to drinking. In Sweden, this level of preventive action is often organised through special clinics or institutions.

Abusing and/or dependent drinkers continue to use alcohol despite significant negative physical, psychological, and social harm. These drinkers generally meet the criteria for abuse or dependence as outlined in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV*, *DSM-III-R*, and *ICD-10* (Hasin, 2003; Whitlock et al., 2004).

2.6 The prevention paradox

The paradigm shift to using a model of a continuum of alcohol use that encompasses a large proportion of the population means that the focus of alcohol prevention has moved towards an increased emphasis on secondary prevention. In Sweden, this development has been reinforced due to the reduced opportunity for primary prevention approaches following the country's entry into the European Union.

It has increasingly been recognised that most problems related to alcohol use occur in people who are not alcohol-dependent. Most people who experience alcohol-related injuries, health problems, or family difficulties do not meet the criteria for alcohol dependence (Fleming and Graham, 2001). Figure 4 illustrates the relationship between drinkers with different levels of alcohol problems and associated prevention levels. The top of the pyramid is composed of abusing or dependent drinkers (who are in need of tertiary prevention). These are relatively few in number. As one progresses down the pyramid, the number of drinkers increases from harmful drinkers and risky/hazardous drinkers (secondary prevention), to those who do not have any alcohol problems (primary prevention).

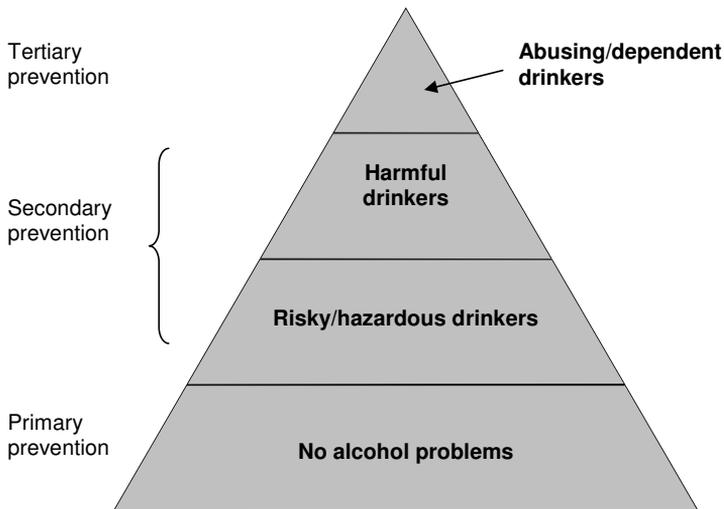


Figure 4: Pyramid illustrating the different drinking categories and associated prevention levels.

The large number of negative health consequences resulting from hazardous and harmful drinking far exceed those resulting from alcohol dependence (Botelho and Richmond, 1996; Institute of Medicine, 1990). Relatively brief interventions aimed at 15–20% of the population with hazardous and harmful alcohol use could have a far greater impact on improving population health than would specialists using expensive treatments only targeting the small group (approximately 5% of the population) who are alcohol-dependent (Skinner, 1990). This observation underlies the prevention paradox, which was first formally described in 1979 by Geoffrey Rose. This paradox suggests that alcohol-related problems in a population stem more from moderate drinkers than from heavy drinkers because of the sheer numbers of moderate drinkers, even though these drinkers are individually at lower risk of adverse outcomes than the much smaller group of heavier drinkers.

A major implication of the prevention paradox is that there may be substantial benefits to overall public health if health care professionals implement secondary prevention interventions into routine practice to identify and intervene to reduce alcohol risk and harm in the population, but there will be relatively small health gains to specific individuals (Botelho and Richmond, 1996).

2.7 Brief alcohol intervention

Intervention means “to come between” (Latin *inter venire*) what otherwise would have happened. The purpose of an intervention is “to maintain, enhance, or interrupt a behaviour pattern or condition of living that is linked to improved health or to decreased risks for illness, injury, disability, or death” (Green and Kreuter, 1999).

Brief intervention (BI) emerged in the 1980s as a secondary prevention strategy for use in general health care settings (e.g. PHC) to provide early intervention, before or soon after the onset of alcohol-related problems. The aim is to moderate drinking rather than necessarily attaining complete abstinence (Moyer et al., 2002).

2.7.1 Definition of brief intervention

BI has been described as a time-limited, patient-centred counselling strategy that focuses on changing behaviour (Fleming and Graham, 2001). However, the BI term has been used flexibly by researchers to encompass a wide range of activities addressing alcohol, from simply asking about alcohol consumption or delivery of a single 5-minute session of simple advice, up to offering multiple sessions of counselling, accompanied by repeated follow-ups (Kaner et al., 2007). Hence, BI should not be regarded as a homogeneous approach, but as a model of multiple interventions varying in duration, content, targets of intervention, and professionals responsible for their delivery (Heather, 1995). BI can be based on a number of different therapeutic approaches, although motivational interviewing has become increasingly popular (Vasilaki et al., 2006).

Two categories of BI should be distinguished, opportunistic and specialist BI. *Opportunistic* BI refers to interventions delivered to people who do not seek treatment for alcohol problems. Asking about alcohol consumption in such instances may be seen as the first step of a BI. *Specialist* BI refers to interventions delivered in specialist alcohol treatment settings where people seek treatment for alcohol problems. BIs for non-treatment-seeking patients are generally shorter and less structured than specialist (Heather, 1996).

To identify individuals who need a BI, some sort of screening must take place. This may involve anything from a simple question, for instance by a physician, to more systematic approaches such as using a health examination questionnaire. It has been suggested that the level of screening should take into consideration the patient population, whether the patients have co-occurring medical or psychiatric problems, performers' skills and interests, and the amount of time available (Fleming, 2004/2005).

2.7.2 Implementation of BI

A large number of randomised, controlled trials of BIs delivered to non-dependent, non-treatment-seeking patients in various health care settings have been conducted since the early 1980s. There is convincing evidence to support the effectiveness of BI at reducing hazardous and harmful alcohol consumption in patients seen in general health care settings such as PHC and emergency care facilities (Kaner et al., 2007).

In spite of a solid evidence base, diffusion of alcohol interventions in routine health care has been slow in many countries. Diffusion refers to the spread of ideas, concepts and practices within a social system, typically via communication and influence (Greenhalgh et al., 2005). Factors that affect professionals' reluctance to inquire about alcohol and/or provide BI have been studied in numerous quantitative surveys and qualitative interviews. The majority of this research has concerned the attitudes of physicians in PHC settings although a few studies have also involved nurses.

Multiple studies have revealed that health care professionals are reticent about raising the issue of alcohol with their patients (Cartwright, 1980; Hutchings et al., 2006; Johansson et al., 2002; Roche et al., 1991; Rush et al., 1995; Thom and Téllez, 1986; Weller et al., 1992). Many health care professionals have received little or no preparation for alcohol preventive work, either in their undergraduate education or continuing professional education (Anderson, 1985; Anderson et al., 2003; Beich et al., 2002; Clement, 1986; Roche et al., 1991). As such, health care professionals do not feel confident in their abilities to intervene with alcohol problems (Bruce and Burnett, 1991; Cartwright, 1980; Kaner et al., 1999; Lock et al., 2002; Rush et al., 1995; Wechsler et al., 1996). Moreover, health care professionals are sceptical as to the expected

effectiveness of counselling on alcohol issues (Aira et al., 2003; Bruce and Burnett, 1991; Kaner et al., 1999; Thom and Téllez, 1986; Weller et al., 1992).

Due to the perceived sensitivity of raising alcohol consumption issues, health care professionals generally find it difficult to bring up the topic of alcohol consumption with patients who are not seeking help for alcohol-related problems (Aira et al., 2003; Hutchings et al., 2006; Lock et al., 2002; Rush et al., 1995). Many health care professionals are afraid of provoking negative reactions and losing rapport with their patients (Aira et al., 2003; Lock et al., 2002; Weller et al., 1992).

Many studies have demonstrated that perceived lack of time constitutes a considerable barrier to health care professionals' work with alcohol issues (Beich et al., 2002; Bruce and Burnett, 1991; Kaner et al., 1999; Rush et al., 1995). Concern has also been expressed about inadequate materials, including alcohol questionnaires and self-help booklets. Health care professionals also cite a lack of structured office systems to facilitate screening and interventions (Aalto et al., 2001; Aira et al., 2003). While the lack of financial incentives has often been described as being less of an obstacle than most other factors, there are also studies that show that poor reimbursement for alcohol-preventive work constitutes a barrier for health care professionals (Hutchings et al., 2006; Rapley et al., 2006).

2.8 Alcohol prevention in Swedish health care settings

The Swedish national alcohol action plan up to 2010 gives high priority to the prevention of risk drinking through interventions delivered in health care settings. Health services have a key role in public health work through their specific expertise, authority, and extensive contacts with people. According to a government bill, health care should initiate and support health promotion and disease prevention efforts at individual and group levels and develop methods so that preventive measures are naturally integrated into care. Disease prevention involves efforts to stop the onset of a specific illness or condition, such as the harmful effects of drinking or alcohol dependence (Breslow, 1999). Health promotion is a broader concept than disease prevention and can be seen as a set of activities with the purpose to prevent disease and ill health, to educate people to a healthier lifestyle, and to address

the wider social and environmental factors which influence people's health. Health promotion is not just the responsibility of the health sector (Naidoo and Wills, 2002; WHO, 2009).

Swedish health care is publicly funded, i.e. residents are insured by the state, with equal access for the entire population. The provision of health services in Sweden is primarily the responsibility of the 21 county councils across Sweden. County councils are relatively independent regional-level administrative organisations with elected council representatives and a right to levy income tax. According to the Swedish health and medical care policy, every county council must provide residents with good-quality health services and medical care and work toward promoting good health in the entire population (Swedish Institute, 2007).

The health care system plays a critical role in the Swedish parliament's national action plan up to 2010. The aim is to protect public health by achieving reductions in alcohol consumption and limiting the negative physical, psychological, and social effects of alcohol in the population (Swedish Government, 2005). An integral part of the action plan is the Risk Drinking Project, which was launched in 2004 by the Swedish government to facilitate more alcohol prevention efforts in routine health care. The objective is that alcohol "shall be a natural element in daily health care and welfare work, and integrated in such a way that it reflects alcohol's importance as the source of different injuries and illnesses" (FHI, 2008). To achieve this goal, health care professionals receive training in interventions aimed at addressing alcohol use by patients, e.g. the use of screening questionnaires and motivational interviewing techniques.

2.8.1 Primary health care

PHC is the first tier of the health services provided in local community settings through health care generalists. PHC has been highlighted as a key setting in many health promotion policies (Naidoo and Wills, 2002). PHC is also an important setting for alcohol prevention in Sweden, as most people have contact with PHC professionals and the services enjoy high status and credibility among the general public (Kaner et al., 2007). Approximately 70% of the Swedish population visit PHC each year for a number of health-related

problems (Yearbook of Health and Medical Care, 2002), many of which may be alcohol-related (Thakker, 1998).

Research indicates that patients generally have positive views about discussing alcohol with PHC professionals (Aalto et al., 2002; Aalto and Seppä, 2004; Johansson et al., 2005; Miller et al., 2006; Richmond et al., 1996; Wallace et al., 1987; Wallace and Haines, 1984). However, it has also been shown that PHC professionals rarely ask patients about alcohol consumption or provide BI to non-seeking, non-dependent patients (Nilsen et al., 2008b).

2.8.2 Occupational health services

The provision of OHS aims to protect and promote workers' health and safety, as well as improving conditions of work and the work environment (Fedotov, 2005). OHS have been endorsed by the WHO (1995, 2007) and the International Labour Organization as a prescription for a healthier, happier, and more productive workforce (ILO, 2006a,b; Lim, 2005). However, despite the efforts undertaken by governments and legislators to expand OHS to working populations, such services cover only 20–50% in most industrialised countries and only 5–10% in many developing countries (Fedotov, 2005). However, OHS coverage in Sweden is considerably higher, as nearly three-quarters (2.6 million) of the employed workforce have access to OHS (Statskontoret, 2001). About one-third of the workforce (32%) consulted OHS in 2001 (Yearbook of Health and Medical Care, 2002). A large proportion of the workforce belongs to the age categories that consume most of the alcohol in Sweden (Leifman, 2003).

Swedish employers are not required by law to organise and pay for OHS (Statskontoret, 2001). Still, there are many incentives for organisations and companies to consult OHS for alcohol-preventive work since employees' alcohol consumption can lead to increased risks for injuries, health problems, and absenteeism, as well as negative effects on the working atmosphere. These consequences may lead to increased costs for both employers and employees (Bennett and Lehman, 1998; Harvey et al., 1992; Hermansson et al., 2002; Jenkins et al., 1992; Marmot et al., 1993; Webb et al., 1994).

There is a paucity of research into OHS-conducted alcohol interventions or those concerning other lifestyle issues (Hulshof et al., 1999; Kääriäinen et al.,

2001; Nilsson et al., 2001; Verbeek et al., 2004). However, the few studies that have been conducted show that it is feasible to carry out some form of alcohol screening and provide BI within OHS (Hermansson et al., 2000; Hermansson et al., 1998). Many alcohol researchers and authorities have suggested that OHS is in fact an opportune setting for increased alcohol intervention activities (Ames et al., 2000; Fauske et al., 1996; Kuokkanen and Heljälä, 2005; Richmond et al., 1996).

2.8.3 Maternity health care

Alcohol-related issues are highly relevant to MHC since alcohol use during pregnancy is one of the leading preventable causes of birth defects, mental retardation, and neurodevelopmental disorders (Astley, 2004; Goodlett et al., 2005; Hawks, 1993). A number of studies have shown that as maternal alcohol intake increases, there is a corresponding increase in the adverse effects observable in the fetus (Stratton et al., 1996). There is no universally defined safe level of prenatal alcohol use; even fairly small amounts of alcohol have been found to cause adverse neurobehavioural effects on fetuses (Hankin, 2002; Kalberg and Buckley, 2007). Thus, early identification of alcohol use and interventions to modify drinking habits in MHC settings are highly desirable (Chang et al., 2005; Ebrahim et al., 1998; Russell et al., 1994).

A comprehensive system of public MHC centres in Sweden provides care for virtually all pregnant women. Standard maternity care in Sweden involves a meeting between a midwife and the pregnant woman some time during week 10–12 of the pregnancy. This is an hour-long meeting (longer in some regions) which addresses the woman's health status and includes a question about the frequency of current drinking. The reply is marked in the woman's medical record, and she is recommended to abstain from drinking during the pregnancy. As a result of the present efforts of the Risk Drinking Project, this first consultation is now held in weeks 6–8 in many regions of Sweden, so that advice on alcohol consumption is given earlier. Further meetings between the midwife and pregnant woman are held in weeks 20 (for those expecting their first child), 25, 29, 30–32, 37, and 39. The meeting in week 30–32 also includes a question on alcohol habits during the pregnancy. Women with a previous disease or a complicated pregnancy and delivery also meet a physician. This overall procedure is common practice in Sweden (Nilsen et al., 2008a).

3 IMPLEMENTATION THEORY

This chapter provides a theoretical framework for understanding the factors that influence the outcome of implementation processes. Implementation research has identified four types of determinants of successful adoption of an innovation: (1) an idea, concept or practice that is perceived as new by an individual or other unit of adoption, such as the provision of BI to address alcohol use by non-dependent, non-treatment-seeking general health care patients; (2) the characteristics of the innovation; (3) the behaviour of health care professionals who adopt (or reject) the innovation; (4) the inner organisational context in which these innovations are implemented; and the broader outer context in which organisations operate. The interactions between these determinants influence the adoption and rejection of innovations (Greenhalgh et al., 2005).

3.1 Characteristics of the innovation

Ideas, concepts, and practices are adopted by individuals at different rates. Rogers's Diffusion of Innovations Theory, first described in 1962, describes the key attributes of innovations that influence their rate and extent of adoption by individuals (Rogers, 2003):

- Relative advantage
- Compatibility
- Complexity
- Trialability
- Observability
- Reinvention

It should be noted that the sixth attribute, reinvention, was not added until several decades after the others (Rogers, 2003).

