


**Personal and professional use of
acupuncture among
medical practitioners in Norway
1994 – 2004**

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Thus, most of the world's population would consider the Westernized form of medicine (allopathic) as "complementary" or "alternative", because it represents a departure from their traditional forms of medicine. Mildén 2004

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FORORD

Denne masteroppgaven er den avsluttende delen av mitt studium i folkehelsevitenskap ved Institutt for samfunnsmedisin, Universitetet i Tromsø.

Ved Nasjonalt forskningssenter for komplementær og alternativ medisin (NAFKAM), Universitetet i Tromsø forelå det data fra likelydende spørreundersøkelser om norske legers holdninger til akupunktur, innsamlet av Arne Johan Norheim i 1994 og 2004. Resultater fra undersøkelsen i 1994 var tidligere publisert, men analyse av mulige endringer fram til 2004 var ikke gjennomført. En analyse av endringer over tid i et enhetlig nasjonalt materiale, ville stå i en særstilling innen internasjonal forskning om holdninger til komplementær og alternativ medisin i den vestlige verden.

I tillegg til den faglige begrunnelsen for å gjennomføre studien, ble temaet for oppgaven en naturlig forlengelse av mine tidligere studier, både før og innenfor masterstudiet; spesielt i folkloristikk (folkemedisin), samfunnsvitenskap (medisinsk sosiologi og antropologi) og vitenskapsteori og etikk (alternativ medisin i vitenskapsteoretisk og forskningsetisk perspektiv).

Opgaven er skrevet på engelsk for å lette omarbeiding til artikkel for internasjonal publisering, som oppfølging av de internasjonalt publiserte resultatene fra undersøkelsen i 1994.

Uten tilrettelegging for innsamling og registrering av data fra Den norske lægeforening og NAFKAM, ville denne undersøkelsen vanskelig latt seg gjennomføre. Men den største takken fra meg personlig går til mine engasjerte og konstruktive veiledere ved NAFKAM; hovedveileder Arne Johan Norheim og biveileder Nina Emaus.

SAMMENDRAG

Bakgrunn

Akupunktur har i tidligere forskning utpekt seg som den formen for komplementær eller alternativ medisin som leger bruker mest både personlig og profesjonelt. Mulige endringer over tid er ikke studert tidligere.

Materiale og metode

I februar 1994 og november 2004 ble likelydende spørreskjema sendt i posten til proporsjonale, stratifiserte, tilfeldige utvalg av praktiserende medlemmer av Den norske lægeforening under 71 år. Antall leger i populasjon, utvalg og respondentgruppe var henholdsvis 1 728, 1466 og 1135 (77 %) i 1994, og 16 462, 1646 og 962 (58 %) i 2004. Personlig og profesjonell bruk av akupunktur ble studert samlet og separat for kjønn, alder og stilling innen år og mellom år ved multivariat logistisk regresjonsanalyse.

Resultater

Andelen leger som har brukt akupunktur for egen sykdom er fordoblet, 18 % i 2004 mot 8 % i 1994 (OR 2.19 $p < 0.001$), og det er økning i alle undergrupper. Halvparten av legene kan tenke seg å bruke akupunktur for egen sykdom, 55 % og 53 % ($p = 0.245$), fire prosent praktiserer akupunktur begge år ($p = 0.829$), færre leger planlegger å lære seg akupunktur, 5 % mot 8 % (OR 0.64 $p = 0.033$), mer enn en tredjedel anbefaler akupunktur for migrene, 37 % og 41 % ($p = 0.569$) og færre oppfatter akupunktur som integrert i helsevesenet, 45 % mot 52 % (OR 0.76 $p = 0.004$); men disse resultatene gjelder ikke for alle undergrupper.

Konklusjon

Leger av 2004 er positive til akupunktur som behandlingsform, men er i større grad akupunkturpasienter enn akupunktører.

Nøkkelord

Komplementær medisin, akupunktur, holdninger, leger, Norge

ABSTRACT

Background

Previous research have documented that acupuncture distinguish itself by being the complementary or alternative therapy that medical practitioners most often use both personally and professionally. Possible changes over the years have not previously been investigated.

Material and methods

In February 1994 and November 2004 equivalent postal surveys were sent to proportional, stratified, random samples of working members of the Norwegian Medical Association under 71 years of age. Sampling frame, sample and respondents amounted to 11 728, 1466 and 1135 (77 %) in 1994, and 16 462, 1646 and 962 (58 %) in 2004. Personal and professional use of acupuncture were analysed overall and separately for gender, age and position within year and between years by multivariate logistic regression analysis.

Results

The percentage of medical practitioners having used acupuncture for own disease has doubled, 18 % in 2004 versus 8 % in 1994 (OR 2.19 $p \leq 0.001$), and there is an increase for all subgroups. Half the physicians intend to use acupuncture for own disease, 55 % in 2004 and 53 % in 1994 ($p=0.245$), four percent practice acupuncture both years ($p=0.829$), fewer physicians intend to learn acupuncture, 5 % versus 8 % (OR 0.64 $p=0.033$), more than a third recommend acupuncture for migraine, 37 % and 41 % ($p=0.569$) and fewer find that acupuncture is incorporated in the health care system, 45 % versus 52 % (OR 0.76 $p=0.004$); however these results does not apply to all subgroups.

Conclusion

Medical practitioners of 2004 have positive attitudes toward acupuncture as a therapeutic method, but are rather acupuncture patients than acupuncturists.

Key words

Complementary medicine, acupuncture, attitudes, medical practitioners, Norway

INTRODUCTION

COMPLEMENTARY AND ALTERNATIVE MEDICINE

During the last decades there has been an increase in preoccupation regarding unconventional medicine in industrialised countries; both among the general population, professionals, authorities and politicians (1 – 9).

Unconventional medicine has been defined as medical interventions not taught widely in medical schools or generally available in the health care system (1), connotative therapies not satisfying the standards of the majority of the orthodox medical community (5, 10). Such health care practices are interchangeably named alternative or complementary, although the two terms imply different perspectives on the role of unconventional medicine. The current convention is to refer to the joint designation Complementary and Alternative medicine (CAM) (11 - 12).

ACUPUNCTURE

Numerous therapies are rubricated under the CAM umbrella. The National Center for Complementary and Alternative Medicine (NCCAM) in the United States of America (USA) has created five categories, one of which is Alternative Medical Systems, i.e. complete systems of theory and practice (13). These alternative medical systems are often evolved apart from and earlier than the western biomedical paradigm, like Traditional Chinese Medicine (TCM). One of the components of TCM is acupuncture, a family of procedures involving stimulation of anatomical points in the body by a variety of techniques (13).

However, health personnel in the western world often use acupuncture independent of TCM. Acupuncture is then used as a therapeutic technique in the context of other CAM therapies or conventional medicine, usually by penetrating the skin with needles to stimulate the acupuncture points (14 - 16). The mode of action is partly explained by western biomedical neurophysiology.

