

CHAPTER 8

FINLAND

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8.1. Introduction

8.1.1. Population

At the end of 2002 the Finnish population was 5,206,295 of whom 2,661,379 (51.1%) were female. The population density was 17 per square kilometre. Mean age of males was 38.2 years and of females 41.4 years. In the general population 16% were aged under 15 and 17% over 65. Life expectancy at birth was 74.6 years for males and 81.5 years for females. The life expectancy of Finnish men is reduced by cardiovascular disease, accidents and excessive alcohol consumption.

8.1.2. Provision of health care

Health services are available to all in Finland regardless of their financial situation. Public health services are financed mainly from tax revenues, either municipal or one-third from state tax. Central government's contribution to municipal health care is determined by population numbers, age distributions, morbidity statistics and a number of other factors. Gross domestic product (GDP) in Finland is €26,000 per head and the ratio of health care expenditure to GDP is 6.7%. This is one of the lowest percentages among EU member states. The public sector finances 76% of total health care expenditure, users of services 20% and others (employers, private insurance and benefit societies) 4%. The decline in public sector health care expenditure in recent years has led to increases in costs to households. Everyone in Finland is covered by obligatory sickness insurance, funded through taxes by the state, municipalities, employers and the insured population. The sickness insurance scheme reimburses fees paid by patients to private doctors, costs of medicines prescribed and transportation costs arising from treatment of illness. By far the greatest expenditure in relation to health insurance is compensation for sick leave and parental leave. All licensed Finnish doctors are covered by the reimbursement system, which is administered by the Social Insurance Institution.

At the beginning of 2003 Finland had 19,336 medical practitioners, equivalent to 269 inhabitants per doctor. Forty-nine percent of the Finnish medical profession is female. About 42% of Finnish doctors work in hospitals and about 20% in health centres.

Finland is divided into 446 municipalities. Each municipality is responsible for arranging health care for its inhabitants. Health centre services include medical consultations and provision of dental care, preventive care and environmental health care. Health centres run maternity and child health clinics, and arrange school and occupational health services. Attached to each health centre there is usually a hospital for patients with mild or chronic illness, a small laboratory, a radiological unit and a physiotherapy unit. Most Finnish municipalities have switched from a primary health care system to a family doctor system. Each family doctor is responsible for about 2000 patients. About 4% of Finnish doctors work in occupational health care, offering both preventive services and primary health care.

Each of the 20 hospital districts provides specialist consultation and care for its population. Each hospital district has a central hospital with departments for most major specialties. The five university hospitals provide the most advanced medical care, including highly specialized surgery and treatment for rare diseases. The university hospitals are also mainly responsible for the clinical training of medical students and for medical research.

Private medical treatment supplements care provided by municipalities and the state. Many doctors, dentists and physiotherapists, particularly in cities, offer private care. There are also a few small, private hospitals. Only about 8 % of Finnish doctors earn their living solely as private practitioners. However, about one third run a private practice in addition to working in a hospital or health centre. Most private practitioners now work in group practices.

8.1.3. Alcohol consumption and alcohol-related problems

Alcohol consumption increased by 28% in Finland from 1980 to 2001. A temporary decrease of 8% during 1990-1994 was interpreted as due to economic recession. The increase resumed after 1994 and in 2001 consumption reached the 1990 level. Current per capita consumption for those 15 years and older is 9.2 litres/year of absolute ethanol (2002 figures). Home-made and imported alcohol represents 20% of this. About half of all alcohol consumption is beer, with spirits making up a quarter. During recent years there has been a slight decrease in the share of spirits and beer and a slight increase in wines. Alcohol consumption in Finland is in the lowest third compared to other EU countries¹.

In 2001 there were 33,156 alcohol-related hospital treatment episodes; 10 645 were due to dependence, 2391 to pancreatitis and 2950 to alcoholic liver disease. Most of the pancreatitis patients had the acute form of the disease. Another peculiarity in Finland is the high number of deaths due to alcohol intoxication (n=401 in 2001). Altogether 2454 persons died of alcohol-related causes in 2001. Both alcohol-related mortality and morbidity are increasing in Finland¹.