Rogers' innovation attributes are well established and have been found to be broadly consistent between studies. They have been slightly modified when applied to an organisational context because the individual adopter is not the

only unit of analysis to consider when innovations are adopted by organisations (this is also referred to as assimilation of innovations in the organisational context) (Greenhalgh et al., 2005).

3.1.1 Relative advantage

Relative advantage was defined by Rogers (2003) as the degree to which an innovation is perceived as being better than the innovation it supersedes. However, this definition must be adjusted in an organisational context depending on the nature of the innovation and who within the organisation is adopting it (Greenhalgh et al., 2005). It has been suggested that relative advantage can be expressed in terms of economic profit within an organisational context (Rogers and Shoemaker, 1972).

3.1.2 Compatibility

Compatibility of an innovation is the degree to which an innovation is consistent with a person's socio-cultural values and beliefs, previously introduced ideas, and the need for the innovation (Rogers, 2003). In an organisational context, there is the additional dimension of compatibility with the organisation's values, routines, procedures, and practices (Klein and Sorra, 1996). It has increasingly been recognised that compatibility should not be seen as a fixed attribute of the innovation, but should instead be viewed in terms of the *fit* between the innovation and the organisation (Greenhalgh et al., 2005).

3.1.3 Complexity

Complexity is the extent to which an innovation is perceived as relatively difficult to understand and use. Essentially, the simpler the innovation, the more likely it is to be adopted (Rogers, 2003). An important distinction relevant to the organisational context is the difference between the complexity of the innovation and the complexity of its implementation. An innovation might be simple to understand or use, but difficult to implement (Agarwal et al., 1007).

3.1.4 Trialability

Trialability was defined by Rogers (2003) as the degree to which an innovation may be experimented with on a limited basis. Other researchers have defined it as the ability to refine, elaborate, and modify an innovation according to the needs and objectives of the implementer, a definition which resembles Rogers' concept of reinvention. In an organisational setting, trialability and reinvention tend to be interlinked with adaptation to the context (Greenhalgh et al., 2005).

3.1.5 Observability

Observability refers to the degree to which the positive results of an innovation are visible to others. The more visible the results of an innovation, the more likely the innovation will be adopted and implemented (Rogers, 2003). In an organisational context, observability can be defined as the degree to which the results of using an innovation are visible to organisational members and external constituents (Meyer and Goes, 1988).

3.1.6 Reinvention

Reinvention is the extent to which an innovation can be changed or modified by the user in the process of adoption and implementation (Rogers, 2003). Researchers have suggested that the notion of reinvention in an organisational context should be replaced by one of mutual adaptation, i.e. the degree to which users refine both the innovation and the context in which it is used (Denis et al., 2002; Leonard-Barton and Sinha, 1993).

3.2 Health care professionals' behaviour

Clinical practice is a form of human behaviour and can be understood in terms of psychological theories that explain and predict how behaviour in a wide range of settings is initiated and maintained. While such theories are typically used to explain health-related behaviours (such as alcohol intake) at the patient level, they are increasingly applied for improved understanding and

prediction of health care professionals' behaviours in clinical settings (Armitage and Conner, 2000; Bonetti et al., 2006; Eccles et al., 2005, 2007).

Several empirically validated theories are relevant for achieving improved understanding of the potential factors that may yield increased alcohol-preventive activity in routine health care. The assumption is that interventions directed at health care professionals that target these factors have the greatest likelihood of success in influencing their behaviour (Bonetti et al., 2006). Five behaviour change theories are described:

- The Theory of Reasoned Action
- The Theory of Planned Behaviour
- Social Cognitive Theory
- Self-Determination Theory
- Stages of Change Theory

These theories have all been rigorously evaluated in various settings. They all explain behaviours in terms of factors that are amenable to change and they include non-volitional factors to account for the influence of individuals' perceptions of external factors on their behaviour (Walker et al., 2003).

3.2.1 The Theory of Reasoned Action

The Theory of Reasoned Action, developed by Fishbein and Ajzen (1975) posits behavioural intention as the proximal determinant of behaviour. Intention is defined as the motivation required to perform a particular behaviour. Therefore, the more one intends to perform a behaviour, the more likely is its actual performance. Intention is held to be determined by attitudes (positive/negative evaluation of the behaviour) and subjective norms (perception of social pressure).

3.2.2 The Theory of Planned Behaviour

The Theory of Reasoned Action was later extended by Ajzen and Madden (1986) with the Theory of Planned Behaviour, which added perceived behavioural control as a predictor of both intention and behaviour. Holding

intention constant, greater perceived control increases the likelihood that enactment of the behaviour will be successful.

Both the Theory of Reasoned Action and the Theory of Planned Behaviour have been widely applied to the understanding of many different types of behaviours. Research supports the use of both theories in the prediction of a range of behaviours. They have been found to account for about 30–40% of the variance in behavioural intentions and in behaviours (Armitage and Conner, 2000).

3.2.3 Social Cognitive Theory

Bandura's (1986) Social Cognitive Theory posits self-efficacy and outcome expectancies related to situation and action as the central determinants of behaviour. Self-efficacy relates to confidence in one's own ability to carry out a particular behaviour. Situation–outcome expectancies are based on the perception that some consequences are determined by the environment and are thus divorced from personal control. Action–outcome expectancies are likewise related to the belief that one's actions are instrumental to a particular outcome. Social Cognitive Theory therefore predicts that behaviours are more likely to be performed if one perceives control over the outcome, few external barriers, and confidence in one's own ability.

The theory has been used to predict a variety of behaviours, although the model typically accounts for a small proportion of variance in behaviour. The central self-efficacy component is typically the dominant predictor of behaviour (Armitage and Conner, 2000).

3.2.4 Self-Determination Theory

Unlike most social psychology theories that focus on variables that predict the initiation of behaviour, the Self-Determination Theory specifies motivational determinants that might be relevant to the maintenance of a behaviour. Developed by Deci and Ryan, (Ryan and Deci, 2000) the theory proposes that all behaviours can be placed along a continuum of relative autonomy (or self-determination), reflecting the extent to which a person endorses and is committed to what he or she is doing. At one end of this continuum is

behaviour that is motivated by external regulations, such as a person doing something simply because he has been told by someone in authority to do so, and at the other end are behaviours that are intrinsically motivated and perceived as exciting in their own right (Vansteenkiste and Sheldon, 2006). A considerable body of research suggests that more intrinsically motivated behaviours are done with greater care and quality, and are more stable and likely to be sustained (Markland et al., 2005).

A more self-determined behaviour is facilitated by a social context that provides structure, autonomy support, and involvement. With regard to the structural dimension, individuals need support to develop clear and realistic expectations about the personal advantages of adopting a behavioural change to formulate realistically achievable goals, to believe that they are capable of engaging in the appropriate behaviours, and receive positive feedback regarding progress. Autonomy support is associated with helping individuals recognise that they can exercise choice regarding their behaviour; involvement is concerned with the quality of the relationships between individuals, e.g. the extent to which individuals perceive that significant others are *genuinely* invested in them and their well-being (Markland et al., 2005).

3.2.5 Stages of Change Theory

Stage theories conceptualise behaviours as encapsulating several discrete stages. These theories suggest that people at different stages will behave in qualitatively different ways and that the interventions needed to move people closer to adoption of new behaviours will vary from stage to stage. The most widely applied stage theory is Prochaska and DiClemente's Stages of Change Theory (Prochaska et al., 1992).

The Stages of Change Theory posits that individuals progress through five distinct stages of change: pre-contemplation (no intention to change the behaviour in the foreseeable future); contemplation (consider making a change in the next six months); preparation (preparing to make a change); action (actively engaged in making a change); and maintenance (the change has been maintained for six months). While all individuals are held to move through these changes, it is assumed that the rate of progression will vary dramatically between individuals and behaviours. The theory emphasises the need to

match interventions to the stage of readiness of individuals (Prochaska et al., 1992).

The Stages of Change Theory has received considerable support in the research literature and has been used with multiple behaviours (Armitage and Conner, 2000). It has been applied to understand health care professionals' behaviour in relation to delivering BI, identifying three categories of professionals: those who are not thinking about using BI (precontemplators); those who are thinking about providing BI (contemplators); and the professionals who are intermittently using BI (intermittently in action) (Botelho and Richmond, 1996).

3.3 Inner context

Although it is ultimately the individual who decides whether or not to adopt and use an innovation, e.g. conduct alcohol-preventive interventions for hazardous and harmful drinkers, it is important to account for the inner organisational context in which this work takes place. Furthermore, it is also important that the characteristics of an innovation are not studied in isolation from the adopting organisation. It is neither the fixed attributes of the innovation nor the organisation that predict the adoption of innovations in organisations, but rather the *fit* between them (Greenhalgh et al., 2005; Klein and Sorra, 1996).

A number of organisational determinants have been consistently found to have a positive association with innovativeness (Greenhalgh et al., 2005).

Larger-sized organisations are associated with more innovativeness than smaller organisations (Baldridge and Burnham, 1975; Castle, 2001; Damanpour, 1991, 1992, 1996; Goes and Park, 1997; Kimberly and Evanisko, 1981; Meyer and Goes, 1988; Nystrom et al., 2002). Organisational size is typically measured using personnel indicators (such as the number of employees) and non-personnel indicators (for example, financial resources). Large organisations are generally better equipped to hear about, adopt, and implement innovations than smaller organisations. However, it has been suggested that it is not size itself that is the factor of interest, but the increasing specialisation and functional differentiation associated with organisational size. A functionally differentiated organisation creates multiple interest groups

and many different demands for innovations. However, there are limits to differentiation: the problems of coordination and control are exacerbated when organisations are formally divided into larger numbers of functional units (Greenhalgh et al., 2005).

Successful adoption of innovations is more likely if innovations receive the support of influential leaders in the organisation (Champagne et al., 1991). There is a positive association between managerial attitudes towards change and organisational innovation and a negative association with centralisation of decision-making (Baldrige and Burnham, 1975; Champagne et al., 1991; Damanpour, 1991; Kimberly and Evanisko, 1981; Meyer and Goes, 1988; Nystrom et al., 2002; Van de Ven, 1986).

The association between organisational climate and innovativeness has received considerable attention. Constructs such as “receptive context” (Greenhalgh et al., 2005) and “absorptive capacity” (Cohen and Levinthal, 1990; Zahra and George, 2002) have been developed to study the different aspects of organisational climate that may impact on adoption. Some of the factors that have been identified as important influences on the adoption and use of innovations in organisations include good managerial and clinical relations, simplicity and clarity of goals and priorities, availability of visionary key people in critical posts leading change, perceived general support for innovation, and “participative safety”, i.e. involvement in decision-making is motivated and reinforced in an interpersonally non-threatening environment (Greenhalgh et al., 2005).

A major challenge to the diffusion of innovations within and between organisations is knowledge utilisation. The existence of strong evidence does not in itself lead to diffusion or implementation (Greenhalgh et al., 2005). Research has identified a number of conditions that are critical for the generation, dissemination, and use of knowledge, including a shared vision of the organisation’s goals and the ways in which learning can contribute to these ends; leaders who ensure that opportunities, resources, incentives, and rewards support learning; and an organic structure with diverse communication channels that efficiently transfer information across organisational boundaries (Barnsley et al., 1998; Dopson et al., 2002).

3.4 Outer context

The diffusion and adoption of innovations are also dependent on the wider extra-organisational (outer) context, which includes society's laws, regulations, distribution of knowledge and resources (Van de Ven, 1986). Implicit rules or standards in the form of social norms are also important in influencing behaviours. Social norms are inferred by individuals from the behaviour they observe or expectations they assume in their social milieu. These norms can be descriptive, i.e. how most people behave, or injunctive, i.e. how others think one should behave (Lewis et al., 2002).

4 AIMS

4.1 Overall aim

The aim of this thesis was to investigate the practice, attitudes, skills, knowledge, and education concerning alcohol-preventive work, barriers for this work, and factors that could facilitate increased alcohol-preventive activity among health care professionals in primary health care, occupational health services, and maternity health care. This thesis is developed around four studies, aimed at answering specific study objectives related to the overall aim.

4.2 Specific aims of the four studies

I. Asking patients about their drinking – A national survey among primary health care physicians and nurses in Sweden

The aim of the first study was to investigate the extent to which Swedish PHC professionals discuss alcohol issues with their patients; their reasons for and against addressing alcohol issues; their perceived importance of these issues; and factors that they believe could facilitate increased alcohol-preventive activity among the PHC professionals.

II. Towards increased alcohol intervention activity in Swedish occupational health services

The aim of study II was to investigate the extent to which Swedish OHS physicians and nurses discuss alcohol issues with their patients; their reasons for and against addressing alcohol issues; their amount of education in handling risky drinking; and factors that these health care professionals believe could facilitate increased alcohol-preventive activity among OHS professionals.

III. Alcohol prevention activity in Swedish primary health care and occupational health services

The aim of study III was to investigate the alcohol-preventive activity in Swedish OHS and PHC in relation to education in handling risky drinking and perceived skills and knowledge in alcohol issues by the physicians and nurses in these two settings.

IV. Addressing alcohol in Swedish maternity health care

The aim of study IV was to evaluate how much education midwives in Sweden have undertaken to help them assess alcohol intake during pregnancy and what tools they use to identify women who may be at risk of drinking during pregnancy.

5 MATERIALS AND METHODS

This chapter describes the materials and methods of the four studies comprising the thesis. The details of the study settings and participants are provided, followed by a description of the research methodology, i.e. the overall approach to studying a topic, and the research method, i.e. the tools used to gather data. The process of collecting the data is described. The chapter ends with information about the analysis of the data.

5.1 Study participants

The four papers included in this thesis investigated different aspects of alcohol-preventive work in three settings: PHC, OHS, and MHC. The target populations included all currently active physicians and nurses in PHC in Sweden, all currently active physicians and nurses in OHS in Sweden, and all currently active midwives in MHC in Sweden.

Only PHC nurses who have the authority to issue prescriptions were included. These nurses are registered with the Board of Social Security and Welfare, which provides a complete listing. We therefore assumed that this would yield the most precise sample.

5.2 Research methodology and method

A research project is built on the foundation of its research questions and aims. The research methodology and methods follow from the questions and aims (Dawson, 2007; Punch, 1998). A quantitative research methodology was considered appropriate for this project in order to investigate different aspects of the health care professionals' alcohol-related work. Quantitative research deals with quantities and relationships between attributes. Quantitative research is appropriate when there is pre-existing knowledge, which permits the use of standardised data collection methods such as a survey questionnaire (Bowling, 2002).

A total population questionnaire survey by mail was deemed the most suitable research method since the objective was to obtain a comprehensive view of various aspects of the alcohol-preventive work among all currently active physicians and nurses in PHC and OHS and all currently active midwives in MHC in Sweden. A questionnaire was considered feasible because factors that affect alcohol-preventive activity in general health care settings have been extensively studied since the late 1970s, thus making it possible to formulate questions and response items. The survey was descriptive and cross-sectional, intended to describe the population at one point in time (Bowling, 2002).

The questionnaires were constructed by a team of Swedish researchers and clinicians participating in the Primary Health Care European Project on Alcohol (PHEPA). An experienced OHS researcher and an experienced midwife, both project managers in the Risk Drinking Project in Sweden, also participated in the construction of the questionnaires.

The PHC and OHS questionnaires each consisted of 23 questions, covering knowledge, attitudes and management of alcohol issues in these two settings (please see appendix A, B and C). The questions were partly based on the Swedish version of The WHO Collaborative Study Questionnaire (Geirsson et al., 2005; Kaner et al., 1999), with a considerable amount of re-drafting and modification.

The MHC questionnaire consisted of 25 questions concerning work with alcohol-related issues, including questions pertaining to alcohol and pregnancy, identification of women with risk consumption of alcohol, and action after identifying women with risk consumption (please see appendix D).

5.3 Data collection

The PHC and OHS questionnaires (studies I, II, and III) were sent out from October 2005 to February 2006 to 3845 physicians and 5677 nurses in PHC and 585 physicians and 1105 nurses in OHS, and the MHC questionnaire (study IV) was sent to 2106 midwives in March to April 2006. The questionnaires were accompanied by a covering letter that explained the rationale for the survey. A written reminder was sent to all participants two weeks after the initial mailing and a second reminder was sent two weeks later.