Clinical research has shown effect on postoperative and chemotherapy nausea, postoperative dental pain, morning sickness in pregnancy, pain in labour, recurrent urinary tract infection in adult women and chronic headache; and a plausible effect in patients who have had stroke (4, 6, 17 - 21). Acupuncture was by 2001 offered in 19 of 112 Norwegian hospitals (22) and by 2003 in 85 % of Norwegian maternity wards (23).

Acupuncture is perceived as being both conventional and alternative, and has distinguished itself by being the form of CAM that medical practitioners most often use both personally and professionally. Acupuncture is also the CAM modality they believe to be the most useful and effective (5, 6, 10, 21, 24 – 29).

The case of acupuncture makes an interesting example of the meeting of medical paradigms. Even when acupuncture is practiced in a western medical context, medical practitioners to some extent use Chinese medical concepts and find non-scientific explanations for how acupuncture works reliable (14, 16). It is argued that two parallel processes can be identified; on the one hand acupuncture is being integrated into biomed-

cal science, on the other hand Chinese medical concepts seem to affect medical practitioners' perception of science and reality (14).

THE NORWEGIAN CONTEXT

The history of acupuncture in Norway is said to have started in 1972, when a delegation of Norwegian medical practitioners visited China. Education in acupuncture has been offered in Norway since 1980. The Norwegian Medical Association established an acupuncture committee in 1990. The Research Council of Norway has financed research in acupuncture and other alternative therapies from 1993 (21). In 1988 chiropractors in Norway got official authorisation and the therapy is eligible for public reimbursement. This is contrary to most other countries where chiropractic is still considered as unconventional medicine (1, 10). The incorporation of unconventional therapies like acupuncture and chiropractic into mainstream medicine in Norway had seemingly started. However the debate on alternative and complementary medicine remained intense in the nineteen eighties and nineties.

In its policy document of 1997 the Norwegian Medical Association defines alternative medicine as therapeutic methods that are not included in conventional medical activity based on scientific knowledge and documentation. The policy document put special restraints on physicians when practicing alternative medicine by stating that alternative medicine should not replace correct medical treatment. However, acupuncture is emphasised as having both an 'alternative' and 'medical' foundation (5).

In 1997 the Ministry of Health and Social Affairs, on request by the Norwegian parliament (Stortinget), appointed the Alternative Medicine Committee to report on various aspects of alternative medicine, including making proposal for revision of the Medical Quackery Act of 1936 (6). The official Norwegian report from the committee became a decisive turning point in the case of CAM in Norway. In consequence of the report a national research center in CAM was established and a new legislation came into force.

The National Research Center in Complementary and Alternative Medicine (NAFKAM) was established as an independent center at the Faculty of Medicine, University of Tromsø in 2000. NAFKAM is funded by the Norwegian Ministry of Health and Care Services. Among other things the center promotes, implements and coordinates Norwegian research in complementary and alternative treatment (12).

January first 2004 the Medical Quackery Act was replaced by the Act relating to the alternative treatment of disease, illness, etc. (30). According to the new legislation, alternative treatment may, under certain conditions, be carried out by other than authorised health personnel. Alternative treatment are, however, not eligible for public reimbursement (9). The Act relating to alternative treatment makes references to the Norwegian Patients' Rights Act, which entered into force January first 2001 (31).

RESEARCH ON ATTITUDES TOWARD CAM

Unlike conventional medicine complementary and alternative treatment modalities come into use without prior randomised controlled trials (RCT) on their efficacy. Moreover CAM practitioners often integrate their therapeutic methods in a holistic system of care. Research on component efficacy should therefore not be the only strategy for assessing CAM (32).

The National Research Center in Complementary and Alternative Medicine in Norway (NAFKAM) has developed a research strategy for CAM which takes these aspects of CAM treatment into account. According to this, research on CAM should start with descriptive studies on the context, paradigm, use and attitudes concerning a therapy. The next phases in the assessing process should be studies on safety, system effectiveness, component efficacy and biological mechanism, in this order; opposite to conventional biomedical approach (33). Descriptive research on medical practitioners' attitudes toward acupuncture and possible changes in attitudes is thus an important part of acupuncture research. In addition research in acupuncture is one of the research areas given priority by NAFKAM (33).

Previous research on attitudes among health personnel often reports on CAM in general, surveys particular groups, e.g. general practitioners; or confines to a small, regional sample (10, 24, 25, 34 - 39). Variations bet-

ween countries regarding judicial, cultural, social, geographical, historical and professional context, make comparisons difficult and challenging (3, 9, 26, 28, 40).

We have found only one recent paper which explicitly aims to assess changes in medical practitioners' attitudes toward CAM over the years (41). The paper reports the results from a national Australian study on general practitioners' attitudes to complementary therapies in 2004 and refers to regional surveys in 1997 and 1998. The paper concludes that the attitudes of Australian general practitioners to complementary therapies have not changed from 1997 to 2004.

Several studies on medical students' attitudes toward CAM have also been carried out. The surveys on attitudes toward acupuncture among medical students at the University in Tromsø are most relevant for our study (42, 43). Equivalent questions as in our study were presented for medical students in 1992, 1996 and 2000. The aim was to describe possible changes in attitudes. The studies concluded that the students were more negative toward acupuncture in 1996 compared to 1992, and even more so in 2000. However, when separated on gender and questions, the picture is less clear.

Further references to these studies will be made in the discussion section of the thesis.

BASIS FOR THE STUDY

The case of acupuncture in the intersection between conventional and unconventional medicine, the changing judicial and cultural context regarding complementary and alternative medicine in Norway around the millennium, the priority and strategy for research on CAM as defined by NAFKAM and the lack of research on attitudes and possible changes in attitudes toward acupuncture as such among physicians in general; all form the basis for the present study.

AIM OF THE STUDY

The aim of the study is to investigate possible changes from 1994 to 2004 regarding attitudes toward acupuncture among medical practitioners in Norway, as they are expressed by their personal and professional use of the method.

MATERIAL AND METHODS

THE SURVEYS

Equivalent postal surveys on attitudes toward and use of acupuncture were carried out in February 1994 and November 2004 among proportional, stratified, random samples of working medical practitioners under 71 years of age in Norway. More than 95 % of medical practitioners in Norway are members of the Norwegian Medical Association (NMA) and the sampling frame was the membership file of NMA, consisting of 11 728 members in 1994 and 16 462 in 2004. The samples were randomly selected proportionately in accordance with the distribution of members on the seven occupational branches of NMA (general practitioners, physicians in scientific posts, occupational physicians, senior hospital physicians, junior hospital physicians, public health and specialists in private practice) and age. In 1994 every eighth member was selected and in 2004 every tenth member, resulting in samples of respectively 1466 and 1646 practitioners. The samples were independently drawn, and the extent of possible overlap is not known.