The aims of Finnish alcohol policy are similar to those of the European Union and the World Health Organisation, and are comprised of prevention and treatment of harm and a good availability of services. The foundations of Finnish alcohol policy lie in retail sales monopoly, age limitations and high taxation. The Finnish government has decided that, after February 2004, alcohol taxation will be reduced by 33% (spirits 44%; strong wines 40%; wines 10%; beer 32%). The aim is to reduce alcohol imports from other EU countries, especially from the future EU member state Estonia. A disintegration of preventive measures is predicted to lead to an increase in consumption and in alcohol-related harm.

Traditionally, Finnish health care took care of alcohol-related health problems but alcohol abuse itself was not considered a task for health care. The situation changed in 1987 when a law for the treatment of substance abusers was introduced. The main provision of the law is that health care, in collaboration with social and specialised care of abusers, has to take responsibility for treatment and prevention of substance abuse. In spite of this, attitudes in primary health care towards preventive and therapeutic activities have remained quite negative, despite the fact that detoxification is undertaken and somatic complications are treated in primary care.

Even if the attitudes among primary health care workers have been somewhat negative, early intervention has been considered important among policy-makers and researchers. Three doctoral dissertations in medical faculties have been undertaken to inquire into the efficacy and effectiveness of brief intervention, one in an orthopaedic setting², one as part of health check-ups³ and one in

primary health care^{4,6}. The last of these was part of a wider community action project⁷. Also, implementation of brief intervention has been promoted^{8,9}. All this fits well with the focus on preventive cardiovascular activities in Finland.

8.2. Customization

A demonstration project was planned to take place in the city of Tampere and this is also where the customization was done. Tampere is a city in Southern Finland with about 200,000 inhabitants. Tampere Communal Health Centre serves all inhabitants of the city, with 77 general practitioners (GPs) and 177 nurses. The city is closely representative of the population of the whole country, including rural and urban areas. Alcohol consumption of the inhabitants is of a medium level for Finland. Of the GPs 52% specialize in general practice (national percentage 56%); 73% are women (nationally 60%); mean age is 43 years (nationally 40-45 years).

The customization aimed at discovering if and how primary health care personnel were willing to undertake early identification and brief alcohol intervention. This information was gathered via two structured questionnaires, six focus groups and contact by the project nurse with health professionals.

8.2.1. Questionnaire

A structured questionnaire was mailed to all GPs and nurses working at Tampere City Communal Health Centre to find out their attitudes, knowledge and beliefs regarding brief intervention for heavy drinkers¹⁰. Attitudes were mainly positive. However, only 18% of the respondents reported having enough knowledge to provide competent brief intervention; practical training was considered especially helpful for promoting it and more information on its evidence-base was thought desirable.

8.2.2. Focus groups

To acquire more information, not only on what but also how professionals thought brief interventions should be implemented, we ran six focus groups (out of the seven clinics in the health centre) including 18 GPs and 19 nurses¹¹. Obstacles found were confusion regarding the content of brief-intervention, lack of self-efficacy in implementing them, difficulty in identifying heavy drinkers, uncertainty about the justification for initiating discussion on alcohol issues, lack of time and lack of simple guidelines. More experienced professionals considered that verbal questions rather than structured questionnaires was a better way to learn about patients' alcohol consumption; younger GPs in contrast preferred a questionnaire. A common opinion was that, instead of systematic screening, certain complaints of patients or certain situations (for example health check-ups) would justify asking and counseling.

8.2.3. Patient survey

Additionally, a patient survey was performed at two of the seven clinics right after consultation. In this survey 1000 patients were inquired if and when GPs or nurses had asked and/or advised them in relation to drinking, and 665 of them responded¹². 6.3% of all participants and 11.9% of excessive drinkers reported that they had been asked about drinking at the consultation in question; 64.7% of all patients and 52.4% of excessive drinkers had never been asked about drinking. 6.0% of all patients and 19.0% of excessive drinkers had been advised about drinking at the consultation. Only a small minority of the patients (<2%) reported a negative attitude towards talking about alcohol with a professional.