The addresses for physicians and nurses in PHC and midwives in MHC were obtained from a private company, Cegedim, which specialises in supplying addresses in the health services field and claims to reach 95% of all addresses. The OHS addresses were obtained from the Swedish Association of Occupational Health Physicians and the Swedish Association of Occupational Health Nurses.

Cegedim's sources of addresses for physicians and nurses are the Board of Social Security and Welfare and the professionals themselves. It is estimated that around 80% of all nurses have the authority to issue prescriptions and the majority of these are working in PHC. We tried to avoid sending the questionnaire to nurses other than those working in PHC.

5.4 Data analysis

Table 3 provides an overview of the study variables used in studies I–IV, including details of which response items were included in the questionnaire, how these items were defined in the analyses, and in which papers the variables were used.

Table 3: Overview of the study variables used in the four studies.

Variables	Response items	Defined in analysis	Study
Years in practice	<1 years 1–2 years 3–5 years 6–10 years 11–20 years >20 years	≤2 years 3–5 years 6–10 years 11–20 years >20 years	I–IV
Location of the unit	Rural-population area Medium-sized city Major city ^a		I–IV
Amount of education in handling risky drinking (aside from their regular basic education)	None <4 hours Half day 1–2 days 3 days >3 days	None Half day or shorter 1–2 days 3 days or more	I–IV
Wish for further education in handling risky drinking	None <4 hours Half day 1–2 days 3 days >3 days	None Half day or shorter 1–2 days 3 days or more	II

Variables	Response items	Defined in analysis	Study
Frequency with which professionals asked patients about alcohol and other lifestyle issues (activity)	Five-point Likert scale ranging from "always" to "never"	"Frequently" (combined "always" and "often") "Infrequently" (combined "occasionally" and "seldom") "Never"	I-III
Perceived importance of identifying and offering advice to patients with risk consumption (attitudes)	Four-point Likert scale ranging from "very important" to "not so important"		I-II
Factors that could facilitate increased alcohol intervention activity (nine statements)	Four-point Likert scale from "strongly agree" to "not agree at all" with an additional "I don't know"	The options "strongly agree" and "somewhat agree" were combined into an "agree category"	I-IV
Perceived competence in achieving change in patients' alcohol habits (skills)	Four-point Likert scale from "very skilful" to "not particularly skilful"	Used in some of the analyses: "skilful" (combined "very skilful" and "moderately skilful") "not very skilful" (combined "somewhat skilful" and "not particularly skilful")	III
Perceived knowledge concerning providing advice to patients with risky alcohol consumption (knowledge)	Four-point Likert scale from "very knowledgeable" to "not particularly knowledgeable"	Used in some of the analyses: "knowledgeable" (combined "very knowledgeable" and "moderately knowledgeable") "not very knowledgeable" (combined "somewhat knowledgeable" and "not particularly knowledgeable")	III
Reasons for addressing alcohol issues	Questionnaire responses Laboratory answer report ^a Patient's own request Part of my routine ^b Patient has alcohol related symptoms ^b Part of the mission ^c Client's or employer's suspicion of alcohol problems ^c Clinical relevance ^c Other ^d		I-II
Reasons against addressing alcohol issues	Lack of time Would not have an effect Uncertain how to ask Uncertain how to give advice Potentially negative patient response Uncertain where to refer the patient		I-II
Perceived knowledge about the risks associated with drinking during pregnancy	Excellent Good Fair Poor		IV

Variables	Response items	Defined in analysis	Study
Perceived knowledge concerning the detection of pregnant women with risk consumption before pregnancy	Excellent Good Fair ^a Poor		IV
Patient encounters per week	0–19 20–39 40–59 ≥60		I–IV
Use of questionnaire to assess risky alcohol consumption	Yes No No, but of other professional		II
If a questionnaire is used, specify which	AUDIT CAGE MAST "The health profile" (a simple lifestyle instrument)		II
Use of questionnaire for assessment of pregnant women's alcohol intake before the pregnancy	Yes No, I assess this in another way No, I do not assess this at all		IV
Action taken when identifying a pregnant women with risk consumption before pregnancy	Start counselling Inform about health consequences of risky drinking Refer to other facility outside MHC Refer to other professional(s) for counselling with the woman		IV
Age	Continuous	≤45 years 46–50 years 51–55 years 56–60 years ≥61 years	I–IV
Sex	Male Female		I–IV
Professional category	Physician Nurses		I–III

^a Not relevant for PHC nurses

^b Relevant only for PHC professionals

^c Relevant only for OHS professionals

^d Relevant only for PHC nurses

5.4.1 Studies I and II

The five main variables analysed in studies I and II were: (1) activity (frequency of addressing the issues of alcohol, smoking, physical activity,

weight, and stress with patients); (2) perceived importance of identifying and offering advice to patients with risk consumption; (3) reasons for addressing alcohol issues; (4) reasons for *not* addressing alcohol issues; (5) factors that could facilitate increased alcohol intervention activity. Furthermore, education (amount of training in handling risky alcohol consumption) and the various types of questionnaires used were also analysed in study II.

Studies I and II used the same six background variables in the analysis: professional category; sex; age; years in practice; patients per week; and location of unit. Study I also analysed education as a background variable; study II included four additional variables: ownership structure; request for further education; questionnaire use; and type of questionnaire used to assess alcohol intake.

SPSS software (version 14.0) was used for statistical analyses in studies I and II. The chi-squared test was used for group comparisons. Differences in proportions between groups were tested (two-sided test, alpha 0.05) with Bonferroni adjustment for multiple tests for all pair-wise comparisons within a row.

5.4.2 Study III

Study III analysed four main variables: activity (frequency of addressing the alcohol issue with patients); education (amount of training in handling risky alcohol consumption); skills (perceived competence in achieving change in patients' alcohol habits); knowledge (perceived knowledge concerning providing advice to patients with risky alcohol consumption). Six background variables were included in the analysis: professional category; sex; age; years in practice; patient encounters per week; and location of the PHC or OHS unit.

Differences in proportions between groups were tested (two-sided test) with Bonferroni adjustment for multiple tests for all pair-wise comparisons within a row. Stepwise backward logistic regression was used to estimate the relationship between activity (frequency of addressing the issue of alcohol; frequently was coded as 1 and infrequently was coded as 0) and the independent variables: sex; age; years in practice; patient encounters per week; location of the PHC or OHS unit; skills; knowledge; and education. These analyses were adjusted for influences between the independent variables. A

separate analysis was conducted for each professional category. The *p*-value for removing was 0.10. Interaction terms were also tested but these were not significant. The odds ratios (OR) and 95% confidence intervals (CI) that resulted from the logistic regression analyses indicate the effects of the predictor variables after controlling for all other variables in the equation/model. SPSS software (version 15.0) was used for statistical analyses.

5.4.3 Study IV

Six main study variables were analysed in study IV: knowledge about the risks associated with drinking during pregnancy; knowledge concerning detection of pregnant women with risk consumption before pregnancy; use of questionnaires for assessment of pregnant women's alcohol intake before the pregnancy; practice when identifying a pregnant women whose pre-pregnancy alcohol consumption is considered risky; factors that could facilitate increased alcohol intervention activity (agreement with nine statements); and amount of education in handling risky drinking. Five background variables were included in the analysis: sex; age; years in practice; number of meetings with pregnant women per week; and location of the MHC unit.

SPSS software (version 15.0) was used for statistical analyses. Differences in proportions between groups were tested (two-sided test, alpha 0.05) with Bonferroni adjustment for multiple tests for all pair-wise comparisons within a row.

6 MAIN RESULTS

In this chapter, the results of the four studies of the thesis are presented in abbreviated form. The chapter begins with information on the response rates for the questionnaires used to obtain the data for the studies. The results are then given for studies I, II, and III pertaining to PHC and OHS. The chapter ends with the results from study IV concerning different aspects of alcohol preventive work by MHC midwives.

6.1 Response rates

A total of 13 318 questionnaires were despatched to physicians and nurses in PHC (9522), physicians and nurses in OHS (1690), and midwives in MHC (2160) within Sweden. Of these, 7177 were returned, yielding an overall response rate of 54%.

Table 4 provides details of the response rates for the different professional categories in the three settings.

We excluded 217 PHC nurses from the analyses because they worked only with children and/or currently did not work as PHC nurses. Another 329 PHC nurses were excluded because they did not have direct patient contact. One hundred and eighty-five midwives were excluded because they did not work in an MHC setting. Most of these midwives worked in adolescent health services.

Table 4: Response rate details

Professional categories and settings	Number of questionnaires sent	Number of questionnaires returned	Response rate %	Number of questionnaires analysed
Physicians PHC	3845	1821	47	1790
Nurses PHC	5677	3125	55	2549
Physicians OHS	585	313	54	309
Nurses OHS	1105	759	69	757
Midwives	2106	1159	55	974
Total	13318	7177	54	6379

6.2 PHC and OHS (studies I, II, and III)

Studies I and II investigated different aspects of the frequency with which PHC (study I) and OHS (study II) professionals addressed alcohol and other lifestyle issues (smoking, exercise, weight, and stress); reasons for and against addressing alcohol; and factors that could facilitate increased alcohol intervention activity. Study III investigated PHC and OHS professionals with regard to their perceived skills and knowledge of alcohol-related issues and the amount of education in handling risky drinking they had received. Furthermore, alcohol-preventive activity by professionals working in PHC and OHS was examined and the relationship between this activity and their skills, knowledge, and professional education about risky drinking was explored.

6.2.1 Alcohol prevention activity

OHS professionals were more active than PHC professionals in initiating discussions about alcohol with their patients ($p < 0.001$), with 85% of the OHS nurses and 70% of the OHS physicians frequently (always or often) addressing alcohol issues with their patients. The corresponding results for PHC professionals were 50% of the physicians and 28% of the nurses.

Figure 5 illustrates the proportion of professionals in PHC and OHS who stated that they frequently (always or often) initiated alcohol and other lifestyle issues with patients. Both physicians and nurses in PHC stated that they discussed alcohol less frequently than all other lifestyle issues investigated. Nurses in OHS addressed all lifestyle issues to a high degree, with the highest frequency noted for physical activity and the lowest frequency for alcohol. Stress was the topic most frequently addressed by the OHS physicians, whereas discussions about alcohol were initiated least frequently.

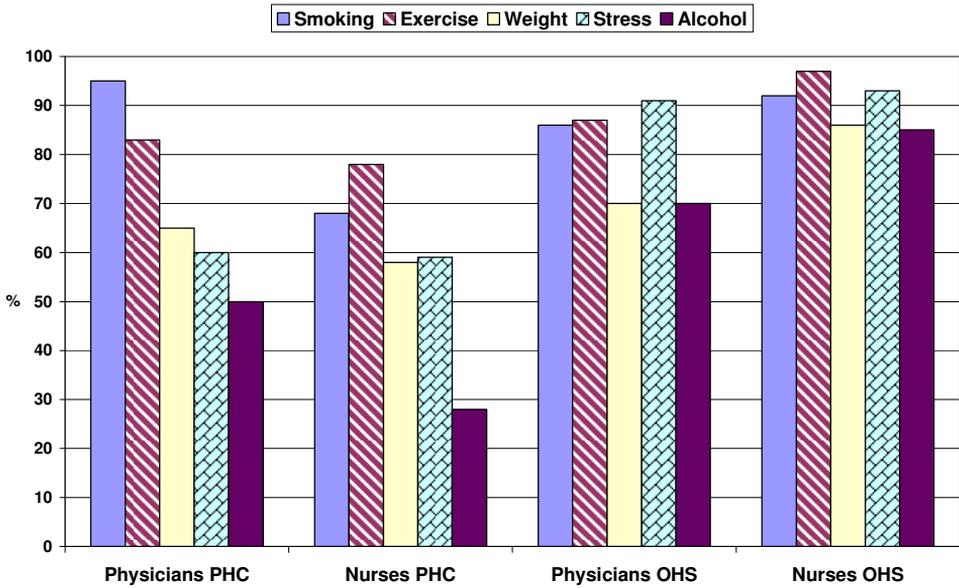


Figure 5: Proportion of professionals in PHC and OHS who frequently^a addressed alcohol and other lifestyle issues with patients

^a Answer options “always” or “often”

6.2.2 Reasons for addressing alcohol issues

Table 5 identifies the reasons for health care professionals addressing alcohol issues with patients. The most commonly stated reasons in PHC settings, from both physicians and nurses, was that addressing alcohol issues was part of their normal routines or that the health care professionals had reason to believe that the patient in question had alcohol-related symptoms. For professionals working in OHS, the most stated reasons for initiating discussion about alcohol were clinical relevance (physicians) and because of patient responses to health questionnaire items (nurses).

Table 5: Reasons for addressing alcohol issues with patients, %

	PHC ^a		OHS ^b	
	Physicians <i>n</i> =1789	Nurses <i>n</i> =2439	Physicians <i>n</i> =357	Nurses <i>n</i> =854
Part of my routines	46	36	–	–
Patient had alcohol-related symptoms	35	41	–	–
On the basis of a laboratory report	17	–	17	11
On the basis of questionnaire responses	1	6	8	73
Other	–	7	–	–
Part of the mission	–	–	8	18
Client's or employer's suspicion of alcohol problems	–	–	22	14
Patient's own request	1	10	4	4
Clinical relevance	–	–	57	14

^a Only one option could be chosen

^b Several options could be chosen

6.2.3 Reasons for not addressing alcohol issues

Table 6 displays the most common reasons given by the professionals for *not* discussing alcohol use by patients, despite clinical indications that a patient's symptoms could be associated with alcohol. Both physicians and nurses in PHC stated that lack of time was the most important reason for not addressing alcohol issues. Compared with PHC professionals, much smaller numbers of OHS professionals identified situations in which the use of alcohol would not be raised with their patients.

Table 6: Common reasons for not addressing patients' alcohol use, %

	PHC ^a		OHS ^b	
	Physicians <i>n</i> =1386	Nurses <i>n</i> =1910	Physicians <i>n</i> =309	Nurses <i>n</i> =757
Lack of time	64	36	9	8
Would not have an effect	10	7	2	2
Uncertain how to ask	4	24	0	7
Uncertain how to give advice	2	11	0	2
Potentially negative patient response	15	17	6	5
Uncertain where to refer the patient	6	6	0	1

^a Only one option could be chosen

^b Several options could be chosen

6.2.4 Factors that could facilitate increased alcohol intervention activity

Table 7 shows the extent of agreement with statements pertaining to factors that could facilitate increased alcohol intervention activity, as expressed by PHC and OHS professionals. In general, physicians and nurses in both PHC and OHS settings agreed to a high degree with the statement that provision of more knowledge about counselling techniques for use when alcohol-related symptoms are evident in patients could facilitate increased alcohol intervention activities.

Table 7: Agreement with statements pertaining to factors that could facilitate increased alcohol intervention activity, %

Statements	PHC		OHS	
	Physicians	Nurses	Physicians	Nurses
More knowledge about how alcohol influences health	45	84	39	77
Improved knowledge about simple pen-and-paper screening instruments	72	84	61	81
More knowledge about laboratory markers	37	-	39	69
More knowledge about conversational techniques for use when alcohol-related symptoms are evident	77	91	72	90
Greater supply of information materials	50	78	48	78
Improved professional team work regarding patients with risk consumption	73	87	54	70
Improved opportunities for referral to specialists	77	84	64	71
Clearer management-level decisions about our obligations to work with risk drinkers	63	88	-	-
More time devoted to health-oriented work	-	94	-	-
Provision of more screening and advice to patients with risk consumption	-	-	66	75
Provision of expanded facilities for alcohol screening and advice in our service	-	-	71	79

6.2.5 Skills

Table 8 provides the results pertaining to the perceived skills of PHC and OHS professionals in achieving changes in patients' alcohol habits. OHS

professionals estimated their skills in achieving change in patients' alcohol habits higher ($p<0.001$) than professionals in PHC. OHS physicians rated their skills highest, with 61% assessing themselves as very or moderately skilful. Fifty-five percent of the OHS nurses, 26% of the physicians in PHC and 14% of the PHC nurses estimated themselves as very or moderately skilful in helping patients change their alcohol habits.