Both the survey in 1994 and the one in 2004 were approved by the Regional Committee for Medical Research Ethics, North Norway.

The questionnaires and reply prepaid envelopes were dispatched and received by NMA. The identity of the participants was not disclosed to

the researchers. The questionnaire was returned by 1135 practitioners in 1994 (of which 211 after a reminder) and 962 in 2004 (of which 227 after a reminder), i.e. response rates of respectively 77 % and 58 %. The socio demographic distribution of the respondents and the sampling frames is shown in table 1.

The surveys consisted of 13 main questions concerning personal and professional use of and intention to use acupuncture, effects and side effects and opinions on research and incorporation of acupuncture in the health care system; with only for a few questions a slightly different wording between the two years. Results from the 1994 survey are previously published (44, 45). The latest paper compares attitudes to the contribution of placebo in acupuncture among medical practitioners, acupuncturists and patients. The present study investigates possible changes in the medical practitioners' attitudes toward acupuncture, partly on the basis of some of the questions dealt with in the first paper (44).

SELECTED QUESTIONS

The questionnaires were named "Norwegian physicians' attitudes toward acupuncture." An attitude can be described as a person's feelings toward and evaluation of some object, person, issue, or event; or a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object (46). Attitudes are shaped and altered in a continuous interaction with beliefs (among

which opinions, knowledge and information), behavioural intentions, overt behaviour (creating experience) and cultural and personal norms (46). Attitudes are of interest from an epistemological point of view (14, 16) or as an entry to explain the relationship between behaviour, intentions, beliefs, and norms or to anticipate behaviour (47).

Attitudes are often investigated by scales where the respondents are asked to mark to what extent they have positive or negative attitudes toward a phenomenon or to what extent they agree or disagree with a given statement (16, 27, 47). In contrast to this, the present study goes the other way round. We ask questions that actually deal with behaviour and behavioural intention; the latter supposed to be the link between attitudes and overt behaviour (46). In this way the more hypothetical character of attitudinal scales is avoided. Still we call this an attitudinal study, in the way that behaviour and behavioral intention regarding personal and professional use of acupuncture is seen as expressions of attitudes of a more general character. To really grasp medical practitioners' attitudes toward acupuncture, however, exceed the limit of this study.

The question concerning the actual position of acupuncture in the health care system was included because it might tell something about the perceived context for personal and professional use of acupuncture.

The selected questions appear from table 2.

STATISTICAL METHODS

Data from the two surveys were combined in one database. Possible differences regarding distribution of gender, age and position between the two populations and between respondents and respective population were explored by Fishers's Exact Test two-sided for two by two tables and Pearson Chi-Square two-sided for larger tables.

Answers given in a self made category were coded as missing answers. Questions with three response alternatives were dichotomised to contrast the number that answered yes to the number that answered 'no' or 'do not know' united. The comparison between 1994 and 2004 could then be carried out using logistic regression analysis.

Possible differences between 1994 and 2004 regarding the six selected questions were thus analysed overall and separately for gender and for subgroups of age and position. For each question logistic regression analyses were carried out with the dichotomised response as the dependent variable and gender, age, position and year of study as covariates. The variables gender, age and position were added to the analyses as control covariates because these variables were thought to be possible confounders. The variable year of study was added as the explanatory variable in question.

In the separate analyses for gender the covariates were age, position and year of study, in the separate analyses for age the covariates were gender, position and year of study and in the separate analyses for position the covariates were gender, age and year of study.

The odds ratio (OR) for year of study is reported with 1994 as the reference category. The p-value expresses the statistical significance of the OR. The OR is interpreted as the odds of answering yes in 2004 compared to the odds of answering yes in 1994 adjusted for any differences in distribution of gender, age and position.

To investigate whether any changes might be the result of ageing (physicians being ten year older) rather than the year of the study taking place (physicians in 1994 compared to physicians of the same age in 2004), separate cohort analyses were carried out. The cohort variable was created by grouping the respondents according to year of birth. Possible changes in attitudes between 1994 and 2004 for medical practitioners born before 1939, 1940-1949, 1950-1959 and 1960-1969 could then be analysed. No cohort analysis could be carried out for medical practitioners born after 1970, as they were only represented in the study in 2004.

To explore possible changes in differences between genders and between subgroups of age and position over the years, multivariate logistic regression analyses were also carried out separately for each of the two years of study.

Cases with missing answers on any included covariate are excluded from multivariate analysis. This might be crucial when the number of cases is low from the onset, as it were for some questions in our study.

When multivariate analysis was not possible to carry out, Fishers's Exact Test and Pearson Chi-Square were used and *crude p* is reported.

No correction was done for repeated measure, as the samples were independent in principle. The statistical software used was SPSS® Base 14.0 for Windows® (48). The level for statistical significance was set to $p=0.05$.

POPULATIONS AND RESPONDENTS

The population of medical practitioners consisted of relatively more women, physicians older than 45 years and junior hospital physicians in 2004 compared to 1994 (all $p<0.001$). General practitioners and the category other physicians each made a smaller percentage (both $p<0.001$). There was no difference regarding the percentage of senior hospital physicians ($p=0.232$) (table 1).

The respondents did not differ from their respective population as far as distribution of gender (1994 $p=0.747$, 2004 $p=0.074$) and age less and older than 45 years (1994 $p=0.924$, 2004 $p=0.313$) was concerned. However, both surveys were under-representative of junior hospital physicians (1994 $p=0.013$, 2004 $p<0.001$) and over-representative of senior

hospital physicians (1994 $p=0.023$, 2004 $p=0.048$) among respondents. The category other physicians were underrepresented in 1994 ($p=0.010$) and overrepresented in 2004 ($p<0.001$). General practitioners, however, were overrepresented in 1994 ($p=0.024$), but did not differ in percentage from the sampling frame in 2004 ($p=0.607$) (table 1).

RESULTS

PERSONAL USE OF ACUPUNCTURE

Use of acupuncture for own disease

The percentage of medical practitioners having used acupuncture for own complaint and disease has doubled from 8 % in 1994 to 18 % in 2004 (OR 2.19 $p < 0.001$). The OR tell that the odds of having used acupuncture is 119 % higher in 2004 compared to 1994 (table 2).

The increase is seen in every subgroup of gender, age and position; however not at a significant level for the category other physicians (table 3).

Relatively more female than male physicians have used acupuncture for own disease in 2004 in contrast to 1994 when no gender difference was detected. The differences between positions is, however, no longer significant. Neither in 1994 nor in 2004 are there any differences between age groups (table 3).

The increased use of acupuncture is seen among medical practitioners born between 1940 and 1970 ($p \leq 0.005$). For physicians born before 1940, i.e. those who were older than 54 years both in 1994 and in 2004, there is no significant change ($p = 0.204$). Practitioners born after 1970 are only represented in the study in 2004.