8.2.4. Guidelines

All the possible obstacles and facilitating factors to carrying out brief intervention found in the three surveys were separately analyzed by three members of the project team. The findings were categorized as follows: 1) tools found to be feasible in doing brief intervention; 2) ways of doing brief intervention; 3) themes for education on brief intervention; and 4) themes regarding implementation. The basic idea for guidelines came from focus groups; the opinion favouring having simple guidelines on when and how to do brief intervention was present in all groups.

The questionnaire completed by professionals¹⁰ provided the justification for creating the guidelines; attitudes were positive and professionals considered brief intervention important. Focus groups helped to identify situations where GPs and nurses were willing to do brief intervention. They did not want to ask alcohol-related questions in all consultations but only in the following situations: health checks, accidents, high blood pressure, arrhythmia, sleep disorders, depression, anxiety, abdominal complaints, hang-over, and increased values in laboratory tests indicating heavy drinking (serum glutamyltransferase, serum desialotransferrin or mean erythrocyte corpuscular volume). Of the questionnaires available, AUDIT was preferred. Professionals were anxious about treating alcohol-dependent patients; thus referral to a specialist clinic was suggested if the AUDIT score was > 14 . Also, how to do brief intervention was found intimidating and this is why it was suggested that a patient information leaflet designed for Lahti project should be given to patients. At least one follow-up consultation was suggested.

The guidelines thus created were called “minimum”; e.g., it was permitted to do more but all professionals should at least ask their patients to fill in the AUDIT. If the score was ≥ 8 but less 15, the patient information leaflet was to be given and one follow-up consultation arranged with the patient.

The guidelines (early identification and brief intervention package) were then tested in a meeting with the focus group participants to check that interpretations developed by the researchers were valid and accurately reflected the professionals’ meanings and intentions. The finding from the patient survey¹² that patients are positive about being asked about their drinking did not change the professionals’ opposition to screening every patient. It was thus agreed that the screening would be opportunistic and that only the selected situations would justify asking patients’ about alcohol consumption. Finally, the guidelines on how to do brief intervention were revised and mailed with a covering letter to all the professionals in primary health care in Tampere. The different phases in creating the guidelines are presented in Figure 8.1 and the final guidelines in Table 8.1.

FIGURE 8.1 ABOUT HERE
TABLE 8.1 ABOUT HERE

8.3. Reframing

Reframing the general public’s understanding of alcohol issues was a central target and it was carried out through several media events. AUDIT was delivered to every household in the city of Tampere inside a local newspaper and a Gallup poll was conducted by telephone to discover whether and how it had been noticed. Two posters were mounted in all health care waiting rooms, one informing about risky drinking limits and the other the AUDIT-questionnaire and its interpretation.

Simultaneously with the present project there was a large project in the same area aiming at the assessment and treatment of drink drivers. The AUDIT was also used in this project and was widely distributed to health professionals nationwide and also to health centres. Collaboration with the

police included information about the brief intervention project and they planned to refer milder cases to health centres for brief intervention.

8.4. Strategic Alliance

An alliance of the following contributed in various ways to the project:

- The Ministry of Social Affairs and Health funded the project.
- The National Research and Development Centre for Welfare and Health (STAKES) administered the project, helped plan the focus group study, collaborated in producing material (posters/handouts) for general population, and collaborated in organising training sessions
- The Finnish Society of Addiction Medicine helped and collaborated in the organization of training
- The Finnish Society for Alcohol Researchers helped and collaborated in the organization of training
- Tampere City Primary Health Centre afforded the opportunity to do the demonstration project in their centre
- The Tampere City Temperance Movement collaborated in mass media events and communication with the public

Collaboration has been fruitful but, for a project like this to prosper, the core workers have to be hard-working and highly active. But sometimes being too active is a disadvantage; efficient action includes putting an activity aside when that becomes necessary. Reminders are important; a project in hectic times like the present is otherwise easily forgotten.