Table 8: Distribution of professionals' estimation of their skills in achieving change in patients' alcohol habits, %

	PHC		OHS	
	Physicians <i>n</i> =1766	Nurses <i>n</i> =2474	Physicians <i>n</i> =301	Nurses <i>n</i> =739
Not particularly skilful	19	42	6	5
Somewhat skilful	55	44	33	39
Moderately skilful	24	12	49	46
Very skilful	2	2	12	9

6.2.6 Knowledge

Table 9 identifies PHC and OHS professionals' estimated knowledge concerning provision of advice to patients with risky alcohol consumption. OHS physicians were most likely to estimate themselves as very knowledgeable (37%) concerning provision of advice to patients with risky alcohol consumption, followed by OHS nurses (17%), and PHC physicians (16%). Only 4% of PHC nurses considered themselves very knowledgeable in this area, a finding which was significantly ($p<0.001$) different from the rates for the other professionals.

Table 9: Distribution of professionals' estimation of their knowledge concerning provision of advice to patients with risky alcohol consumption, %

	PHC		OHS	
	Physicians <i>n</i> =1779	Nurses <i>n</i> =2520	Physicians <i>n</i> =304	Nurses <i>n</i> =753
Not particularly knowledgeable	7	28	1	3
Somewhat knowledgeable	33	42	13	25
Moderately knowledgeable	44	26	49	55
Very knowledgeable	16	4	37	17

6.2.7 Education

Table 10 identifies the amount of continuing professional education undertaken by PHC and OHS professionals in handling risky drinking. Sixty-six percent of the OHS nurses, 58% of the PHC physicians, 57% of the OHS physicians, and 37% of the PHC nurses said they had participated in some education. PHC nurses were the group with the highest proportion of professionals who had received no education in handling risky drinking ($p<0.001$).

Table 10: Distribution of amount of education undertaken by the professionals on handling risky drinking, %

	PHC		OHS	
	Physicians <i>n</i> =1756	Nurses <i>n</i> =2463	Physicians <i>n</i> =303	Nurses <i>n</i> =740
None education	42	63	43	34
Half a day or shorter	27	23	38	35
1–2 days	18	9	12	22
3 days or more	12	5	7	10

Significantly higher proportions of female physicians in both OHS ($p<0.05$) and PHC settings ($p<0.01$) stated that they lacked education on handling risky drinking compared with male physicians in the same settings (OHS males lacking education, 38%; females 53%) (PHC males 39%; females 46%).

6.2.8 Relationships between activity and knowledge, skills and education in handling risky drinking

Figure 6, Figure 7, and Figure 8 illustrate the relationships between health care professionals' self-assessed knowledge, skills, and professional education in handling risky drinking, related to their activity in addressing patient drinking. Overall, activity was positively associated with self-assessed skills, knowledge, and education for all professional categories in both OHS and PHC settings. Two exceptions were PHC physicians with education lasting half a day or less, who were less active than their colleagues lacking this education, and OHS nurses with 3 days or more of education in handling risky drinking, who were less active than OHS nurses with only 1–2 days education.

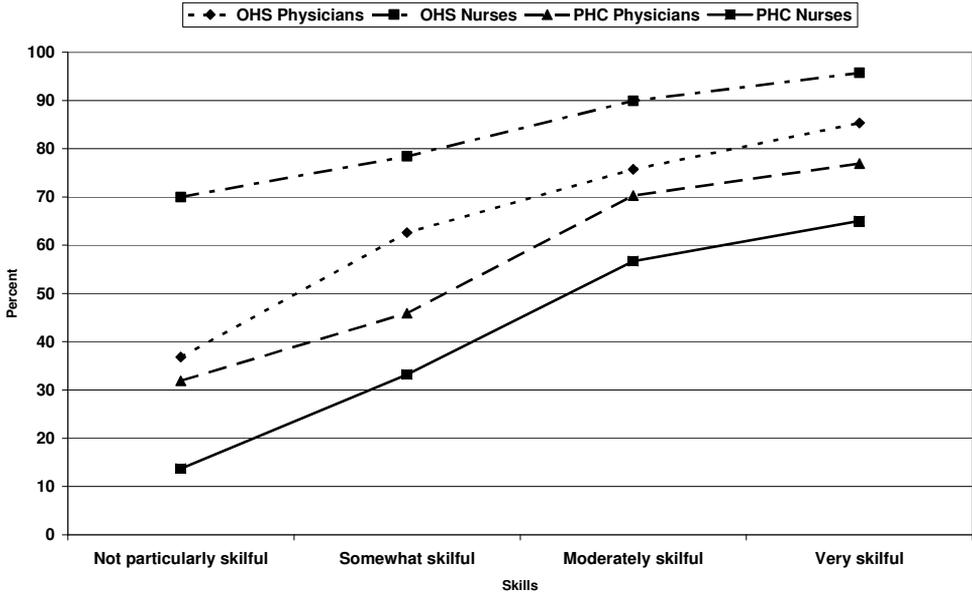


Figure 6: The relationship between reported skills and activity (proportion (%) who frequently (always/often) asked their patients about alcohol).

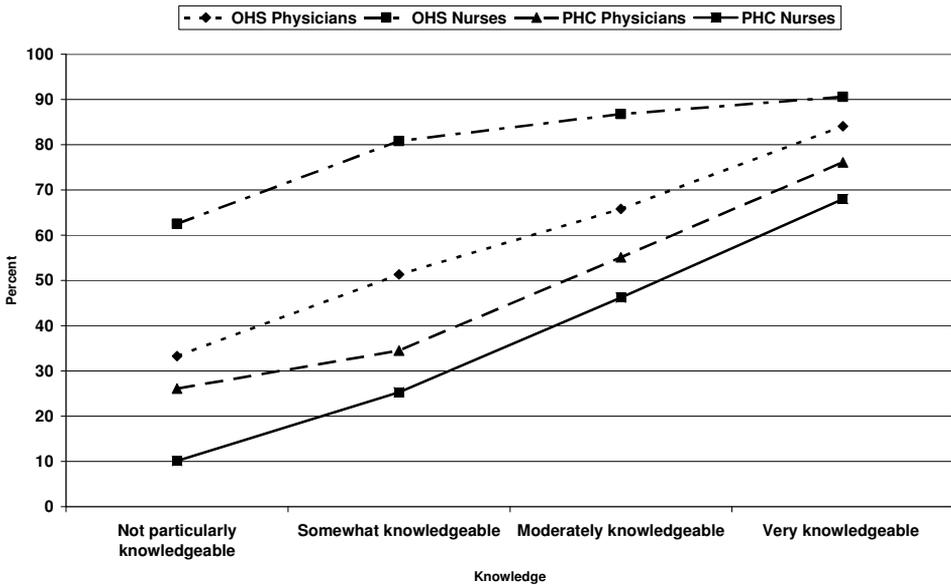


Figure 7: The relationship between reported knowledge and activity (proportion (%) who frequently (always/often) asked their patients about alcohol).

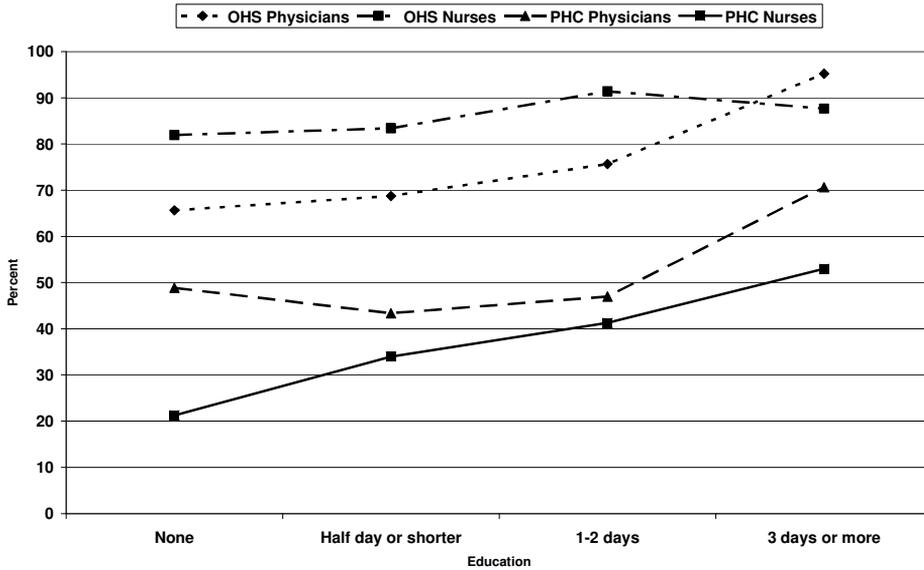


Figure 8: The association between education and activity (proportion (%) who frequently (always/often) asked their patients about alcohol).

Logistic regression analyses were conducted to adjust for influences between factors that predict the professionals' activity in addressing the alcohol issue with their patients. The following results are based on these analyses.

Female OHS physicians were twice as likely (OR 2.0) as male OHS physicians to ask patients about alcohol. OHS physicians who estimated themselves as very knowledgeable were 13 times (OR 13.3) more likely to ask patients about alcohol compared to those who described themselves as not particularly knowledgeable. It was seven times more common (OR 7.3) for OHS physicians who had acquired at least 3 days education to initiate alcohol discussions compared with those who lacked education. Because of the small number of physicians in OHS, the confidence intervals are wide.

Few significant associations were found between OHS nurses' activity and the predictor variables. OHS nurses aged 46–55 years initiated alcohol discussions more often than nurses 45 years or younger (OR 1.2). The OHS nurses who rated their skills in influencing patients' alcohol habits highest (very skilful) were 11 times more likely (OR 11.1) to ask patients about alcohol than nurses in OHS who considered themselves not particularly skilful.

Female PHC physicians were more likely (OR 1.7) than male physicians in PHC to ask patients about alcohol. PHC physicians who worked in larger population areas (>250 000 residents) were more likely (OR 1.8) than those working in less populated areas to ask patients about alcohol. PHC physicians who rated themselves as very skilful in influencing patients' alcohol habits and those who estimated themselves as very knowledgeable concerning provision of advice to patients with risky alcohol consumption were more likely to initiate alcohol discussions with their patients, compared with physicians who estimated themselves as less skilful and knowledgeable, respectively (very skilful OR 2.5; very knowledgeable OR 6.1).

Female PHC nurses were twice as likely (OR 2.4) to ask patients about alcohol than male nurses in PHC. PHC nurses who rated themselves as very skilful were 4 times more likely (OR 3.6) to address alcohol issues than those who considered themselves not particularly skilful. Nurses in PHC who believed they were very knowledgeable were about 8 times more likely (OR 7.6) to initiate alcohol discussions with patients compared to those who rated themselves as not particularly knowledgeable. PHC nurses with some education in handling risky drinking were more likely to ask patients about alcohol than those lacking such education (education consisting of half a day or shorter OR 1.3; 1–2 days OR 1.4; 3 days or more OR 1.4).

6.3 MHC (study IV)

Study IV investigated aspects of alcohol-preventive work by MHC midwives: their education in handling risky drinking, knowledge concerning risks associated with drinking during pregnancy and detecting risky drinkers; use of tools to assess alcohol intake; actions taken when identifying risky drinkers; and factors that could facilitate increased alcohol intervention activity.

6.3.1 Education

The vast majority MHC midwives responding to the survey had participated in continuing professional education in handling risky drinking. Almost one third (31%) had 3 days or more of education, 31% 1–2 days, 25% a half day or shorter and 12% had none education in handling risky drinking.

6.3.2 Knowledge

Nearly all midwives stated that they had excellent (25%) or good (69%) knowledge concerning the risks associated with drinking during pregnancy. However, they considered themselves less knowledgeable about identifying risky alcohol consumption by patients before pregnancies occurred, as 37% stated that their knowledge on this issue was fair and 3% rated their knowledge as poor.

6.3.3 Use of tools for alcohol intake assessment

Almost half of the midwives (49%) assessed women's alcohol intake before the pregnancy without using screening questionnaires. Of the 35% midwives who used a questionnaire for assessment, 77% used the AUDIT instrument. This instrument was developed by the WHO as a simple method of screening for excessive drinking and to assist in estimate alcohol consumption (Babor et al., 2001). Sixteen percent of the midwives stated that they did not assess the risk of their patients' pre-pregnancy alcohol consumption.

The use of questionnaires for assessment of pre-pregnancy alcohol intake was related to the amount of professional education midwives received in handling risky drinking. Midwives who had 3 days or more of education ($p<0.05$) were more likely to use questionnaires to assess patients' pre-pregnancy alcohol intake, compared to midwives who had received education lasting 2 days or less (no education 16%; half a day or less 26%; 1–2 days 35%; 3 days or more 51%).

6.3.4 Actions taken when identifying risky drinkers

Having identified a patient as having risky alcohol consumption before her current pregnancy, 58% of the midwives claimed that they would initiate a discussion with the woman about the risks associated with drinking during pregnancy to ascertain the woman's abstinence. In addition, 18% stated that they would inform the women about the potential health consequences of risky drinking during pregnancy, and 17% said that they would refer such a

woman to another specialist facility outside MHC, for example social services or an abuse treatment clinic.

Initiation of counselling by a midwife for a woman with risky pre-pregnancy consumption of alcohol was associated with the amount of professional education in handling risky drinking that the midwife had received. Midwives with 3 days or more of education in handling risky drinking were more likely to begin patient counselling in this situation ($p<0.05$) compared to those who had 2 days or less of such education (no education 47%; half a day or less 54%; 1–2 days 57%; 3 days or more 67%).

6.3.5 Factors that could facilitate increased alcohol intervention activity

Nearly two-thirds of the midwives (64%) strongly agreed that improved local guidelines on how to address alcohol use by expectant mothers could facilitate increased alcohol intervention activities. The majority of respondents also agreed about the need for more knowledge about conversational strategies that could be used when alcohol-related symptoms are evident in patients (61% strongly agreed), clearer national-level guidelines for working with risky drinkers (61%), and clearer management-level decisions about working with risky drinkers (61%).

7 GENERAL DISCUSSION

The four papers of this thesis have investigated alcohol-preventive activity and attitudes, knowledge, and skills concerning alcohol-related work, barriers to this work, and factors that could facilitate increased activity among health care professionals in PHC, OHS, and MHC. In this chapter, the results of the four studies and the potential for increased and/or improved alcohol-preventive activity are discussed. Implementation theory is applied for improved understanding of the factors that impact on the feasibility of providing alcohol interventions in general health care settings. Methodological considerations of the studies are addressed and the need for future research is outlined.

7.1 Alcohol-preventive activity, attitudes, skills, and knowledge

Alcohol-preventive activity varied considerably among the health care professionals in the PHC and OHS settings. Alcohol issues in PHC were addressed less often than all the other lifestyle issues, i.e. smoking, physical activity, overweight, and stress. Not more than half of the physicians and only 28% of the nurses stated that they frequently discussed alcohol with their patients. In contrast, 70% of the physicians and 85% of the nurses in OHS said that they frequently addressed alcohol issues, although they still addressed all other lifestyle issues more frequently.

The high level of alcohol-related activity among the nurses in OHS can be attributed to widespread use of health examination questionnaires to assess general health and lifestyle status. Alcohol-related questions are typically incorporated into these questionnaires. Three-quarters of the responding OHS nurses said that they discussed alcohol on the basis of some type of questionnaire (primarily “the health profile” and AUDIT) that allowed for assessment of risky alcohol consumption. Meanwhile, more than half of the OHS physicians discussed alcohol with their patients when they thought it had clinical relevance, which suggests that most of the patients were first

screened by a nurse using a health examination questionnaire and then referred to a physician.

The finding that alcohol intervention activity is low in PHC despite recognition of the importance of alcohol problems is consistent with many other studies. In a Swedish study (Geirsson et al., 2005), both physicians and nurses in PHC stated that obtaining information about patients' alcohol consumption was more important than information pertaining to smoking, exercise, diet/nutrition, and stress. A number of Swedish studies (Andreasson et al., 2000; Arborelius and Damstrom Thakker, 1995; Arborelius et al., 1997) have demonstrated low alcohol-preventive activity among PHC staff and difficulties in implementing work on alcohol prevention. Similarly, several international studies (Aalto et al., 2002; Anderson, 1985; Clement, 1986; Volk et al., 1996) have documented limited alcohol prevention activity among health professionals in PHC. Alcohol prevention activity in OHS has not been investigated to the same extent (Hulshof et al., 1999; Kääriäinen et al., 2001; Nilsson et al., 2001; Verbeek et al., 2004). Only a few studies from Sweden and Finland have addressed alcohol-related issues from the perspective of OHS, but none has examined the extent to which alcohol is discussed in this setting.