Intention to use acupuncture for own disease

Half the medical practitioners intend to use acupuncture for own disease, and this percentage have not changed significantly from 1994 to 2004 (table 2).

However, the percentage intending to use acupuncture for own disease has risen among senior hospital physicians and physicians older than 54 years. Since the analyses were done with adjustment for age and position, this means that a senior hospital physician more likely intends to use acupuncture for own disease in 2004 compared to 1994, independent of age, and likewise for a physician older than 54 years independent of position (table 3).

Relatively more female than male physicians intended to use acupuncture for own disease both in 1994 and in 2004, and general practitioners to a greater extent than other physicians. There was no significant difference between age groups either year (table 3).

Physicians having acupuncture experience are more inclined to use the therapy for own disease in the future, compared to those who have not been acupuncture patients themselves, 75.5 % versus 24.5 % in 1994 and 74 % versus 26 % in 2004 ($p < 0.001$, both years).

There is no significant change for any cohort ($p \geq 0.360$).

PROFESSIONAL USE OF ACUPUNCTURE

Clinical use of acupuncture to treat patients

The percentage of physicians practicing acupuncture is 4 % both years (table 2), and there is neither a change for any of the subgroups in non adjusted analyses (*crude* $p \geq 0.109$).

The multivariate analyses within the two years of study reveal that male physicians practiced acupuncture more often than female physicians in 1994. However, there is no difference between genders ten years later. Contrary, while there were no differences between age groups in 1994, practitioners older than 54 years practice acupuncture more often than younger ones in 2004. General practitioners still treat patients with acupuncture more often than other physicians (table 4).

A non adjusted analysis show no significant change for any cohort (*crude* $p \geq 0.431$).

Recommendation of acupuncture for migraine

More than a third of the medical practitioners recommend acupuncture for migraine patients. No change is shown from 1994 to 2004 (table 2).

However there has been a decrease among physicians less than 35 years (OR 0.54 $p=0.015$). This implies that the odds for recommending acupuncture for a physician in this age group is 46 % lower in 2004 compared to 1994 (table 4).

The differences between categories within age and position are maintained over the years; general practitioners still recommend acupuncture more often than hospital and other physicians; and physicians 45 – 54 years of age more often than physicians in other age groups. However there is neither year any difference between male and female physicians (table 4).

There is no significant change for any cohort ($p \geq 0.369$).

Intention to learn acupuncture for clinical use

The overall percentage of practitioners planning to learn acupuncture has decreased from 8 % to 5 % over the ten years of interest (OR 0.64 $p=0.033$) (table 2). This implies that the odds for a medical practitioner planning to learn acupuncture in 36 % lower in 2004 compared to 1994.

The decrease is statistically significant only for male physicians (table 4) and in non adjusted analysis for physicians 35–44 years (*crude* $p=0.048$).

In 2004 male physicians no longer intend to learn acupuncture to a greater extent than female, but general practitioners still intend to learn acupuncture for clinical use to a greater extent than physicians in other positions. Neither in 1994 nor in 2004 are there any differences between age groups (table 4).

A non adjusted analyses for cohort, reveals that for medical practitioners born between 1950 and 1970 the percentage that intend to learn acupuncture has decreased (*crude* $p \leq 0.035$), but that there is no change for physicians born before 1950 (*crude* $p \geq 0.364$).

POSITION OF ACUPUNCTURE IN THE HEALTH CARE SYSTEM

The percentage of medical practitioners that find acupuncture incorporated in the health care system has decreased from 52 % to 45 % ($p=0.004$) (table 2). The decrease is significant for men, practitioners 35-44 years of age and general practitioners (table 5).

In 2004 practitioners older than 54 years find that acupuncture is incorporated to a greater extent than their counterparts in other positions ($p=0.024$), while there was no difference in 1994 ($p=0.706$). Contrary there are no longer any differences between positions. There is no difference between genders either year (table 5).

There is no significant change for any cohort ($p \geq 0.060$).

DISCUSSION

MAIN FINDINGS

The percentage of medical practitioners having used acupuncture for own complaint or disease has doubled and still half the medical practitioners intend to use acupuncture for own disease. Few physicians practice acupuncture and fewer than before intend to do so, however, still more than a third recommend acupuncture for migraine. Almost half the physicians find that acupuncture is incorporated in the health care system; however this proportion has slightly decreased.

BIAS CONSIDERATIONS

Selection bias

The present study is designed with fairly large, national samples of medical practitioners. Inasmuch as the sampling frames included more than 95 % of medical practitioners in Norway and the samples were proportionally stratified and random; we expect any selection bias in the sampling process to be of minor influence.

However participant self selection might have influenced the results. Response rates of more than 70 % are normally considered sufficient in population studies of the present size (21). The requirement for surveys

of homogenous groups is considered to be less strict (49). The level of response rate for inclusion of studies in one review of the incorporation of complementary and alternative medicine by mainstream physicians was set to 50 % (28). The same review found a nonsignificant negative association between sample size and belief in efficacy and practice of CAM. However, another study concludes that a high response rate is indicative of a high proportion of proponents of complementary medicine (26).

On this background, the response rates of 77 % and 58 % in the present study might be interpreted as reasonable. However it is not possible to determine whether and how the behaviour and intentions of non respondents might differ from those of the respondents, neither whether any differences might be analogous the two years. The fall in response rate from 1994 to 2004 might be an expression of 'over surveyed' physicians (41). It might also be the result of less controversy regarding unconventional medicine in 2004, making it less imperative to communicate personal attitudes. To what extent this might have influenced the attitudinal balance between respondents and non-respondents from 1994 to 2004 is impossible to tell.

The population of medical practitioners consisted of relatively more women, physicians older than 45 years and junior hospital physicians and fewer general practitioners and 'other physicians' in 2004 compared to 1994. The respondents were not representative of their populations re-

garding the subgroups of position. The study is, however, mainly carried out by multivariate analyses with adjustment for any differences in distribution of gender, age and position.

Information bias

The present study concentrates on a sole treatment outside mainstream medicine in contrast to most surveys on attitudes toward and use of complementary and alternative medicine that covers several forms. This makes it possible to go more thoroughly into the matter and presumably reduces information bias from questions being mixed up or answers being coloured by the common context of different therapies.

Furthermore, the combined database of twin surveys with ten years interval, render a unique possibility of exploring possible changes over time avoiding some of the information bias associated with comparison of results from studies with different designs.

The extent of possible overlap between the two samples is not known. Information bias might occur if answers in 2004 are influenced by the same respondent's answers ten year before. However, we do not find reason to believe that this would be a likely or frequent phenomenon; or that it would systematically bias the results in one direction.

Endeavour to avoid possible information bias linked to the design and wording of the questionnaire was included in the planning process (21). However, the different wording of the questions regarding whether

acupuncture is perceived as incorporated in the health care system or not, may threaten the internal validity on this matter. Furthermore, the questionnaire does not distinguish between traditional Chinese and western, medical acupuncture; which would have refined the study.