8.5. Demonstration Project

The demonstration project took place in the city of Tampere and was preceded by customisation of material and reframing of understanding (see above)¹³. The reframing process took place during the entire period of implementation¹⁴. The guidelines on how to do early identification and deliver brief intervention (brief intervention package), developed together with local primary health care nurses and GPs, were mailed to all GPs in May 1999.

Based on experience in the Lahti project in which brief intervention had been given, but also based on the results of the focus group study described above, we decided to find a more motivational way of implementing brief interventions among health professionals. At first, we were in active contact with the centres but over time we adjusted this contact time to the extent to which responses had been received. Thus, we remained available for consultation in problematic situations and also willing to give education whenever needed but without being automatically present at all times. Occasionally, however, we contacted the Health Centre offering mainly practical education. In addition to these reminders, at one time we attempted telephone marketing. However, in our city GPs were too busy to take this kind of telephone call during working hours and too tired after work. Another way of dissemination was that we published several articles in local and national journals describing the project¹⁵⁻²³. One year after the implementation we mailed a questionnaire to all GPs in the Tampere Health Centre. After four waves, 64/75 of them answered and 29 (44%) reported using the package²⁴.

The AUDIT and the written materials needed to apply the guidelines were provided for nurses and GPs. Later in autumn of the same year, a project nurse and physician held a workshop in each of seven health centres to promote the guidelines. Later, education based on needs was given and a

project nurse and physician were available for consultation. As recorded in a project diary, requests for education and consultation were rare. However, reminders using local and professional publications were distributed frequently.

The main difficulty was that, even if the professionals who came to the training sessions and who were in contact with the project team were positive, a part of the professional group was never reached. There are probably many reasons for this, one of which may be the fact that primary health care professionals are very busy; in Tampere an average of 2700 patients are enrolled for every GP.

In order to discover whether widespread implementation had been successful, the possible change in activity related to brief intervention was measured by a questionnaire given to professionals and patients at the beginning and end of the project. In addition, professionals' skills, knowledge and attitudes in relation to early detection and brief intervention were measured using a questionnaire before and after the implementation. Analyses were carried out with the Statistical Package for Social Sciences 10.1. Comparisons of frequency measures for answers were made between baseline and follow-up. Nurse and GP data were analysed together and separately. In frequency comparisons the chi-square test was used and in comparisons of means the T-test was used. Differences were considered statistically significant at $p < 0.05$.

Economic evaluation was based on interviews with GPs and the theoretical cost calculation was based on Finnish health care costs.

8.5.1. Questionnaire for professionals

Doctors and nurses were asked to record their knowledge, skills and attitudes to brief intervention using multiple-choice questions with six options¹⁰. Structured questions about gender, age, years of experience in practice and respondents' own alcohol consumption were also included in the questionnaire. In the questionnaire given after the implementation, respondents judged whether they had increased their brief intervention activity during the past year²⁵. Because we focused on evaluating the success of implementation in a certain unit, not among individuals, about 20% of the respondents at baseline and follow-up were different individuals.

The response rate was 59.1% (150/254) before and 57.9% (147/254) after the implementation; for nurses 60.5% (107/177) and 59.9% (106/177) and for GPs 55.8% (43/77) and 53.2% (41/77) respectively. Nurses' mean length of experience was shorter (14.3 vs. 16.3 years, $p=0.082$) and weekly alcohol consumption was higher (3.8 vs. 2.4 drinks/week, $p=0.026$) after the implementation than before.

The proportion of respondents who estimated they had increased their activity in carrying out brief intervention during the past year was 26.0% (32/123) before and 26.9% (36/134) after the implementation. Those who had increased their activity during the implementation had generally more positive attitudes and reported having better skills and knowledge in relation to brief intervention than the rest of the sample.