OHS professionals generally considered themselves more skilful than their PHC counterparts in achieving change in patients' alcohol habits and more knowledgeable about providing advice to patients with risky alcohol consumption. Perceived skills in achieving change in patients' alcohol habits were positively associated with activity for all professional categories in PHC and OHS, except for the physicians in OHS. A particularly strong association between skills and activity was seen with OHS nurses. Knowledge concerning provision of advice to patients with risky alcohol consumption was positively associated with activity for all categories except for OHS nurses, which could be explained by their high level of activity.

MHC differs from PHC and OHS in that alcohol is routinely addressed as part of standard care, i.e. increased "quantity" of alcohol-preventive activity may not necessarily be a goal, but rather improved "quality" of this activity to ascertain that all women who drink during pregnancy are detected and receive relevant treatment. However, it has been recognised that it may be difficult to obtain reliable self-reports of alcohol consumption by women during pregnancy due to the perceived sensitivity of the subject. This is why the Risk Drinking Project has promoted the use of the AUDIT questionnaire to

ask about the woman's drinking in the year *prior* to the pregnancy without scientific evidence to support this strategy. The assumption is that asking about pre-pregnancy drinking patterns is less sensitive and that these predict drinking during pregnancy. Study IV showed that only 16% of the responding midwives did *not* assess whether a pregnant woman's pre-pregnancy alcohol consumption was risky or not. Still, this result does not preclude the possibility that they assessed the woman's current drinking habits. Slightly more than one-third of the midwives used a questionnaire to assess the woman's alcohol intake before the pregnancy, with AUDIT being the most commonly used.

The midwives' perceived knowledge on alcohol and pregnancy matters was generally high. Consequently, relatively few midwives believed that more knowledge about the risks associated with drinking during pregnancy would yield increased alcohol-preventive activity. However, the midwives considered themselves less proficient at detecting pregnant women with risky alcohol consumption before the pregnancy.

7.2 Barriers to alcohol-preventive work in PHC and OHS

Several barriers to alcohol-preventive activity in PHC and OHS were identified in the studies, including lack of time, scepticism regarding the effectiveness of addressing alcohol, fear of potentially negative patient responses, uncertainty about how to ask, uncertainty about how to give advice regarding alcohol, and uncertainty concerning where to refer the patient. Barriers to alcohol-preventive activity were not investigated with regard to MHC since alcohol is routinely addressed as part of the standard care for pregnant women (Nilsen et al., 2008a).

Lack of time was cited by many physicians and nurses in PHC as the most common reason for not discussing alcohol despite a clinical indication that a patient's symptoms could be associated with alcohol, i.e. potentially harmful drinking. Similar results have been found in numerous other studies (Aalto et al., 2003a; Higgins-Biddle et al., 1997; Johansson et al., 2002; Kaner et al., 1999; Vinson et al., 2000). Health care professionals generally face time barriers to providing preventive services because most health care systems are focused on the management of acute illness and chronic health conditions (Stange et

al., 2002). However, perceived lack of time must also be seen as a reflection of priorities. There are no major barriers to examining diabetic patients or follow up of high blood pressure, which can be fairly time-consuming activities (Aira et al., 2003). It has been proposed that priorities for screening particular behaviours, risks, or conditions are based on a combination of health care professionals' knowledge about the issue, availability of screening tools, and the professionals' perceptions of patient requests (Nilsen et al., 2008b).

One in four physicians in PHC stated that the reason for not asking patients about alcohol was that it would not have any effect or could yield potentially negative patient responses. Among the nurses in PHC, there was a high proportion who were uncertain about how to ask and give advice about alcohol. These barriers have been identified in many previous studies although research has focused on PHC physicians, with relatively few studies involving PHC nurses (Lock et al., 2002).

To a large extent, the findings pertaining to PHC in this thesis have confirmed the well-known obstacles to alcohol-preventive activity that have been described in numerous studies. While most of these studies have been cross-sectional, a few studies (Kaner et al., 1999; Wechsler et al., 1996) have suggested that there have been long-term improvements regarding some of these barriers. Thus, the proportion of health professionals who perceive that they possess adequate skills, believe that alcohol-preventive work is important, do not feel hindered by patient-related factors, and are optimistic about the potential for reducing patients' alcohol consumption appears to have increased over time.

With regard to OHS, the most common reasons for not discussing alcohol with patients were the professionals' perceived lack of time and their uncertainty about how to ask about alcohol. However, it should be noted that few of the respondents agreed with the statements provided to define the most important reasons for *not* addressing alcohol issues. Previous studies about alcohol prevention in OHS have not examined barriers to this work.

7.3 Facilitators for increased and/or improved alcohol-preventive work

The studies investigated a number of interventions or initiatives that might facilitate increased quantity and/or quality of alcohol-preventive work in PHC, OHS, and MHC, including education on handling risky drinking, provision of materials, implementation of guidelines, and referral to specialists.

The studies generally showed a positive relationship between education on handling risky drinking and activity in addressing alcohol issues, i.e. the more education a health care professional has received in this area, the more likely it is that he or she is active in discussing alcohol with patients. There are several mechanisms by which education may affect this activity, including increased awareness of the importance of addressing risky alcohol consumption, improved knowledge of appropriate risk levels, more positive attitudes to intervening with risky drinkers, and an increased self-confidence in raising and handling the issue.

Although previous research has emphasised the importance of education and training for alcohol-preventive activity, the results have been somewhat inconsistent (Anderson et al., 2003; Funk et al., 2005). For example, a study conducted in Finland reported that the brief intervention activity did not change following a 3-year project that involved training as an important component (Aalto et al., 2003b). Furthermore, a randomised controlled study, part of a WHO project, demonstrated that the intervention activity following education increased only for those physicians who were already committed to working with alcohol issues (Anderson et al., 2004b). Physicians often choose not to stray outside of their “comfort zone” when given the freedom to select which educational events to attend, which means that those most in need of education may not be reached (Sibley et al., 1982).

Research in the continuing medical education field has shown that approaches involving multiple educational interventions, outreach events (also known as academic detailing, i.e. office-based approaches where health care professionals are visited by an expert), and peer review and group learning models are among the most effective, whereas lecture format teaching and unsolicited printed materials are the least effective methods (Cantillon and Jones, 1999). In 2004, in a systematic review and meta-analysis (Anderson et

al., 2004a) of different strategies used to increase PHC physicians' rates of screening for and provision of interventions with hazardous and harmful drinkers, it was found that the more effective programmes were those that combined education and continuing office-based support. Educational programmes that were alcohol-specific (rather than dealing with alcohol as one of several lifestyle issues) and multi-component were most effective.

While education and training in handling risky alcohol consumption can be expected to improve skills and knowledge, there likely is a two-way causality between activity and skills/knowledge due to the practice-based learning that occurs when practitioners reflect on work experience to facilitate improved practice (Nikkarinen, 2002). Educational efforts that link learning to clinical practice, by combining acquisition learning (accumulation of experience) and formalised learning (the more decontextualised learning consisting of guided episodes of learning), have been found to be most effective (Davis et al., 1995; Oxman et al., 1995). Inconsistent associations were noted in study III between activity and two variables directly related to practice experience, i.e. the number of patients per week and years in practice. This finding underscores that learning through practice experience alone may not be sufficient for increased activity in addressing alcohol issues.

The results suggest that there is a great deal of interest in continuing professional education on alcohol issues. Most of the professionals in PHC and OHS believed that provision of more knowledge about counselling techniques to use when alcohol-related symptoms are evident could facilitate increased alcohol intervention activity. Notably, nine out of 10 OHS nurses believed that providing more knowledge about the counselling techniques could facilitate increased activity. These nurses are already active in addressing alcohol issues, but most likely their current work is focused on assessing alcohol consumption using health examination questionnaires rather than actually counselling clients.

Nurses in PHC also wanted to obtain more knowledge about counselling techniques. Thirty-four percent stated that the most common reasons for not addressing alcohol were that they felt uncertain about how to ask or give advice about alcohol. Further, more than eight out of 10 nurses in PHC asked for more knowledge about how alcohol influences health in order to increase their alcohol prevention activity. These findings suggest the importance of

investing in continuing professional education for nurses in PHC (Lock et al., 2002).

Many nurses in PHC and OHS as well as MHC midwives requested more knowledge about simple pen-and paper screening instruments. Such instruments, for instance AUDIT, do not merely function as screening tools, but can also be used as a communication tool to provide a structure for conversations about alcohol (Morse and Hutchins, 2000). Eight of ten nurses in PHC stated that a greater supply of information materials could facilitate increased alcohol intervention activity. However, this finding is not supported by a systematic review in 2006 (Nilsen et al., 2006), which analysed 11 studies that evaluated the effects on utilisation of screening materials (e.g. AUDIT questionnaire, provider advice, and patient booklet) and activity in screening and providing BI following interventions of varying intensity directed at the professionals, from merely sending screening materials to providing materials, education, and subsequent support for the health care professionals. It was found that utilisation and activity generally increased with the intensity of the intervention effort, i.e. the amount of training and/or support the health care professionals had received. However, the overall effectiveness was rather modest.

A majority of the physicians and the nurses in PHC required improved opportunities for referral to specialists in order to increase their activity in alcohol prevention. This finding is in accordance with a UK study (Kaner et al., 1999), in which 85% of the physicians stated that more readily available support services to refer patients to would provide an incentive for increased alcohol-preventive work. This could be attributed to a paucity of knowledge since most risky drinkers may not be in need of referral since they are not dependent, but it could also be an indication of increased drinking across the spectrum in Sweden. Thus, PHC professionals may encounter more non-dependent hazardous and harmful drinkers than previously, as well as a higher number of dependent drinkers who need to be referred to specialist services.

Many of the factors that the midwives in MHC believed could facilitate increased alcohol intervention activity concerned direction (guidelines and decisions) at different levels (national, local, and management) for alcohol-preventive work with pregnant women. These findings are rather surprising since the social norm in Sweden seems to be evolving toward a broad

agreement that drinking during pregnancy is not acceptable. However, the results may indicate a desire for more support and clearer directions for this work. New national guidelines are currently being developed in Sweden by a task force mandated by the National Board of Health and Welfare. The guidelines concern alcohol, physical activity, diet, and tobacco, and will be presented in 2010.

7.4 Potential for increased and/or improved alcohol prevention in PHC, OHS, and MHC

There may be substantial benefits to public health if health care professionals in PHC and OHS addressed alcohol more frequently with and/or provided BI to patients. Eighteen percent of the Swedish population are categorised as hazardous drinkers according to the National Public Health Institute's definition, i.e. having a weekly intake of 10 or more standard drinks for women and 15 or more for men and/or engaging in heavy episodic drinking (i.e. 4 drinks or more on one occasion for women and 5 or more on one occasion for men) once a month or more often (unpublished data from The Swedish National Institute of Public Health). Although there are obvious fundamental differences between the three arenas investigated, all can play critical roles in a multi-faceted national strategy to achieve improved detection of and intervention with hazardous and harmful drinkers.

PHC has generally been described as a key setting for secondary alcohol prevention to identify and intervene with non-dependent patients who are hazardous and harmful drinkers (Anderson, 1996; Babor and Higgins-Biddle, 2000, 2001; Babor et al., 1986; Fleming, 2004/2005). However, while PHC reaches a significant portion of the Swedish population, it is worth noting that these patients tend to be older and drink less than the national average (Leifman and Gustafsson, 2003). The number of PHC visits increases with age and the average age of PHC patients is increasing over time with the aging Swedish population (Yearbook of Health and Medical Care, 2002). Furthermore, these patients often have chronic health conditions that need to be prioritised (Johanson et al., 1995; Stange et al., 2002). Most preventive activities in PHC, including provision of BI, are provided opportunistically (Litt and Egger, 2008b).

Although there is no question that PHC has an important role to play in Swedish alcohol prevention, many factors suggest that OHS may in fact have greater potential than PHC to take on an *increased* role in Swedish alcohol prevention. OHS does not have the same reach as PHC, but their clients belong to the age categories that consume most of the alcohol in Sweden (Leifman, 2003). Moreover, these age groups tend to visit PHC less frequently than the older age groups, underscoring the importance of the OHS arena for early detection and intervention with hazardous and harmful drinkers. The findings of this thesis show that OHS professionals generally consider themselves more skilful in achieving change in patients' alcohol habits and more knowledgeable about providing advice to patients with risky alcohol consumption than their PHC counterparts.

Another advantage for alcohol interventions in OHS is the prevalent use of health examination questionnaires which incorporate alcohol consumption questions among other health and lifestyle issues. This procedure has the potential to function as a systematic screening tool to detect clients whose consumption is hazardous or harmful and may provide a natural starting point for discussing alcohol issues. It has been suggested that addressing alcohol is facilitated by normalising the enquiry about alcohol, for instance by asking *all* patients and/or using a lifestyle-oriented health examination questionnaire that provides a context for asking (Litt, 2005).

The aim of OHS is more overtly preventive than that of PHC, where treatment of acute illness and chronic health conditions often needs to be prioritised. People may approach OHS for an annual health examination without any symptoms of disease or injury. In general, OHS patients are likely healthier than PHC patients. Still, it has been recognised that preventive services by OHS are frequently underutilised and the focus tends to be more on treatment than the published OHS guidelines recommend (Statskontoret, 2001). This suggests that there is considerable room for improvement with regard to alcohol prevention in OHS, although this would require an expanded demand for alcohol-preventive work from OHS clients. It is also important to recognise that a third of the employed workforce in Sweden does not have access to OHS and many of the two-thirds who do have access may not take advantage of OHS. A few researchers (Ames et al., 2000; Fauske et al., 1996; Kuokkanen and Heljälä, 2005; Richmond et al., 1998) have argued that OHS may be a particularly opportune setting for early detection of alcohol problems. There is

clearly a need for further investigation into different aspects of OHS dealing with alcohol issues and their potential role in increased alcohol prevention.

The majority of research on secondary alcohol prevention has concerned physicians in PHC. However, nurses and other professionals may be required to take a more active role in discussing alcohol issues with patients and providing alcohol interventions in the future. The findings from this thesis suggest that nurses in PHC are in a good position for increased intervention with patients who are hazardous or harmful drinkers. However, almost all nurses stated that they needed more time for health-oriented work to achieve increased alcohol-preventive activity. They also requested more knowledge on topics such as how alcohol influences health and the use of conversational techniques, as well as clearer management-level decisions about their obligations to work with risky drinkers. Overall, these findings suggest a need for increased support for and education on alcohol-related issues among PHC nurses.

Studies in the UK and Sweden (Deehan et al., 1998; Lock et al., 2002) (Johansson et al., 2002) have indeed suggested that nurses are an underutilised resource since they may be more favourably disposed to preventive work in general and have a more holistic perspective on patients than physicians, with more time to spend with patients. In addition, they are perceived as less formal than physicians. A generic “lifestyle worker” has also been discussed, i.e. someone trained in behaviour change techniques and dealing with multiple lifestyle issues, including smoking and diet as well as alcohol (Hutchings et al., 2006). Another solution that has been advocated is the formation of inter-professional “lifestyle teams” to take advantage of the skills of the entire health care team (Litt, 2006).

Addressing alcohol and/or providing interventions to moderate drinking among non-dependent hazardous and harmful drinkers in PHC and OHS settings constitute secondary prevention (Kristenson et al., 2006). In contrast, MHC provides primary alcohol prevention by targeting *all* pregnant women with the aim of achieving abstinence since any drinking during pregnancy is considered risky (Kristenson et al., 2006). MHC reaches virtually all pregnant women in Sweden and standard maternity care includes a question about the pregnant woman’s alcohol use and provision of advice about the risks associated with drinking during pregnancy. However, it may still be difficult to detect all women who drink during pregnancy. A recent Swedish study

(Nilsen et al., 2008) compared the current Swedish standard maternity care with a considerably more comprehensive counselling model that involved the use of AUDIT and tailored advice on the basis of the responses. While there were notable differences between the two models with regard to the women's attitudes to and perceptions of the counselling they received, the proportion of women who continued drinking during pregnancy was the same, 6%.