The present study addresses actual behaviour and behavioural intentions, questions believed to be burdened by less information bias than those dealing purely with attitudes, feelings and hypothetical situations. However, we do not know to what extent different understanding of the questions, recall bias or the forced response alternatives might have influenced the results.

The two surveys were carried out within quite different judicial and cultural contexts regarding unconventional medicine in Norway. The Medical Quackery Act and possible social desirability bias might have restricted physicians from reporting personal use of acupuncture in 1994. In that case the more extended use in 2004 would be an expression of revealed fact, not a change. However this interpretation does not seem plausible, given the fact that the results for other questions does not point in the same direction.

Apart from the likely information bias concerning the question on the status of acupuncture in the health care system, we assume that possible selection or information bias in the study has not unduly influenced the results.

The present study is confined to throw light on medical practitioners' attitudes toward acupuncture, as expressed by their personal and professional use of the method. Other parts of the questionnaire, which might have illuminated the issue of 'how' and 'why', are left out. This limits the interpretations of results.

INTERPRETATIONS AND COMPARISONS

Other studies

No other studies on medical practitioners' attitudes toward CAM seem to be of particular relevance for our study. Other studies report on CAM in general, do not give results for acupuncture, survey only subgroups or confine to a small, regional sample. We are not acquainted with any review or meta-analysis that covers studies after 1995. And, to our knowledge, possible changes in medical practitioners' attitudes over the years have not previously been investigated in one study. The only studies with similar design as ours seem to be the surveys among medical students at the University of Tromsø (42, 43).

The Australian study in 2004 aimed to assess changes in medical practitioners' attitudes toward CAM from 1997 to 2004 (41). The conclusion was that "Comparing the results of this study with the earlier surveys of GPs in Victoria, Perth and Tasmania, suggests that the attitudes of Australian GPs to complementary therapies have not changed appreciably in

the last 7 years”. In what way the comparison was done is, however, not reported; neither commensurable results from the regional surveys. Furthermore, the response rate in 2004 was 33.2 %, but the authors conclude that “... the results were remarkably consistent with previous studies – both in Australia and overseas, with much higher response rates, suggesting that response bias did not unduly influence the results.” The possibility of response bias having hindered any differences to come into view is, however, not discussed.

The crude comparison of percentages between studies carried out with different designs in different countries at different times is methodologically a dubious undertaking. With this limitation in mind, in the following discussion we nevertheless quote percentages from other studies, including the national Australian study in 2004 (41) and one of the regional studies to which it refers (39).

Personal use of acupuncture

The extended use of acupuncture for own disease from 1994 to 2004 is seen among medical practitioners of all kind. However the cohort analyses show that among physicians born before 1940 there is no change. This implies that the change from 1994 to 2004 regarding use of acupuncture for own disease could be an effect both of ageing and year of study for every age group except physicians older than 54 years, for whom the change might only be an effect of year of study.

In our study 8 % of the physicians had used acupuncture for own disease in 1994. This corresponds to the 9 % of physicians reporting having used acupuncture for own disease in a survey on a random sample of 2000 members of the Norwegian Medical Association in 1995 (27).

In our study the percentage of general practitioners having used acupuncture for own disease is the same as for the respondents overall; 8 % in 1994 and 18 % in 2004. Corresponding numbers were 11 % in Germany and 2 % in the United Kingdom of Great Britain (UK) in 2000 (40) and 12 % in Australia in 2004 (41).

The difference between Germany and UK is partly explained by diversity of medical health care systems and medical education. In Germany the familiarisation with non-conventional medicine is compulsory in the medical curriculum (40). However, education in acupuncture is neither a compulsory part of the medical curriculum in Norway. Still the percentage in Norway is closer to the percentage in Germany than to the one in UK.

The data from Germany and UK are collected four years earlier than our latest data. The seemingly lower percentages in Germany and UK could then be explained by the same effect of ageing and year of study on the use of acupuncture for own disease, which we found in our study. However, we do not have data on the use of acupuncture in UK or Germany to confirm this. And the effect of ageing and year of study

does not explain the seemingly higher percentage in Norway in 2004 compared to the Australian study the same year.

Another explanation could be the particular change in judicial and cultural context regarding CAM and the acknowledgement of research in CAM and acupuncture in Norway after the millennium (6, 21, 32). In our bias consideration we did not find this a plausible source of information bias. On the contrary it might actually be an explanatory factor for the increased use of acupuncture for own disease among medical practitioners in Norway and the seemingly higher percentage of users compared to other countries.

Half the medical practitioners intend to use acupuncture for own disease. Senior hospital physicians and physicians older than 54 years have extended their intentions. These groups had the lowest percentage of intenders from the outset, and seem now to be more on a level with their counterparts. There is no cohort effect, which implies that the increase for physicians older than 54 years is probably only an effect of year of study, not ageing.

The fact that users of acupuncture to a greater extent than non-users intend to use the method for own disease in the future, makes it at least plausible to conclude that the experience from being an acupuncture patient has not been too disappointing.

The percentage of general practitioners intending to use acupuncture for own disease is steady around 65 %. This is seemingly a higher pro-

portion than the 56 % of general practitioners in Australia in 2004 that would consider receiving acupuncture (41). The above mentioned particular change in judicial and cultural context regarding CAM in Norway could also be an explanatory factor in this matter.

Professional use of acupuncture

Only 4 % of the physicians practice acupuncture in 1994 and 2004. The same percentage was also found in the study on medical practitioners in Norway in 1995 (27).

The percentage of general practitioners practicing acupuncture is steady around 10 %. This discrepancy from the overall result might be explained by the fact that most diseases where acupuncture is indicated are taken care of in the primary health care setting in Norway (44).

In 2000, 19 % of general practitioners in Germany and 5 % of those in UK had ever practiced acupuncture (40). The seemingly higher percentage in Germany compared to both UK and Norway, might be explained by the compulsory familiarisation with CAM in the German medical education. In 1997, 21 % of general practitioners in Victoria, Australia did practice acupuncture (39) and in 2004, 18 % of general practitioners in the national survey in Australia had practiced the therapy last year (41). By referring to the survey in Victoria in 1997 the paper on the national Australian study in 2004 concluded that the attitudes of medical practitioners had not changed. From the crude comparison between percentages, this seems to be the case. This corresponds to our conclusion

of no change from 1994 to 2004 regarding the proportion of general practitioners that practice acupuncture in Norway. A higher percentage in Australia than in Norway might be explained by the fact that acupuncture has been eligible for reimbursement from the Medical Benefits Schedule since 1984 (37).

The proportion of hospital physicians practicing acupuncture is in our study 1-2 %. This corresponds to the 2 % of members of the American College of Rheumatology having administered the therapy (50). The seemingly lesser interest in practicing acupuncture among hospital practitioners and specialist physicians, might partly be explained by the mode and setting of their work compared to that of general practitioners (21).