Professionals' attitudes, skills, knowledge and training needs regarding brief intervention before and after implementation are presented in Table 8.2. Nurses, but not GPs had significantly more positive attitudes towards discussing alcohol with patients before than after the implementation. In other questions regarding attitudes, frequencies were stable over time. Motivational skills remained low even after the implementation. Several significant changes were seen in responses to questions regarding knowledge and training needs. Nurses reported that they knew the contents of brief

intervention and some structured questionnaires better at follow-up than at baseline. Increased knowledge of some of the structured questionnaires was also found among GPs. Training needs decreased significantly among nurses but not among GPs during the study.

TABLE 8.2 ABOUT HERE

8.5.2. “Exit poll” among patients

A survey of patients directly after their GP consultation was carried out before and after the implementation period^{12,26}. Subjects came from two independent samples of one thousand 16-65 year old consecutive patients consulting GPs at two primary health care centres at baseline and follow-up, of whom 655 and 768 respectively participated. No statistically significant differences were found regarding enquiries or advice about alcohol between baseline and three year follow-up. Of all patients, 19.1% (125/655) at baseline versus 19.7% (151/768) at follow-up were asked about alcohol during the consultation in question or during the past year ($p=0.784$). Likewise, of heavy drinkers, 30.9% (30/97) versus 33.9 (38/112) were asked ($p=0.644$). Of heavy drinkers, 13.4% (13/97) versus 14.9% (17/114) were advised about alcohol during the consultation in question ($p=0.754$). It can be concluded that brief intervention activity by health care professionals remained stable and did not increase from before to after the implementation period. This may have been due to the short follow-up, the way brief intervention was implemented in the present study or to a saturation in brief intervention activity that was reached before the present study began.

TABLE 8.3 ABOUT HERE

8.5.3. Economic evaluation

A questionnaire survey was e-mailed to six general GPs who specialized in brief alcohol intervention²⁶. Cost calculations were based on Finnish health care prices²⁸ and adjusted by questionnaire results on the mean time used in screening and intervention and the extent of use of laboratory tests. A basic consultation (≤ 20 minutes, including salaries, administrative costs, cleaning, rents) amounted to €53.3 (2.665 €/min); an extended consultation (>20 min. or including laboratory tests or x-ray costs of equipment) = €94.8 (4.74 €/min). The mean time for screening was 5 minutes and for intervention 9 minutes. The cost of intervention (screening á €13.3 and intervention á €29.4€) for a GP with 1600 registered adult patients (50% male) was calculated under four different assumptions. (Table 8.4). Assumptions were that in systematic screening 20% of the men and 9% of the women are risky drinkers; in opportunistic screening 40 % of the patients are screened and 30% of them are risky drinkers; the sensitivity of the screening test is 92% and the specificity 94%; 50% of the risky drinkers are motivated; intervention is effective in 20% (NNT=5). Early identification and brief intervention, especially when targeted opportunistically to the whole population, is cheap as compared to the treatment costs of alcohol-related complications (e.g. one acute pancreatitis = €30 000)²⁹.

TABLE 8.4 ABOUT HERE

8.6. Conclusions

The main finding of the present study is that early identification and brief intervention activity among GPs and nurses did not increase in the area of the demonstration project. The level of activity remained low and this conclusion is supported by the findings of a collaborative project in which GP consultations were videotaped³⁰. However, several positive changes during the demonstration project indicated increased knowledge regarding brief intervention among

professionals. This was especially true of nurses. The project's success in increasing knowledge is also reflected in a decrease in training needs. Instead, attitudes and skills among the professionals did not seem to develop positively. This may have been due to positive attitudes and that were already present at the beginning of the project. Increasing motivational skills seems to be a special challenge for the future. A national survey in occupational health care showed that brief intervention activity in the demonstration project area was higher than in other parts of Finland (unpublished).