7.5 Using implementation theory for improved understanding of the results

Implementation theory may be applied for improved understanding of some of the results of the studies of this thesis. Four types of implementation "determinants" were described in chapter 3: characteristics of the innovation; motivation and behaviours of the health care professionals who adopt (or reject) the innovation; the inner organisational context in which the innovation is implemented; and the wider outer context in which the organisations, i.e. PHC, OHS, and MHC, operate. While the conceptual shift to a continuum of alcohol problems and advocating a population solution cannot be considered "new", addressing alcohol with hazardous and harmful drinkers who are not seeking treatment for alcohol-related problems in general health care settings may still be seen as an innovation since it represents a departure from an established practice (Meyer and Goes, 1988). Implementation of innovations represents a complex interaction between the different factors (Rohrbach et al., 2006).

The outer context in the form of social norms concerning alcohol provides an explanation for the limited alcohol-preventive activity in PHC and OHS. Drinking is a social activity that provides enjoyment and a way for many people to reduce stress and there is a lack of agreement among health care professionals and the general public at what point drinking becomes a problem since alcohol is often used in a socially acceptable way (Litt and Egger, 2008a). In comparison, there likely is more of a general consensus among health care professionals and the general public that *no* level of alcohol consumption during pregnancy is safe. This makes it less sensible to ask pregnant women about their alcohol consumption, yet it may simultaneously make it more difficult to obtain reliable self-reports of alcohol use during pregnancy because pregnant women who feel that they do not conform to the social norm of abstaining are likely to feel guilt or shame, hence distorting

their answers to avoid presenting themselves in an unfavourable light. Research suggests that women tend to under-report alcohol consumption during pregnancy (Nilsen et al., 2008a).

Scant research attention has been paid to exploring the societal conditions that underpin a population strategy that requires the delivery of alcohol interventions in general health care to relatively large proportions of the population. It would seem plausible that such a strategy requires considerable public support for its success. After all, the health care professionals who are expected to become involved in identifying and intervening with hazardous and harmful drinkers are part of the community and larger society. They cannot be expected to hold entirely different attitudes from the rest of the population concerning alcohol-related issues, even though they have greater knowledge about the risks associated with alcohol.

There are a number of important questions that need to be explored for better understanding of the feasibility of achieving more widespread alcohol-preventive activity in settings such as PHC and OHS. To what extent does the general public view alcohol problems in terms of a continuum, rather than in terms of a more dichotomous alcohol dependence-or-not? The concepts of hazardous and harmful drinking were introduced in a 1983 WHO document (Aasland, 2008) and the conceptual change towards an alcohol problem continuum and applying a population approach has largely been researcher-driven. The general public does not necessarily view alcohol problems and their solutions this way, which affects the feasibility and acceptability of addressing alcohol in routine health care.

Another relevant question is the extent to which health care professionals and the general public understand the concepts of hazardous and harmful drinking. Moreover, to what degree do they recognise such drinking as tangible health hazards? Research suggests that health care professionals prefer to work with patients who *have* alcohol-related symptoms, i.e. harmful drinkers, rather than with patients who do not have such symptoms but may be hazardous drinkers (Aira et al., 2003; Johansson et al., 2002). Another important question concerns the general public's attitudes to being asked about their alcohol intake as part of routine health care consultations.

There are also factors associated with the organisational context that may provide explanations for some of the results. While large size of an

organisation has been identified as a predictor of innovativeness, there were few associations between alcohol-preventive activity and size of the PHC, OHS or MHC units that were investigated. Other organisational aspects which have been found to influence adoption of innovations include leadership support, simple and clear goals and priorities, and availability of visionary key people in critical posts leading change. These were not investigated in this thesis. Reimbursement for alcohol-preventive work is another organisational issue, with research indicating that pay-for-performance incentives can be effective in increasing the delivery of smoking cessation advice given by PHC physicians (Millet et al., 2007).

The behaviour change theories described in section 3.3 may also offer guidance as to why alcohol-preventive work is not prevalent in PHC and OHS, but widely implemented in MHC. The theories contain several key constructs that have been found to predict behaviour change. The central self-efficacy component of Bandura's (1986) Social Cognitive Theory predicts that behaviours are more likely to be performed if one has self-efficacy, i.e. confidence in one's own ability. The study findings clearly suggest the importance of self-efficacy, as the studies generally found positive associations between alcohol-preventive activities on the one hand and knowledge and education on the other.

Fishbein and Ajzen's (1975) Theory of Reasoned Action posits that intention to perform a particular behaviour is determined by attitudes and the perceived pressure from others to perform the behaviour (i.e. subjective norms). The relative weight between attitudes and social pressure varies as a function of both the specific behaviour and the population being examined (Conner and Norman, 2005). A weak overall relationship between attitudes to alcohol-preventive work and actual activity in PHC and OHS was found. This indicates that the social pressure to perform the behaviour (i.e. addressing alcohol) is not sufficiently strong, thus "reducing" the positive behavioural intentions generated by favourable attitudes. There is likely a far stronger social pressure to address alcohol with pregnant women in MHC. Ajzen and Madden's (1986) expanded Theory of Planned Behaviour added perceived behavioural control as a predictor of both intention and behaviour. This construct is similar to the self-efficacy construct of Social Cognitive Theory (Conner and Norman, 2005).

The Self-determination Theory (SDT) (Deci and Ryan, 1985) proposes that the quality and sustainability of a behaviour depend on the extent to which the behaviour is self-determined, with behaviours ranging from being externally regulated to intrinsically motivated (Vansteenkiste and Sheldon, 2006). Somewhat similarly, Prochaska and DiClemente's Stages of Change Theory (Prochaska et al., 1992) suggests that people are at different stages of motivation for behavioural change. Both theories have bearing on the study results, as it is obvious that the motivational strength to address alcohol issues varied greatly among health care professionals in the three settings. This implies that strategies to achieve increased and/or improved alcohol-preventive activity need be tailored to professionals' motivation and readiness to address alcohol issues.

Finally, the characteristics of the innovation itself also impact on the alcohol-preventive work. Rogers' Diffusion of Innovations Theory describes six attributes that influence an individual's rate and extent of adoption of innovations (Rogers, 2003). Most of these attributes would appear to hinder rather than to facilitate alcohol-preventive work in PHC and OHS settings, although this may not be the case to the same extent with regard to MHC.

The compatibility, i.e. the degree to which an innovation is consistent with people's socio-cultural values and beliefs, previously introduced ideas, and the need for the innovation, may be relatively limited in PHC and OHS settings but more considerable in MHC. Relative advantage is concerned with the degree to which an innovation is perceived as being better than the innovation it supersedes, which in this instance could be interpreted as comparing addressing alcohol issues to refraining from broaching the issue. Considering the limited alcohol-preventive activity in PHC and OHS, many health care professionals in these settings do not appear to perceive much relative advantage in addressing alcohol. Again, the opposite may be the case among MHC midwives.

Complexity, i.e. the extent to which an innovation is perceived as difficult to understand and use, may not provide the most important obstacle to addressing alcohol in any setting. However, several of the findings do indicate that there are many aspects of the alcohol-preventive work that are considered difficult. For example, many health care professionals in PHC and OHS requested more knowledge about counselling techniques to use when alcohol-related symptoms are evident. It is likely feasible to achieve a certain degree of

trialability, i.e. experiment with an innovation on a limited basis, and re-invention, i.e. change or modify the innovation. It has been suggested that many health care professionals already integrate discussions about alcohol into their everyday practice even though they may not refer to this as delivering an “alcohol intervention” (May et al., 2006). It is less obvious how the observability of addressing alcohol might affect health care professionals’ willingness to address alcohol with non-treatment-seeking patients. The more visible the results of an innovation, the more likely the innovation will be adopted and implemented. Regardless of whether alcohol prevention is successful or not, patients may not return for further visits which limit professionals’ ability to follow up on patients’ drinking habits to determine the effectiveness of alcohol interventions. In other cases, patients may return but meet with a different person, for example due to turnover of physicians or nurses.

In summary, implementation theory provides a partial explanation for some of the results of this thesis and other empirical research on alcohol prevention in general health care settings. Implementation research in this area, including this thesis, has largely focused on investigating individual health care professionals’ attitudes, knowledge, skills, and behaviour. However, this research has rarely accounted for the organisational context in terms of organisational culture, management support, resources, and financial incentives for alcohol-preventive work. Furthermore, the lack of research concerning underlying conditions for more widespread alcohol-preventive activity in a variety of health care settings means that many important questions remain unanswered.

7.6 Methodological considerations

A quantitative research methodology was considered appropriate for this research project. The aim was to investigate a population at one particular point in time, which led to a cross-sectional survey. This type of cross-sectional research makes it possible to reach many individuals in an inexpensive way and in a short time. However, it does not allow for conclusions regarding causality as cross-sectional studies can only point to statistical associations between variables (Bowling, 2002).

A structured questionnaire was used which leads to greater ease of data collection and analysis. This approach is relatively economical and large samples of people can be included. A disadvantage is that the pre-coded response choices may not be sufficiently comprehensive and all answers may not be easily accommodated. Some respondents may therefore be “forced” to choose inappropriate pre-coded answers that might not fully represent their views (Bowling, 2002). However, the questions were partly based on the Swedish version of The WHO Collaborative Study Questionnaire (Geirsson et al., 2005; Kaner et al., 1999) and a considerable amount of re-drafting and modification of the questionnaire was done to ascertain that as many relevant choices as possible were included.

The objective was to obtain a comprehensive view of various aspects of the alcohol-preventive work among *all* currently active health care professionals in PHC, OHS, and MHC. Hence, a total population survey was chosen. A limitation, however, was the inability to analyse the responses of those who did not reply. This means that the generalisability of the findings is restricted. It is well known that more motivated and opinionated people are more likely to respond to surveys (Brodie et al., 1997). Hence, it is likely that those who did respond to the survey had more favourable attitudes towards discussing alcohol and providing advice to patients with risky alcohol consumption. Consequently, the results pertaining to the frequency of discussing alcohol and overall attitudes to alcohol-preventive work could be overestimated.

8 CONCLUSIONS AND FUTURE RESEARCH

The findings from the studies of this thesis support a number of conclusions with regard to the research questions posed:

- ❖ Alcohol issues in both PHC and OHS were addressed less frequently than all the other lifestyle issues, i.e. smoking, physical activity, overweight, and stress.
- ❖ Professionals in the PHC, OHS, and MHC to a large extent believed that provision of more knowledge about counselling techniques to use when alcohol-related symptoms are evident could facilitate increased alcohol intervention activity.
- ❖ PHC physicians and nurses stated that they most commonly addressed alcohol because they considered it part of the normal routines or that they had reason to believe that the patient in question had alcohol-related symptoms.
- ❖ OHS physicians most commonly addressed alcohol when they considered that it had clinical relevance and OHS nurses most commonly addressed alcohol because of patient responses to health questionnaire items.
- ❖ OHS professionals generally considered themselves more skilful than their PHC counterparts in achieving change in patients' alcohol habits and more knowledgeable about providing advice to patients with risky alcohol consumption.
- ❖ Important barriers to alcohol-preventive activity in PHC and OHS were perceived lack of time, scepticism regarding the effectiveness of addressing alcohol, fear of potentially negative patient responses, uncertainty about how to ask, uncertainty about how to give advice regarding alcohol, and uncertainty concerning where to refer the patient.

- ❖ Slightly more than one-third of the MHC midwives used a questionnaire to assess the woman's alcohol intake before the pregnancy, with AUDIT being the most common. Their perceived knowledge concerning alcohol and pregnancy matters was generally high, but the midwives considered themselves less proficient at detecting pregnant women with risky alcohol consumption before the pregnancy.
- ❖ MHC midwives had the highest proportion who had participated in continuing professional education in handling risky drinking followed by OHS nurses. PHC nurses were the group that had highest proportion of professionals who had received no education in handling risky drinking.
- ❖ The overall frequency of initiating discussions about alcohol with patients in PHC and OHS was positively associated with self-assessed skills, knowledge, and education for all professional categories.

The results of the work discussed here have provided knowledge about alcohol prevention in PHC, OHS, and MHC in 2006: the practice, attitudes, skills, knowledge, and education concerning alcohol-preventive work, barriers for this work, and factors that could facilitate increased alcohol-preventive activity. However, the cross-sectional design of the studies limits the possibilities of analysing causal relationships. Although the studies generally showed positive associations between education on handling risky drinking and activity in addressing alcohol issues, the mechanisms by which this education may affect activity were not clear. There is a need for longitudinal studies to allow for examination of the causality between health care professionals' alcohol-related practice and various factors, including continuing professional education on alcohol-related matters.

The Risk Drinking Project is a huge undertaking and appears to be the largest educational intervention effort targeting health care professionals described in the scientific literature. The studies in this thesis have provided a picture of alcohol-preventive work in PHC, OHS, and MHC in 2006. However, this was at a time when the Risk Drinking Project was only starting up. The project needs to be followed up to analyse changes in health care professionals' practice, attitudes, skills, knowledge, and education concerning alcohol-preventive work. There may also be a need to explore the importance of

specific components of the Risk Drinking Projects, such as motivational interviewing which has become widely applied in a variety of health care settings and has been found by many practitioners to be effective in addressing topics which are perceived as sensitive and achieving behavioural modification.

Further investigations are needed into more qualitative aspects of alcohol discussions and interventions in OHS and PHC before more conclusive statements can be made about the potential of different arenas for expanded alcohol-preventive work. However, the two studies involving OHS suggest that this arena has the potential to take on a more important role in Swedish alcohol prevention. Follow-up evaluations of the Risk Drinking Project could probably provide important answers. Research should also explore other efforts than continuing professional education to achieve increased and/or improved alcohol prevention in health care settings. There is a need to examine the feasibility and effectiveness of new approaches, such as solutions involving lifestyle workers or inter-professional lifestyle teams.

9 SVENSK SAMMANFATTNING (SUMMARY IN SWEDISH)

De senaste 100 årens alkoholkonsumtion i Sverige nådde 2004 sin högsta nivå och beror till viss del på Sveriges inträde i EU 1995 som medförde ändrade införselregler. Ökade alkoholpreventiva insatser har fått hög prioritet och regeringen har presenterat en nationell handlingsplan fram till 2010 för alkohol- och narkotikaförebyggande åtgärder med målet att minska alkoholens medicinska och sociala skadeverkningar. Handlingsplanen innebär en nationell satsning på fortbildning till primärvårdens (inklusive mödravården) och företagshälsovårdens personal. En sådan satsning är Riskbruksprojektet som drivs inom Statens folkhälsoinstitut. Riskbruksprojektets motto är att frågor om alkohol ska bli en naturlig del i det dagliga hälso- och sjukvårdsarbetet.

Syftet med denna avhandling var att undersöka olika aspekter av den alkoholförebyggande verksamheten bland vårdpersonal inom primär-, företags- samt mödrhälsovården. Avhandlingen omfattar 4 studier som baseras på en totalundersökning gjord 2005/2006 där läkare, distriktssköterskor med förskrivningsrätt samt barnmorskor har fått besvara en postenkät.

Resultaten från studierna visar att alkohol diskuteras mindre ofta, både inom primär- och företagshälsovården, jämfört med rökning, fysisk aktivitet, övervikt och stress. Viktiga hinder som angavs för alkoholpreventivt arbete var tidsbrist, att det inte har någon effekt, rädsla för att patienten ska reagera negativt, osäkerhet om hur man frågar patienten om dess alkoholvanor och hur man sedan ger råd samt en osäkerhet om vart man kan hänvisa patienten.

Läkare och sköterskor inom företagshälsovården ansåg sig mer skickliga jämfört med läkare och sköterskor inom primärvården, både i att kunna påverka sina patienter att förändra sina alkoholvanor och att ge råd till patienter med en riskfylld alkoholkonsumtion. Hur ofta de olika professionerna diskuterade alkohol med sina patienter var positivt relaterat till deras självskattade kompetens, kunskap och utbildning i hantering av riskbruk.

Drygt en tredjedel av de barnmorskor som ingick i studien använde ett frågeformulär för att bedöma kvinnans alkoholintag före graviditeten där frågeformuläret AUDIT var det mest vanligt använda. Deras självskattade kunskaper angående alkohol och graviditet var generellt hög, men barnmorskorna ansåg sig mindre skickliga i att upptäcka kvinnor med en riskfylld alkoholkonsumtion före graviditeten.