In the case of recommending acupuncture for migraine the proportion is steady around 40 %. The Norwegian survey on medical practitioners in 1995 (27) has often been cited showing a high proportion of 65 % of physicians referring patients to acupuncture (6, 21, 51). However there is a misprint in the paper (27). The proportions of 'yes' and 'no' for referring patients to acupuncture are reversed. The correct percentage is published in the background report for the policy document on alternative medicine from the Norwegian Medical Association (5). On enquiry the misprint in the paper was confirmed by the author Olaf Aasland in a personal message 9.1.2006. The correct proportion of physicians having referred patients to acupuncture in the Norwegian study of 1995 is 32 %.

This is less than our result regarding recommendation only for migraine. There is no overall change regarding recommendation for migraine in our study, which implies that the discrepancy from the study in 1995 is probably not an expression of change over the years. The physicians might, however, have responded differently to a question on referral in general, compared to our question on referral only for migraine. The fact that the latter is posed in conjunction with a statement on documented effect of acupuncture for migraine, strengthens this hypothesis.

There has been a decrease of physicians less than 35 years recommending acupuncture for migraine. This does not seem to be an expression of adjustment to other age groups since physicians less than 35 years did not have an outstanding high percentage of recommenders in 1994. It is not possible to investigate if this is a cohort effect, since physicians less than 35 years in 2004, i. e. those who are born after 1970, are not represented in the study in 1994. A hypothesis of a cohort effect is, however, not supported by the student surveys in Tromsø. To the extent that medical students are becoming more negative toward acupuncture during their education, this is explained as an effect of education and hospital physicians as role models, not as a cohort phenomenon (42). Furthermore, no other results in our study indicate that physicians born after 1970 are more negative toward acupuncture than older ones.

A review of 19 studies in different industrialised countries found a variation from 1 to 24 % (mean 17 %) of physicians practicing acupunc-

ture and a variation from 8 to 71 % (mean 43 %) regarding referral (28). The review illustrates the problems by comparing percentages and only covers studies in the period 1982 – 1995. Our result regarding referral corresponds to the mean percentage in the review. However, the number of physicians in Norway practicing acupuncture is seemingly lower than the reported mean for industrialised countries. The review found no association for year of study, which corresponds to our results of no overall change regarding professional practice and referral for migraine from 1994 to 2004.

The percentage of general practitioners recommending acupuncture for migraine in our study is 55 % in 1994 and 58 % in 2004. In 1997, 90 % of general practitioners in Victoria, Australia had ever referred to acupuncture treatment (39). In 2004, 83 % of general practitioners throughout Australia had referred patients to acupuncture during the last 12 months (41). There is seemingly a decrease from 1997 to 2004 in Australia, which contrasts the conclusion that “the attitudes of Australian GPs to complementary therapies have not changed appreciably in the last 7 years” (41). Again the public reimbursement for acupuncture in Australia might be an explanatory factor for the seemingly discrepancy between Australia and Norway. This might also have a direct effect on patients’ demand for referral.

Fewer medical practitioners in Norway intend to learn acupuncture for clinical use; however this is only significant for male practitioners. This

can be interpreted as an adjustment between genders, since there is no longer a difference between genders in 2004. The percentage of general practitioners intending to learn acupuncture, being 15 % in 1994 and 9 % in 2004, seems to approach that of physicians in other positions. In 1997, 49 % of general practitioners in Victoria, Australia were interested in training acupuncture (39) and in 2004 31 % of general practitioners throughout Australia (41). This again might reflect a higher professional use of acupuncture among general practitioners in Australia compared to Norway, possibly due to public reimbursement. However, the figures might also indicate a decrease in Australia over the years, contradictory to the conclusion of no change as put forward in the paper on the national study in 2004 (41).

Differences between subgroups

Previous cross-sectional studies told that a medical practitioners using acupuncture for own disease would most likely be female; and that a physician treating patients with acupuncture would most likely be younger and/or male and/or a general practitioner (14, 21, 27, 37, 38).

Our study tell that a physician using acupuncture for own disease in 2004 is most likely female, but that this difference between genders has arisen in the period from 1994. Moreover, our study tells that a physician practicing acupuncture in 2004 is just as likely female, and that this equalisation between genders has arisen since 1994. In addition, our

study tells that a physician practicing acupuncture in 2004 is most likely older, and that there were no differences between age groups in 1994. The probability that a physician practicing acupuncture is most likely a general practitioner prevails throughout the period of our study.

Student surveys

The students' premises for answering questions on practicing and referring are quite different from practicing physicians'. Our results might, nevertheless, be compared to the results from the surveys among medical students at the University of Tromsø (42, 43). The overall conclusions in the student surveys were that students become more negative toward acupuncture during their education. The picture is, however, less clear when the results are separated on gender and questions. Male students are partly more negative and partly have not changed their attitudes from 1996 to 2000. Female students are partly more positive and partly have not changed. A recent study on gender differences among medical students found that female students were more positive to learning about complementary and alternative medicine compared to male students. The study concludes that the difference between genders might increase in the future, if learning about CAM is an elective and not compulsory part of the curriculum (52).

In our study the difference between genders is only seen for personal and not for professional use of acupuncture. Male and female physicians

recommend acupuncture for migraine to the same extent and the difference regarding practice and intention to practice has disappeared, only in the latter case because of men 'becoming more negative' from 1994 to 2004. However, one might speculate if this is only a transitional stage toward new differences between genders when it comes to professional use of acupuncture.

Why acupuncture patients not acupuncturists?

One conclusion from the 1994 survey among medical practitioners in Norway was that "With the present attitudes among doctors, it is likely that an increasing number of doctors, especially general practitioners, will take up the practice of acupuncture." (44). This prophecy has surely not come true. But why do medical practitioners in Norway increase their personal, but not their professional use of acupuncture?

Possible explanations for a discrepancy between having positive attitudes and even training in a complementary therapy and yet not practicing it, are mentioned in the survey among general practitioners in Victoria, Australia (39). Factors like lack of financial reward or difficulty accommodating more time-consuming therapies in a busy clinic does not concern acupuncture in general practice in Australia, since the therapy is eligible for reimbursement. But they are probably relevant explanatory factors in our case (51).

Furthermore, patient pressure is an acknowledged factor in medical referrals. Willingness to refer might thus be an inadequate measure of medical practitioners' acceptance of a method (39, 53). A low or stable referral rate might reflect the patients demand for acupuncture treatment in general or that they go elsewhere for their acupuncture treatment. Then our results does not necessarily mean that the physicians are negative or that the have not changed their attitudes. The number of acupuncturists in Norway has increased over the years. By 2004 the number is estimated to 600 non-health personnel and 9-1300 authorised health personnel; including besides physicians also nurses, midwives, physiotherapists and others (8). The increasing possibilities of receiving acupuncture treatment from other than medical practitioners might be an additional explanatory factor for medical practitioners not increasing their professional use of acupuncture.