At the present time, the Ministry of Social Affairs and Health is committed to promoting country-wide implementation of brief intervention in primary health care. This is partly a result of the present project, partly due to earlier work in the alcohol research field but also a consequence of a fear that reduction in alcohol taxation will lead to increase in alcohol consumption and thereby to an increase in alcohol-related morbidity and mortality. The costs of the implementation will be covered from the state budget and the work will be accomplished by project workers (six nurse-doctor pairs) in different parts of Finland. The money will be distributed based on project plans. This means that municipalities must take steps to apply the funding and identify suitable professionals to do the work. The Ministry of Social Affairs and Health will help to develop plans, co-ordinates projects (to commence at the beginning of 2004), organise training and produce the materials needed.

It is obvious that when money is provided nationally to brief intervention projects, it will be applied. Projects will last until 2006 which offers a sufficient perspective to make changes. There will be problems that will have to be faced. One is that Finnish primary health care is in crisis; lack of physicians generally and lack of interest in primary health care work means that the few who do work in primary care are very busy. The National Health Project, which provides money for the implementation of brief intervention, has also to confront these organizational problems. Overcoming them will hopefully lead to better future for early identification and brief intervention for hazardous and harmful drinking in Finland.

8.7. References

1. STAKES. *Alcohol Statistical Yearbook 2002*. Helsinki: Author, 2003.
2. Antti-Poika I, Karaharju E, Roine R, Salaspuro M. Intervention of heavy drinking – a prospective and controlled study of 438 consecutive injured male patients. *Alcohol & Alcoholism* 1988; 23:115-121.
3. Suokas A. Brief intervention of heavy drinking in primary health care: Hämeenlinna Study. Helsinki, University Printing House 1992.
4. Aalto M, Seppä K, Kiianmaa K, Sillanaukee P. Drinking habits and prevalence of heavy drinking among primary health care outpatients and general population. *Addiction* 1999; 94:1371-1379.
5. Aalto M, Saksanen R, Laine P, Forsström R, Raikaa M, Kiviluoto M, Seppä K, Sillanaukee P. Brief intervention for female heavy drinkers in routine controlled study: a 3- year randomized controlled study. *Alcoholism: Clinical & Experimental Research* 2000; 24:1680-1686.
6. Aalto M, Seppä K, Mattila P, Mustonen H, Ruuth K, Hyvärinen H, Pulkkinen H, Alho H, Sillanaukee P. Brief intervention for male heavy drinkers in routine general practice: a three year randomized controlled study. *Alcohol & Alcoholism* 2001; 36: 224-230.
7. Holmila M. The Finnish case: community prevention in a time of rapid change in national and international trade. *Substance Use & Misuse* 2000;35:111-23.
8. Kääriäinen J, Sillanaukee P, Poutanen P, Seppä K, Brief intervention for heavy drinkers: an action project for health care implementation. *Alcologia* 2001; 13: 67-73.