Barnmorskorna var den yrkeskategori där störst andel hade genomgått, förutom sin grundutbildning, utbildning i hantering av riskfylld alkoholkonsumtion. Sjuksköterskorna var den kategori som till störst del saknade utbildning i hantering av riskbruk.

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Appendix A-D

Enkät beträffande handläggning av riskbruk av alkohol i primärvården

En möjlighet för dig som är allmänläkare att påverka utvecklingen av vad som är rimligt att genomföra i primärvården.

Riskbruk av alkohol syftar till en konsumtion som på sikt kan leda till hälsoproblem eller som har gett upphov till detta. I definitionen utesluts således patienter som har utvecklat ett alkoholberoende.

1. Kön:

- Man
 Kvinna

2. När är Du född?

_____ (årtal)

3a. Är Du specialist i allmänmedicin?

- Ja
År för specialistexamen: _____
 Nej

3b. Har du annan specialistexamen än i allmänmedicin?

- Ja
Vilken: _____
 Nej

4. Hur länge har Du arbetat inom primärvården?

- < 1 år
 1-2 år
 3-5 år
 6-10 år
 11-20år
 > 20 år

5. Inom vilket Landsting/region arbetar Du i första hand?

- | | | | |
|------------------------------------|-------------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Blekinge | <input type="checkbox"/> Jönköping | <input type="checkbox"/> Stockholm | <input type="checkbox"/> Västernorrland |
| <input type="checkbox"/> Dalarna | <input type="checkbox"/> Kalmar | <input type="checkbox"/> Södermanland | <input type="checkbox"/> Västmanland |
| <input type="checkbox"/> Gotland | <input type="checkbox"/> Kronoberg | <input type="checkbox"/> Uppsala | <input type="checkbox"/> Västra Götaland |
| <input type="checkbox"/> Gävleborg | <input type="checkbox"/> Norrbotten | <input type="checkbox"/> Värmland | <input type="checkbox"/> Örebro |
| <input type="checkbox"/> Halland | <input type="checkbox"/> Skåne | <input type="checkbox"/> Västerbotten | <input type="checkbox"/> Östergötland |
| <input type="checkbox"/> Jämtland | | | |

6. Ange storleken på den ort inom vilken din vårdcentral är placerad:

- Glesbygd
 Mindre/mellanstor stad
 Storstad (Stockholm, Göteborg, Malmö)

7. Ange din enhets storlek:

- 1-2 läkare
 3-4 läkare
 5-6 läkare
 7-8 läkare
 ≥9 läkare

8. Hur många patienter (enskilda besök) träffar Du i genomsnitt per vecka? Skatta utifrån det senaste året.

- 0-19
 20-39
 40-59
 ≥ 60

9. Vilken driftsform har din enhet?

- Offentlig regi med offentlig finansiering
 Privat regi med offentlig finansiering
 Privat regi med privat finansiering

10. Hur ofta diskuterar Du följande livsstilsrelaterade frågor med dina patienter?

	<i>Alltid</i>	<i>Ofta</i>	<i>Ibland</i>	<i>Sällan</i>	<i>Aldrig</i>
Rökning	<input type="checkbox"/>				
Fysisk aktivitet	<input type="checkbox"/>				
Vikt	<input type="checkbox"/>				
Alkohol	<input type="checkbox"/>				
Stress	<input type="checkbox"/>				

11. Vad är den vanligaste orsaken till att Du tar upp alkoholfrågor med dina patienter?

Markera endast 1 svarsalternativ

- | | |
|---|--|
| <input type="checkbox"/> Laboratorieprovsvrar | <input type="checkbox"/> Ingår i mina rutiner |
| <input type="checkbox"/> Enkät/formulärsvar | <input type="checkbox"/> Patienten har alkoholrelaterade symptom |
| <input type="checkbox"/> Patientens egen önskan | |

12. Vilka är de vanligaste symptom/besöksorsaker som Du anser är alkoholrelaterade:

13. När du tror att patientens symptom kan vara alkoholrelaterade – vad är i så fall den vanligaste orsaken till att Du inte väljer att ta upp alkoholfrågan?

Markera endast 1 svarsalternativ

- | | |
|--|--|
| <input type="checkbox"/> Tidsbrist | <input type="checkbox"/> Vet inte hur jag skall ge råd |
| <input type="checkbox"/> Det skulle inte ha någon effekt | <input type="checkbox"/> Patienten kan reagera negativt |
| <input type="checkbox"/> Osäker på hur jag skall fråga | <input type="checkbox"/> Vet inte vart jag skall hänvisa patienten |

Annat: _____

14. Har du använt något eller några formulär vid bedömning av riskkonsumtion i ditt kliniska arbete det senaste året?

- | | | |
|---|---|--|
| <input type="checkbox"/> Ja, vid enstaka tillfällen | → | Om formulär använts ange vilket/vilka: |
| <input type="checkbox"/> Ja, regelbundet | | _____ |
| <input type="checkbox"/> Nej | | _____ |
| <input type="checkbox"/> Nej, men det har använts av annan personal | → | _____ |

15. Har Du använt någon eller några biologiska markörer (blodprov) för bedömning av riskkonsumtion i ditt kliniska arbete det senaste året?

- | | | |
|---|---|---------------------------------------|
| <input type="checkbox"/> Ja, vid enstaka tillfällen | → | Om markör använts ange vilken/vilka: |
| <input type="checkbox"/> Ja, regelbundet | | <input type="checkbox"/> CDT |
| | | <input type="checkbox"/> GGT |
| | | <input type="checkbox"/> ASAT |
| <input type="checkbox"/> Nej | | <input type="checkbox"/> ALAT |
| | | <input type="checkbox"/> MCV |
| | | <input type="checkbox"/> Annat: _____ |

16. Det finns flera alternativ för den gräns när alkoholkonsumtionen övergår från att vara riskfri. När du ger råd till en patient om att han/hon ska minska sin alkoholkonsumtion, vilka konsumtionsnivåer anger Du då att patienten inte bör överstiga – förutsatt att han/hon i övrigt är frisk?

Med ett standardglas menas något av detta:



Antal standard glas för män: _____ glas per vecka Vet ej

Antal standard glas för kvinnor (ej gravida): _____ glas per vecka Vet ej

17. Vad gör Du vanligen om Du bedömer att en patient har ett riskbruk av alkohol?

Markera endast 1 svarsalternativ

- Ger information om alkoholens negativa hälsoeffekter och rimliga konsumtionsnivåer
 Ger information om alkoholens negativa hälsoeffekter utan att ange någon specifik konsumtionsnivå
 Påbörjar ett samtal med syftet att motivera patienten till en minskad konsumtion
 Hänvisar till annan personal inom vårdcentralen som genomför ett motiverande samtal
 Hänvisar till annan instans utanför vårdcentralen

18. Hur mycket utbildning har Du fått i hantering av riskbruk av alkohol (gäller ej grundutbildning)?

- Ingen 1-2 dagar
 < 4 timmar 3 dagar
 halvdag > 3 dagar

Ange vilken utbildning Du har genomgått: _____

19. Hur uppskattar Du dina nuvarande kunskaper beträffande rådgivning till patienter med olika livsstilsrelaterade hälsoproblem?

	<i>Mycket kunnig/insatt</i>			<i>Inte särskilt kunnig/insatt</i>
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk inaktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Hur effektiv anser Du att Du är i att hjälpa patienter att åstadkomma en förändring på följande områden?

	<i>Mycket effektiv</i>			<i>Inte särskilt effektiv</i>
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk inaktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Hur viktigt anser Du det är, med tanke på din profession och uppdrag, att identifiera och erbjuda rådgivning till patienter med riskbeteende inom olika livsstilsområden?

	<i>Mycket viktigt</i>			<i>Inget viktigt</i>
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk inaktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. Ta ställning till följande påståenden om vad som skulle kunna öka din insats beträffande identifikation och rådgivning till patienter med riskbruk av alkohol:

	<i>Stämmer helt</i>	<i>Stämmer ganska bra</i>	<i>Stämmer mindre bra</i>	<i>Stämmer inte alls</i>	<i>Vet ej</i>
Mer faktakunskap om hur alkoholen påverkar hälsan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om enkla skriftliga screeningsinstrument	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om biologiska markörer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om samtalsmetoder vid alkoholrelaterade problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Större tillgång till skriftligt informationsmaterial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bättre teamwork med övriga yrkeskategorier på enheten runt patienter med riskbruk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bättre möjligheter att remittera till specialiserade stödinsatser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tydliga beslut på ledningsnivå om vad som ingår i vårt uppdrag/arbete med riskbrukspatienter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Hur mycket tid, under ett år, skulle Du själv vilja avsätta för fortbildning om riskbruk av alkohol?

- | | |
|-------------------------------------|------------------------------------|
| <input type="checkbox"/> Ingen | <input type="checkbox"/> 1-2 dagar |
| <input type="checkbox"/> < 4 timmar | <input type="checkbox"/> 3 dagar |
| <input type="checkbox"/> halvdag | <input type="checkbox"/> > 3 dagar |

ÖVRIGA SYNPKUNKTER: _____

STORT TACK FÖR DIN MEDVERKAN!

Enkät om ditt arbete med riskbruk i din roll som **distriktssköterska** **OBS** denna enkät gäller **inte** ditt ev. arbete med **barnhälsovård**

Arbetar du också med barnhälsovård får du inom några veckor ytterligare en enkät som vi är tacksamma om du svarar på.

Riskbruk av alkohol syftar till en konsumtion som på sikt kan leda till hälsoproblem eller som har gett upphov till detta. I definitionen utesluts således patienter som har utvecklat ett alkoholberoende.

1. Kön:

- Kvinna
 Man

2. När är Du född?

_____ (årtal)

3. Din organisatoriska tillhörighet:

- Landstingets primärvård Kommunens hälso- och sjukvård

4. Med vad arbetar du vanligen? (fler alternativ kan anges)

- Hemsjukvård
 Allmän distriktssköterskemottagning
 Telefonrådgivning
 Specialmottagning, ange för vad: _____
 Arbetar inte som distriktssköterska just nu

5. Hur länge har Du arbetat som distriktssköterska?

- < 1 år 6-10 år
 1-2 år 11-20år
 3-5 år > 20 år

6. Inom vilket Landsting/region arbetar Du i första hand?

- | | | | |
|------------------------------------|-------------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Blekinge | <input type="checkbox"/> Jönköping | <input type="checkbox"/> Stockholm | <input type="checkbox"/> Västernorrland |
| <input type="checkbox"/> Dalarna | <input type="checkbox"/> Kalmar | <input type="checkbox"/> Södermanland | <input type="checkbox"/> Västmanland |
| <input type="checkbox"/> Gotland | <input type="checkbox"/> Kronoberg | <input type="checkbox"/> Uppsala | <input type="checkbox"/> Västra Götaland |
| <input type="checkbox"/> Gävleborg | <input type="checkbox"/> Norrbotten | <input type="checkbox"/> Värmland | <input type="checkbox"/> Örebro |
| <input type="checkbox"/> Halland | <input type="checkbox"/> Skåne | <input type="checkbox"/> Västerbotten | <input type="checkbox"/> Östergötland |
| <input type="checkbox"/> Jämtland | | | |

7. Ange storleken på den ort inom vilken din vårdcentral/enhet är placerad:

- Glesbygd
 Mindre/mellanstor stad
 Storstad (Stockholm, Göteborg, Malmö)

8. Ange din enhets storlek i antal DSK/SSK:

- 1-2
 3-4
 5-6
 7-8
 ≥9

9. Hur många patientbesök har Du i genomsnitt per vecka? Skatta utifrån det senaste året.

- | | |
|--------------------------------|--------------------------------|
| Enskilda | I grupp |
| <input type="checkbox"/> 0-19 | <input type="checkbox"/> 0-19 |
| <input type="checkbox"/> 20-39 | <input type="checkbox"/> 20-39 |
| <input type="checkbox"/> 40-59 | <input type="checkbox"/> 40-59 |
| <input type="checkbox"/> ≥ 60 | <input type="checkbox"/> ≥ 60 |

10. Vilken driftsform har din enhet?

- Offentlig regi med offentlig finansiering
 Privat regi med offentlig finansiering

Appendix B

11. Hur ofta diskuterar Du följande livsstilsrelaterade frågor med dina patienter?

	<i>Alltid</i>	<i>Ofta</i>	<i>Ibland</i>	<i>Sällan</i>	<i>Aldrig</i>
Rökning	<input type="checkbox"/>				
Fysisk aktivitet	<input type="checkbox"/>				
Vikt	<input type="checkbox"/>				
Alkohol	<input type="checkbox"/>				
Stress	<input type="checkbox"/>				

12. Vad är den vanligaste orsaken till att Du tar upp alkoholfrågor med dina patienter?

Markera endast 1 svarsalternativ

- | | |
|---|--|
| <input type="checkbox"/> Enkät/formulärsvar | <input type="checkbox"/> Ingår i mina rutiner |
| <input type="checkbox"/> Patientens egen önskan | <input type="checkbox"/> Patienten har alkoholrelaterade symptom/
problem |
| <input type="checkbox"/> Annan orsak. _____ | |

13. Vilka är de vanligaste symptom/besöksorsaker som Du anser är alkoholrelaterade:

14. När du tror att patientens symptom kan vara alkoholrelaterade – vad är i så fall den vanligaste orsaken till att Du inte väljer att ta upp alkoholfrågan?

Markera endast 1 svarsalternativ

- | | |
|--|--|
| <input type="checkbox"/> Tidsbrist | <input type="checkbox"/> Patienten kan reagera negativt |
| <input type="checkbox"/> Det skulle inte ha någon effekt | <input type="checkbox"/> Vet inte vart jag skall hänvisa patienten |
| <input type="checkbox"/> Osäker på hur jag skall fråga | <input type="checkbox"/> Diskuterar alltid frågan då det är kliniskt
relevant |
| <input type="checkbox"/> Vet inte hur jag skall ge råd | |

Annat: _____

15. Har du regelbundet använt något eller några formulär vid bedömning av riskkonsumtion i ditt kliniska arbete det senaste året?

- | | | |
|---|---|--|
| <input type="checkbox"/> Ja | → | Om formulär använts ange vilket/vilka: |
| <input type="checkbox"/> Nej | | _____ |
| <input type="checkbox"/> Nej, men det har använts av annan personal | → | _____ |

16. Det finns flera alternativ på vad som kan anses som övre gräns för riskfri alkoholkonsumtion per vecka. När du ger råd till en patient om att han/hon ska minska sin alkoholkonsumtion, vilka konsumtionsnivåer anger Du då som övre gräns för en låg risk-konsumtion om patienten i övrigt är frisk?

Med ett standardglas menas något av detta:



Antal standard glas för män: _____ glas per vecka Vet ej

Antal standard glas för kvinnor (ej gravida): _____ glas per vecka Vet ej

Ger inte råd om alkoholkonsumtion

17. Vad gör Du vanligen om Du bedömer att en patient har ett riskbruk av alkohol?

Markera endast 1 svarsalternativ

- Ger information om alkoholens negativa hälsoeffekter och rimliga konsumtionsnivåer
 Ger information om alkoholens negativa hälsoeffekter utan att ange någon specifik konsumtionsnivå
 Påbörjar ett samtal med syftet att motivera patienten till en minskad konsumtion
 Hänvisar till annan personal inom vårdcentralen som påbörjar samtal i syfte att motivera till minskad konsumtion
 Hänvisar till annan instans utanför vårdcentralen

18. Hur mycket utbildning har Du fått i hantering av riskbruk av alkohol (gäller ej grundutbildning)?

- Ingen 1-2 dagar
 < 4 timmar 3 dagar
 Halvdag > 3 dagar

Ange vilken utbildning Du har genomgått: _____

19. Hur uppskattar Du dina nuvarande kunskaper beträffande rådgivning till patienter med olika livsstilsrelaterade hälsoproblem?

	<i>Mycket kunnig/insatt</i>		<i>Inte särskilt kunnig/insatt</i>	
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk inaktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Hur effektiv anser Du att Du är i att hjälpa patienter att åstadkomma en förändring på följande områden?

	<i>Mycket effektiv</i>		<i>Inte särskilt effektiv</i>	
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk inaktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Hur viktigt anser Du det är, med tanke på din profession och ditt uppdrag, att identifiera och erbjuda rådgivning till patienter med riskbeteende inom olika livsstilsområden?