Australian general practitioners of 2004 seem to be more acupuncturists and less acupuncture patients compared to their Norwegian counterparts of the same year. The public reimbursement for acupuncture might contribute to the more extended professional use of acupuncture among general practitioners in Australia. On the other hand, the particular change in judicial and cultural context regarding CAM and the acknowledgement of research in CAM and acupuncture in Norway might contribute to the more extended personal use of the therapy in our country. However, we do not have sufficient information on the use and

the context of acupuncture, neither in Australia nor in Norway, to reach decisive conclusions on this matter.

Acupuncture in the health care system

The question on whether acupuncture is incorporated in the health care system or not is, as earlier mentioned, probably burdened with information bias. However, the results indicate that relatively fewer physicians find that acupuncture is incorporated. This might partly be explained by the large number of non-health authorised acupuncturists and the lack of formal approval from the health authorities.

Why the decrease is only significant for men, physicians 35 – 44 years of age and general practitioners is difficult to explain. One might however reflect on the parallel decrease regarding intention to practice acupuncture among men and physicians 35 – 44 years of age, however for the latter only shown in an unadjusted analysis. The fall in the percentage of general practitioners intending to practice acupuncture is high, but not statistically significant.

To investigate possible associations between the medical practitioners thoughts about the actual position of acupuncture in the health care system and their personal and professional use of the therapy; further analyses would have been necessary. On the background of the questionable intern validity for this question, such analyses were not done.

CONCLUSION

Medical practitioners seem to be equally positive toward acupuncture as a therapeutic method in 1994 and 2004. However medical practitioners of 2004 are rather acupuncture patients than acupuncturist.

The main concern of the present study has been to describe possible changes in personal and professional use of acupuncture. To broaden the picture, other questions from the surveys in 1994 and 2004 should also be investigated.

Further research should go deeper into the relationship between individual beliefs, attitudes, behavioral intentions and overt behavior in the context of normative expectations regarding acupuncture and other unconventional therapies; preferably also by qualitative research methods.

REFERENCES

1. Eisenberg DM, Davis RB, Ettner SL et al. Trends in Alternative Medicine Use in the United States, 1990-1997. *JAMA* 1998(280);18:1569-1575.
2. Ernst E. From alternative to complimentary: changing the view on the fringe. *Br J Hosp Med* 1993;50:299-300.
3. Fisher P, Ward A. Complementary medicine in Europe. *BMJ* 1994; 309:107-111.
4. Borchgrevink CF. Forskning i alternativ medisin. Hva er dokumentert og hva er dokumentasjon? (Research in alternativ medicine. What has been documented, and what is documentation). *Tidsskr Nor Lægeforen* 1997(18);117:2469-73.
5. Alternativ behandling. Del 1 Legeforeningens holdning til alternativ behandling. Del 2 Innstilling fra Alternativ medisin utvalget. (Alternative treatment. Part 1 The Norwegian Medical Association's policy. Part 2 Recommendations from the alternative medicine committee). Den norske Lægeforening, Oslo 1998.
6. Norges offentlige utredninger, Alternativ medisin. Sosial og helsedepartementet, NOU 1998:21. (Official Norwegian Report. Alternative medicine. Ministry of Health and Care Services.)
<http://odin.dep.no/hd/norsk/publ/utredninger/NOU/030005-020019/index-dok000-b-n-a.html> (29.11.2006)
English summary http://odin.dep.no/hod/norsk/dok/andre_dok/nou/030005-020019/ved005-bn.html (6.12.2006)
7. Barrett B. Complementary and Alternative Medicine: What's It All About? *Wisconsin Medical Journal* 2001 (100); 7:20-26.
8. Utredning om utdanning i akupunktur og homøopati. Delrapport 1 – akupunktur. Sosial- og helsedirektoratet oktober 2004. (Report on training in acupuncture and homeopathy. Part 1 – acupuncture. The Directorate for Health and Social Affairs October 2004)
http://www.shdir.no/vp/multimedia/archive/00000/IS-0029_akupunktrappor_862a.pdf (29.11.2006)
9. Ersdal G. How are European patients safeguarded when using complementary and alternative medicine (CAM)? Jurisdiction, supervision and reimbursement status in the EEA area (EU and EFTA) and Switzerland. CAM-Cancer project funded by the European Commission.
<http://www.cam-cancer.org/index.asp?o=2338> (29.11.2006)

10. Easthope G, Tranter B, Gill G. Normal medical practice of referring patients for complementary therapies among Australian general practitioners. *Complementary Therapies in Medicine*, 2000, 8:226-233.
11. Ernst E, Fugh-Berman A. Complementary and alternative medicine: What is it all about? *Occupational and Environmental Medicine* 2002;59:140-144.
12. The National Research Center in Complementary and Alternative Medicine (NAFKAM), The medical faculty, University of Tromsø.
<http://uit.no/nafkam/omnafkam/?Language=en> (5.12.2006)
13. National Center for Complementary and Alternative Medicine. What is Complementary and Alternative Medicine. NCCAM Publication No. D156 May 2002. <http://nccam.nih.gov/health/whatisacam/> (29.11.2006)
14. Sagli G, Gulbrandsen P, Fugelli P. Leger og andre utøvere av akupunktur i Norge – utdanning, teoriforankring og praksis (Medical doctors and other practitioners of acupuncture in Norway: training, theoretical orientation and practice). *Tidsskr Nor Lægeforen* 1998;118:2948-52.
15. Johannessen H. Alternativ behandling i Europa. Århus: Videns- og Forskningscenter for Alternativ Behandling. Mars 1995, revidert mai 2001.
16. Shao JYJ, Borthwick AM, Lewith GT et al. Attitudes towards Traditional Acupuncture in the UK. *Evid Based Integrative Med* 2005, 2(1): 37-45.
17. Alræk, Terje og Anders Bærheim: An empty and happy feeling in the bladder. Women's experienced health changes after acupuncture for recurrent cystitis. *Complementary Therapies in Medicine*, 2001(9);4:219-223.
18. Skilnand E, Fossen D, Heiberg E. Acupuncture in the management of pain in labor. *Acta Obstet Gynecol Scand* 2002;81:943-948.
19. Vickers AJ, Rees RW, Zollman CE et al. Acupuncture for chronic headache in primary care: large, pragmatic, randomised trial. *BMJ* 2004;328:744 (27 March), doi:10.1136/bmj.38029.421863.EB (published 15 March 2004)
20. Nesheim B-I, Kinge R, Berg B, Alfredsson RN et al. Acupuncture during labor can reduce the use of meperidine: a controlled clinical study. *The Clinical Journal of Pain*, 2003;19:187-191.
21. Norheim AJ. Acupuncture in health care – Attitudes to, and experience with acupuncture in Norway. Doktoravhandling (Doctoral thesis). Tromsø: NAFKAM, Universitetet i Tromsø 2005; skriftserie nr 1.
22. Salomonsen LJ, Grimsgaard S, Fønnebø V. Bruk av alternativ medisinsk behandling ved norske sykehus. (Use of alternative medicine in Norwegian hospitals). *Tidsskr Nor Lægeforen* 2003;5:631-3.