9. Kääriäinen J, Sillanaukee P, Poutanen P, Seppä K. Opinions on alcohol-related issues among professionals in primary, occupational, and specialized health care. *Alcohol & Alcoholism* 2001; 36:141-146.
10. Aalto M, Pekuri P, Seppä K. Primary health care nurses' and physicians' attitudes, knowledge and beliefs regarding brief intervention for heavy drinkers. *Addiction* 2001; 96: 305-311.
11. Aalto M, Pekuri P, Seppä K. Obstacles to carrying out brief intervention for heavy drinkers in primary health care: a focus group study. *Drug & Alcohol Review* 2003; 22:169-173
12. Aalto M, Pekuri P, Seppä K. Primary health care personnels' activity in intervening in patients' alcohol drinking: a patient perspective. *Drug & Alcohol Dependence* 2002; 66: 39-43
13. Seppä K, Pekuri P, Kääriäinen J, Aalto M. Widespread implementation of brief alcohol intervention in primary health care – description of an action research project. *Adicciones* 2004; 16: 315-322.
14. Aalto M, Seppä K. At which drinking level to advice a patient? – general practitioners' views. *Alcohol & Alcoholism* 2001;36:431-433.
15. Seppä K. WHO:n asiantuntijakokous pohti mini-interventiotutkimuksen suunnittelua. *Suom. Lääkäril.* 1997;52:495-496.
16. Seppä K. Mini-interventio - alkoholiongelman varhaisvaiheen hoito. *Kunnallislääkäri. Vuosikirja*; 1998/99: 172-175.
17. Seppä K. Alkoholiongelman varhaistoteaminen. Kirjassa Salaspuro M, Kiianmaa K, Seppä K. (Toim.): Päihdelääketiede. *Gummerus*; Jyväskylä 1998: 54-60.
18. Seppä K. Mini-interventio. Kirjassa Salaspuro M, Kiianmaa K, Seppä K. (Toim.): Päihdelääketiede. *Gummerus*; Jyväskylä 1998: 61-65.
19. Seppä K. Terveystenhuolto ja alkoholin suurkuluttajan mini-interventio. *Dialogi* 1999; 9: 53-55
20. Seppä K, Aalto M. Alkoholisairauksien sekundaaripreventio perusterveydenhuollossa. *Kunnallislääkäri* 2001; 16: 15-17.
21. Seppä K, Aalto M, Kuokkanen M. Tietoa alkoholin suurkuluttajien mini-interventiosta WHO:n projektin uudelta kotisivulta (Information of brief alcohol intervention from WHO project's new web page). *Suom Lääkäril* (Finnish Medical Journal) 2001; 56: 4909-4911.
22. Seppä K. Päihdetyöhön terveyskeskuksissa – kouluttaen ja organisoiden. *Kunnallislääkäri* 2002; 17: 24-25.
23. Seppä K, Salaspuro M. Auttaako alkoholin käyttäjän lyhytneuvonta sittenkin? *Duodecim* 2003; 119: 475-476.
24. Aalto M, Värre T, Pekuri P, Seppä K. The role of general practitioners' working style and brief alcohol intervention activity. *Addiction* 2003; 98: 1447-1451.
25. Aalto M, Pekuri P, Seppä K. Implementation of brief alcohol intervention in primary health care: Do nurses' and general practitioners' attitudes, skills and knowledge change? Submitted for publication.
26. Aalto M, Pekuri P, Seppä K. Primary health care professionals' activity in intervening in patients' alcohol drinking during a three-year year intervention implementation project. *Drug & Alcohol Dependence* 2003; 69: 9-14.
27. Seppä K, Lappeteläinen V, Aalto M. Mitä maksaa? Alkoholin suurkuluttajan lyhytneuvonnan kustannus perusterveydenhuollossa. (Costs of screening and brief intervention in primary health care). *Sosiaalilääketieteellinen Aikakauslehti* (Journal of the Society of Medicine) 2004; 41: 3-9..
28. Heikkinen K, Hujanen T, Rusama H. *Terveystenhuollon yksikkökustannukset. Suomessa vuonna 2000.* (Health care unit costs in Finland in 2000). Helsinki: STAKES, 2001.

29. Sillanaukee PA, Kääriäinen J, Sillanaukee P, Poutanen P, Seppä K. Substance use-related outpatient consultations in specialized health care; an underestimated entity. *Alcoholism: Clinical & Experimental Research* 2002; 26:1359-1364.
30. Seppä K, Aalto M, Raevaara L, Peräkylä A. brief intervention for risky drinking –analysis of videotaped consultations in primary health care. *Drug & Alcohol Review* 2004; 23; 167-170

TABLE 8.1

Early Identification and Brief Intervention for Risky Drinking: guidelines developed in collaboration with health professionals.