	<i>Mycket viktigt</i>		<i>Inget viktigt</i>	
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk inaktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix B

22. Ta ställning till följande påståenden om vad som skulle kunna öka din insats som distriktssköterska beträffande identifikation och rådgivning till patienter med riskbruk av alkohol:

	<i>Stämmer helt</i>	<i>Stämmer ganska bra</i>	<i>Stämmer mindre bra</i>	<i>Stämmer inte alls</i>	<i>Vet ej</i>
Mer faktakunskap om hur alkoholen påverkar hälsan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om enkla skriftliga screeningsinstrument	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om samtalsmetoder vid alkoholrelaterade problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Större tillgång till skriftligt informationsmaterial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bättre teamarbete med övriga yrkeskategorier på enheten runt patienter med riskbruk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bättre möjligheter att remittera till specialiserade stödinsatser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tydliga beslut på ledningsnivå om vad som ingår i vårt uppdrag/arbete med riskbrukspatienter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Att mer tid kan avsättas för hälsoinriktat arbete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Hur mycket tid, under ett år, skulle Du själv vilja avsätta för fortbildning om riskbruk av alkohol om du själv fick bestämma?

- | | |
|-------------------------------------|------------------------------------|
| <input type="checkbox"/> Ingen | <input type="checkbox"/> 1-2 dagar |
| <input type="checkbox"/> < 4 timmar | <input type="checkbox"/> 3 dagar |
| <input type="checkbox"/> Halvdag | <input type="checkbox"/> > 3 dagar |

ÖVRIGA SYNPKUNKTER: _____

STORT TACK FÖR DIN MEDVERKAN!

RISKBRUKSENKÄT TILL PERSONAL INOM FHV

Denna enkät handlar om **riskbruk av alkohol**, vilket innebär en konsumtion som på sikt kan leda till hälsoproblem eller som redan har gett upphov till detta. I definitionen utesluts således med personer (patienter) som har utvecklat ett alkoholberoende.

I enkäten används begreppet "patient" vilket får motsvara olika benämningar som används inom FHV, t.ex. kund, anställd, brukare etc.

1. Kön:

- Man
 Kvinna

2. När är Du född?

_____ (årtal)

3. Vilken är din befattning inom FHV-enheten?

- Företagsläkare
 Företagssköterska
 Övrig tjänst
 Arbetar inte inom FHV just nu

4. Hur länge har Du arbetat inom FHV?

- < 1 år
 1-2 år
 3-5 år
 6-10 år
 11-20år
 > 20 år

5. Inom vilken region finns din FHV-enhet?

- | | | | |
|------------------------------------|-------------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Blekinge | <input type="checkbox"/> Jönköping | <input type="checkbox"/> Stockholm | <input type="checkbox"/> Västernorrland |
| <input type="checkbox"/> Dalarna | <input type="checkbox"/> Kalmar | <input type="checkbox"/> Södermanland | <input type="checkbox"/> Västmanland |
| <input type="checkbox"/> Gotland | <input type="checkbox"/> Kronoberg | <input type="checkbox"/> Uppsala | <input type="checkbox"/> Västra Götaland |
| <input type="checkbox"/> Gävleborg | <input type="checkbox"/> Norrbotten | <input type="checkbox"/> Värmland | <input type="checkbox"/> Örebro |
| <input type="checkbox"/> Halland | <input type="checkbox"/> Skåne | <input type="checkbox"/> Västerbotten | <input type="checkbox"/> Östergötland |
| <input type="checkbox"/> Jämtland | | | |

6. Ange storleken på den ort inom vilken din FHV-enhet är placerad:

- Glesbygd
 Mindre/mellanstor stad
 Storstad

7. Vilken driftsform har din FHV-enhet?

- Inbyggd FHV
 Extern FHV
 Annan

8. Ange antalet personer för nedanstående personalgrupper som jobbar inom din FHV-enhet:

_____ st företagsläkare
_____ st företagssköterskor
_____ st beteendevetare/personalkonsulter

9. Hur många patienter (enskilda besök) träffar du i genomsnitt per vecka? Skatta utifrån det senaste året.

- 0-19
 20-39
 40-59
 ≥ 60

10. Hur ofta diskuterar du följande livsstilsrelaterade frågor med dina patienter?

	Alltid	Ofta	Ibland	Sällan	Aldrig
Rökning	<input type="checkbox"/>				
Fysisk aktivitet	<input type="checkbox"/>				
Övervikt	<input type="checkbox"/>				
Alkohol	<input type="checkbox"/>				
Stress	<input type="checkbox"/>				

Appendix C

11. Vad är den vanligaste orsaken till att Du tar upp alkoholfrågor med dina patienter?

- | | |
|---|---|
| <input type="checkbox"/> Ingår i uppdrag från beställaren | <input type="checkbox"/> Enkät/formulärsvar |
| <input type="checkbox"/> Beställaren (arbetsgivaren) har misstankar om alkoholproblem | <input type="checkbox"/> Patientens egen önskan |
| <input type="checkbox"/> Laboratorieprovsvär | <input type="checkbox"/> Att det har klinisk relevans |

12. Ange de vanligaste symptom/besöksorsaker som du anser är alkoholrelaterade:

13. När du tror att patientens symptom kan vara alkoholrelaterade – vad är i så fall den vanligaste orsaken till att du inte väljer att ta upp alkoholfrågan?

- | | |
|--|---|
| <input type="checkbox"/> Tidsbrist | <input type="checkbox"/> Patienten kan reagera negativt |
| <input type="checkbox"/> Det skulle inte ha någon effekt | <input type="checkbox"/> Vet inte vart jag skall hänvisa patienten |
| <input type="checkbox"/> Osäker på hur jag skall fråga | <input type="checkbox"/> Diskuterar alltid frågan då det är kliniskt relevant |
| <input type="checkbox"/> Vet inte hur jag skall ge råd | |

Annat: _____

14. Har du själv använt något eller några formulär vid bedömning av riskkonsumtion i ditt kliniska arbete det senaste året?

- Ja →
- Nej
- Nej, men det används av annan personal

Om formulär används ange vilket/vilka:

- AUDIT
- CAGE
- MAST
- Hälsoprofilen (HPB)/liknande
- Annat: _____

15. Har Du använt någon eller några biologiska markörer (blodprov) vid bedömning av riskkonsumtion i ditt kliniska arbete det senaste året?

- Ja →
- Nej
- Nej, men det används av annan personal

Om markör används ange vilken/vilka:

- CDT
- GGT
- ASAT
- ALAT
- MCV
- Annat: _____

16. Det finns flera alternativ på vad som kan anses som gräns för riskfri alkoholkonsumtion per vecka. Vad bedömer du är den övre gränsen för riskfri alkoholkonsumtion hos en frisk person innan du rekommenderar denna att minska sin alkoholkonsumtion?

Med ett standardglas menas något av detta:



Antal standard glas för män: _____ glas per vecka Vet ej

Antal standard glas för kvinnor (ej gravida): _____ glas per vecka Vet ej

17. Vad gör du om du bedömer att patienten har ett riskbruk av alkohol?

Markera ett eller flera alternativ:

- Ger information om alkoholens negativa hälsoeffekter och rimliga konsumtionsnivåer
- Ger information om alkoholens negativa hälsoeffekter utan att ange någon specifik konsumtionsnivå
- Påbörjar ett samtal med syftet att motivera patienten till en minskad konsumtion
- Hänvisar till annan personal inom FHV-enheten som genomför ett motiverande samtal
- Hänvisar till annan instans utanför FHV-enheten

18. Hur mycket utbildning, under de 3 senaste åren, har du fått i hantering av riskbruk av alkohol (gäller ej grundutbildning)?

- Ingen 1-2 dagar
- < 4 timmar 3 dagar
- halvdag > 3 dagar

Ange vilken utbildning du har genomgått: _____

19. Hur uppskattar du dina nuvarande kunskaper beträffande rådgivning till patienter med olika livsstilsrelaterade hälsoproblem?

	<i>Mycket kunnig/insatt</i>		<i>Inte särskilt kunnig/insatt</i>	
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk aktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Hur effektiv anser du att du är i att hjälpa patienter att åstadkomma en förändring på följande områden?

	<i>Mycket kompetent/effektiv</i>		<i>Inte särskilt kompetent/effektiv</i>	
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk aktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Hur viktigt anser du det är, med tanke på din profession och ditt uppdrag, att identifiera och erbjuda rådgivning till patienter med riskbeteende inom olika livsstilsområden?

	<i>Mycket viktigt</i>		<i>Inte alls viktigt</i>	
Rökning:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysisk aktivitet:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Övervikt:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riskbruk av alkohol:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix C

22. Ta ställning till följande påståenden om vad som skulle kunna öka din insats beträffande identifikation och rådgivning till patienter med riskbruk av alkohol

	<i>Stämmer helt</i>	<i>Stämmer ganska bra</i>	<i>Stämmer mindre bra</i>	<i>Stämmer inte alls</i>	<i>Vet ej</i>
Mer faktakunskap om hur alkoholen påverkar hälsan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om enkla skriftliga screeningsinstrument	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om biologiska markörer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om samtalsmetoder vid alkoholrelaterade problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tillgång till skriftligt informationsmaterial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bättre teamwork med övriga yrkeskategorier på enheten runt patienter med riskbruk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Möjlighet att remittera till specialiserade stödinsatser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Att vi på FHV-enheten erbjuder alkoholscreening och rådgivning i vårt tjänsteutbud	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Att våra kunder efterfrågar screening och rådgivning av riskbruk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Hur mycket tid, under ett år, skulle du själv vilja avsätta för fortbildning om riskbruk av alkohol?

- | | |
|-------------------------------------|------------------------------------|
| <input type="checkbox"/> Ingen | <input type="checkbox"/> 1-2 dagar |
| <input type="checkbox"/> < 4 timmar | <input type="checkbox"/> 3 dagar |
| <input type="checkbox"/> halvdag | <input type="checkbox"/> > 3 dagar |

ÖVRIGA SYNPKUNKTER: _____

STORT TACK FÖR DIN MEDVERKAN!

Riskbruks ENKÄT

Till dig som jobbar som Barnmorska inom MVC

Riskbruk av alkohol avser en konsumtion som på sikt kan leda till hälsoproblem eller som har gett upphov till detta. I definitionen utesluts således besökare som har ett missbruk eller utvecklat ett alkoholberoende.

1. Kön

- Kvinna
 Man

2. När är Du född?

_____ (årtal)

3. Vad har Du för tjänstgöring?

- Barnmorska inom mödrahälsovården
 Barnmorska inom familjecentral, motsv.
 Arbetar inte inom mödrahälsovården just nu
 Annat _____

4. Hur länge har Du arbetat inom mödrahälsovården?

- < 1 år
 1-2 år
 3-5 år
 6-10 år
 11-20år
 > 20 år

5. Inom vilket Landsting/region arbetar Du i första hand?

- | | | | |
|------------------------------------|-------------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Blekinge | <input type="checkbox"/> Jönköping | <input type="checkbox"/> Stockholm | <input type="checkbox"/> Västernorrland |
| <input type="checkbox"/> Dalarna | <input type="checkbox"/> Kalmar | <input type="checkbox"/> Södermanland | <input type="checkbox"/> Västmanland |
| <input type="checkbox"/> Gotland | <input type="checkbox"/> Kronoberg | <input type="checkbox"/> Uppsala | <input type="checkbox"/> Västra Götaland |
| <input type="checkbox"/> Gävleborg | <input type="checkbox"/> Norrbotten | <input type="checkbox"/> Värmland | <input type="checkbox"/> Örebro |
| <input type="checkbox"/> Halland | <input type="checkbox"/> Skåne | <input type="checkbox"/> Västerbotten | <input type="checkbox"/> Östergötland |
| <input type="checkbox"/> Jämtland | | | |

6. Ange storleken på den ort inom vilken din mottagning är placerad

- Glesbygd
 Mindre/mellanstor stad
 Storstad (Stockholm, Göteborg, Malmö)

7. Ange din mottagningsstorlek

Antal barnmorskor som arbetar med mödrahälsovård vid din mottagning, omräknat till heltider:

8. Hur många inskrivna träffar Du i genomsnitt per vecka? Skatta utifrån det senaste året.

- | | |
|--------------------------------|--------------------------------|
| Enskilt | I grupp |
| <input type="checkbox"/> 0-19 | <input type="checkbox"/> 0-19 |
| <input type="checkbox"/> 20-39 | <input type="checkbox"/> 20-39 |
| <input type="checkbox"/> 40-59 | <input type="checkbox"/> 40-59 |
| <input type="checkbox"/> ≥ 60 | <input type="checkbox"/> ≥ 60 |

9. Vilken driftsform har din enhet?

- Offentlig regi
 Privat regi

16. Finns handlingsplan på mottagningen för vidare handläggning av inskrivna med etablerad missbruk/beroende av alkohol?

Observera att frågan inte innefattar patienter med ett *riskbruk*

- Ja
 Nej

17. Har Du tillgång till specialist- och stödresurser för patienter med missbruk/beroende?

- Ja
 Nej

Om ja, vilka

18. Har Du regelbunden samverkan med andra aktörer, t ex BVC, socialtjänst, kvinnoklinik?

- Ja
 Nej

Om ja, vilken/vilka aktörer?

19. Hur upplever Du som barnmorska det är att diskutera alkohol med din patient/besökare?

	Ja	Nej	Vet ej
Lätt att tala om, gör det gärna	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Svårt att tala om men gör det ändå	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Svårt att tala, vill helst slippa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Hur uppskattar Du dina nuvarande kunskaper beträffande identifiering av inskrivna med riskbruk av alkohol?

- Mycket bra
 Bra
 Ganska dåliga
 Mycket dåliga

21. Vad anser Du om dina kunskaper när det gäller alkohol och graviditet?

- Mycket bra
 Bra
 Ganska dåliga
 Mycket dåliga

22. Hur mycket fortbildning under din yrkesverksamma tid har Du fått när det gäller hantering av riskbruk av alkohol?

- Ingen
 < 4 timmar
 halvdag
 1-2 dagar
 3 dagar
 > 3 dagar

Ange vilken utbildning Du har genomgått: _____

23. Hur mycket tid skulle Du vilja avsätta under ett år för fortbildning om riskbruk av alkohol?

- Ingen
 < 4 timmar
 halvdag
 1-2 dagar
 3 dagar
 > 3 dagar

Appendix D

24. Ta ställning till följande påståenden om vad som skulle kunna öka din insats beträffande identifikation av och rådgivning till kvinnor med riskbruk av alkohol:

	<i>Stämmer helt</i>	<i>Stämmer ganska bra</i>	<i>Stämmer mindre bra</i>	<i>Stämmer inte alls</i>	<i>Vet ej</i>
Mer faktakunskap om hur alkoholen påverkar graviditeten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om enkla skriftliga screeningsinstrument	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mer kunskap om samtalsmetoder vid alkoholrelaterade problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Större tillgång till skriftlig patientinformation till gravida	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Större möjlighet att avsätta tid för extra barnmorskesbesök när kvinnor med riskbeteende identifieras	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tydliga riktlinjer från nationell nivå om vad som ingår i vårt uppdrag/arbete med riskbrukspatienter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tydliga beslut på ledningsnivå om vad som ingår i vårt uppdrag/arbete med riskbrukspatienter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bättre möjligheter att i svåra fall få stöd och handledning från specialmottagning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Väl utvecklade lokala handlingsplaner för hur frågan om alkohol tas upp med blivande föräldrar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Det kan finnas skäl att uppmärksamma den inskrivnas alkoholkonsumtion under tiden före graviditet. Det finns flera alternativ till vad som kan anses som gräns för riskfri alkoholkonsumtion per vecka för kvinnor som inte är gravida. När anser Du att en frisk ej gravid kvinna respektive frisk man är riskkonsument?

Med ett standardglas menas något av detta:



50 cl
folköl



33 cl
starköl



15 cl
vin



8 cl
starkvin



4 cl
starksprit

Antal standard glas för män: _____ glas per vecka Vet ej

Antal standard glas för kvinnor (ej gravida): _____ glas per vecka Vet ej

ÖVRIGA SYNPKUNKTER: _____

STORT TACK FÖR DIN MEDVERKAN!