ASK THE PATIENT TO FILL IN AUDIT (Alcohol Use Disorders Identification Test) IN THE FOLLOWING SITUATIONS:

- health check-up
- accident or trauma
- high blood pressure
- arrhythmia
- sleep disorder
- depression
- anxiety
- abdominal complaints
- hang-over
- abnormal blood test value indicative of risky drinking (s-GT, S.CDT, MCV)

WRITE DOWN THE SCORE IN PATIENT DOCUMENTS

WHEN AUDIT SCORE IS 8-14

- inform the patient personally of the health risks of alcohol, mainly in relation to the patient's complaints; negotiate with the patient of how and how much to reduce drinking and give the written information (or give the written information at the very least)
- make a new appointment

WHEN AUDIT SCORE IS >14

- you can refer the patient to a specialist clinic

(n.b. This is the minimum that should be done - more can be done if preferred.)

TABLE 8.2

Changes in attitudes, skills, knowledge and training needs regarding brief intervention during the three-year implementation

Percentage (n) of who...	Both GPs and nurses		p-value	Change (%)
	Baseline (n)	Follow-up (n)		
...have positive attitudes towards discussing alcohol with patients.	102/150	81/147	0.022	-12.9
...think patients take positive attitudes towards being asked about their alcohol consumption.	127/140	133/147	0.945	-0.2
...think detection and treatment of early phase alcohol abusers is appropriate for their work.	61/148	54/146	0.457	-4.2
...think that they know how to talk about alcohol drinking with patients.	96/148	97/147	0.840	+1.1
...think that they know how to motivate patients to participate intervention.	20/145	22/145	0.739	+1.4
...know the content of brief intervention well.	27/149	51/147	0.001	+16.6
...know some structured questionnaire.	34/144	86/143	0.000	+36.5
...know the definition of heavy drinking.	66/103	79/113	0.362	+5.8
...expressed need for training in detection of heavy drinkers.	70/150	41/146	0.001	-18.6
...expressed need for training in doing brief intervention.	84/147	59/146	0.004	-16.7

TABLE 8.3.

Patients' answers concerning the last time a doctor or nurse at the clinic had asked about their drinking and whether patients were advised about drinking.

	ASKED*	ASKED*	ADVISED*	ADVISED*
	Today/during past year %	Over a year ago/never %	Today Yes (%)	Today No (%)
All				
Baseline (n=655)	19.1	80.9	6.0	94.0
Follow-up (n=768)	19.7	80.3	6.2	93.8
Heavy drinkers				
Baseline (n=97)	30.9	69.1	13.4	86.6
Follow-up (n=112)	33.9	66.1	14.9	85.1
Non-heavy drinkers				
Baseline (n=546)	17.2	82.8	4.6	95.4
Follow-up (n=564)	16.7	83.3	4.8	95.2
Men				
Baseline (n=244)	29.5	70.5	10.4	89.6
Follow-up (n=270)	30.7	69.3	11.2	88.8
Women				
Baseline (n=403)	12.7	87.3	3.2	96.8
Follow-up (n=489)	13.3	86.7	3.3	96.7
16-50 year olds				
Baseline (n=397)	19.1	80.9	4.6	95.4
Follow-up (n=438)	18.3	81.7	5.1	94.9
51-65 year olds				
Baseline (n=248)	19.0	81.0	8.1	91.9
Follow-up (n=315)	20.6	79.4	7.7	92.3

* No significant differences were found between baseline and follow-up

TABLE 8.4
Costs of brief intervention (see text).

	Systematic screening (n=1600)		Opportunistic screening (n=640)	
	21 280 €		8 512€	
	↓		↓	
	Intervention to screen-positive		Intervention to screen-positive	
	All (n=309)	Motivated (n=155)	All (n=215)	Motivated (n=108)
	9 085€	4 557€	6 321€	3 175€
	↓	↓	↓	↓
Total cost	30 365€	25 837€	14 833€	11 687 €
Cost per one Intervention	143€ (n=213)	241€ (n=107)	84€ (n=177)	131€ (n=89)
Cost per one effective inter- vention	706€	1230€	424€	649€

FIGURE 8.1
Sources of information for brief intervention guidelines.