23. Barratt-Due, A, Hagen I, Dahl V. Smertelindring til fødende i norske sykehus. (Obstetric analgesia in Norwegian Hospitals). Tidsskr Nor Lægeforen 2005(18);125:2504-6.
24. Marshall RJ, Gee R, Israel M et al. The use of alternative therapies by Auckland general practitioners. New Zealand Medical Journal 1990; 103, 213-5.
25. Lynöe N, Svensson T. Physicians and Alternative Medicine – An Investigation of Attitudes and Practice Scand J Soc Med 1992(20);55-60.
26. Ernst E, Resch K-L, White AR. Complementary Medicine. What Physicians Think of It: A Meta-analysis. Arch Intern Med 1995 (155)L 2405-2408.
27. Aasland OG, Borchgrevink CF, Fugelli P. Norske leger og alternativ medisin. Kunnskaper, holdninger og erfaringer (Complementary medicine – knowledge, attitudes and experiences among Norwegian physicians). Tidsskr Nor Lægeforen 1997;117:2464-8.
28. Astin JA, Marie A, Pelletier KR et al. A Review of the Incorporation of Complementary and Alternative Medicine by Mainstream Physicians. Arc Intern Med 1998 (158):2303-2310.
29. Risberg T, Kolstad A. Alternativ medisin – holdninger og bruk blant sykehusansatte leger, sykepleiere og kontorpersonell i Nord-Norge. Tidssk. Nor Lægeforen 2003(5);123:604-6.
30. Lov om alternativ behandling av sykdom mv. <http://www.lovdatab.no/all/nl-20030627-064.html>
English translation: Act No. 64 of 27 June 2003 relating to the alternative treatment of disease, illness, etc. <http://www.ub.uio.no/ujur/ulovdata/lov-20030627-064-eng.doc>
31. Lov om Lov om pasientrettigheter (pasientrettighetsloven). <http://www.lovdatab.no/all/nl-19990702-063.html>
English translation: Act No. 63 of 2 July 1999 relating to Patients' rights (the Patients' Rights Act) <http://www.ub.uio.no/ujur/ulovdata/lov-19990702-063-eng.doc>
32. Fønnebø V, Grimsgaard S, Walach H et al. Researching complementary and alternative treatments – the gatekeepers are not at home. In press.
33. Strategidokument for Nasjonalt Forskningscenter Innen Komplementær og Alternativ Medisin, NAFKAM. (Strategic plan for The National Research Center in Complementary and Alternative Medicine, NAFKAM). NAFKAM, The medical faculty, University of Tromsø.
<http://uit.no/getfile.php?PageId=1492&FileId=430> (14.12.2006)

34. Wharton R, Lewith G. Complementary medicine and the general practitioner. *BMJ* 1986;292:1498-1500.
35. Perkin MR, Percy RM, Fraser JS. A comparison of the attitudes shown by general practitioners, hospital doctors and medical students towards alternative medicine. *J R Soc Med* 1994;(87):523-525.
36. Jump J, Yarbrough L, Kilpatrick S. Physicians' Attitudes Toward Complementary and Alternative Medicine. *Integrative Medicine* 1998;1(4):149-153.
37. Easthope G, Beilby JJ, Gill GF et al. Acupuncture in Australian general practice: practitioner characteristics. *MJA* 1998, 169:197- 200.
38. Hall K, Giles-Corti B. Complementary therapies and the general practitioner. *Australian Family Physician* 2000; 29(6), 602-606.
39. Pirotta MV, Cohen MM, Kotsirilos V et al. Complementary therapies: have they become accepted in general practice? *MJA* 2000, 172:105-109.
40. Schmidt K, Jacobs PA, Barton A. Cross-cultural differences in GPs' attitudes towards complementary and alternative medicine: a survey comparing regions of the UK and Germany. *Complementary Therapies in Medicine* 2002;10:141-7.
41. Cohen M M, Penman S, Pirotta M et al. The integration of Complementary Therapies in Australian General Practice: Results of a National Survey. *The Journal of Alternative and Complementary Medicine*, 2005;11(6):995-1004.
42. Syverstad DE, Norheim AJ, Fønnebø V. Changing attitudes to acupuncture among medical students. A possible impact of role models. *Education for Health* 1999;12:195-201.
43. Nguyen KD, Salomonsen LJ, Norheim AJ et al. Endringer i holdning til akupunktur blant medisinstudentene i Tromsø (Change in attitude to acupuncture among medical students in Tromsø). Student Report, Faculty of Medicine, University of Tromsø, 2003.
<http://uit.no/getfile.php?SiteId=65&PageId=1492&FileId=339> (29.11.2006)
44. Norheim AJ, Fønnebø V. Doctors' attitudes to acupuncture – a Norwegian study. *Soc Sci Med* 1998;47(4):519-23
45. Norheim AJ, Fønnebø V. Attitudes to the contribution of placebo in acupuncture – a survey. *Compl Ther Med* 2002;10:202-9.
46. Fishbein M, Ajzen J. *Belief, Attitude, Intention and Behavior: An introduction to Theory and Research*. Reading, MAS; Addison.-Wesley: 1975.
47. Milden A, Stokols D. Physicians' Attitudes and Practice Regarding Complementary and Alternative Medicine. *Behavioral Medicine* 2004; 0(2):73-82.

48. SPSS® Base 14.0 for Windows®
<http://www.spss.com/no/products/base/index.htm> (11.12.2006)
49. Berman BM, Singh BB, Hartnoll SM et al. Primary care physicians and complementary-alternative medicine: training, attitudes, and practice patterns. *J Am Board Fam Pract* 1998(11);4:272-81.
50. Berman BM, Bausell RB. Use and Referral Patterns for 22 Complementary and Alternative Medical Therapies by Members of the American College of Rheumatology Results of a National Survey. *Arch Intern Med* 2002;162:766-70.
51. Aanjesen T, Senstad AC, Lystad N et al. Akupunktur – et supplement i allmennpraksis (Acupuncture in general practice). *Tidsskr Nor Lægeforen* 2002;122:921-1.
52. Greenfield SM, Brown SL, Dawlatly SL et al. Gender differences among medical student in attitudes to learning about complementary and alternative medicine. *Complementary Therapies in Medicine* 2006;14,207-212.
53. Ernst E. Prevalence of use of complementary/alternative medicine: a systematic review. *Bulletin of the World Health Organization* 2000;78(2):252-257.

TABLE 1 - 5

Table 1. Medical practitioners in Norway 1994 – 2004, distribution of respondents and sampling frames according to gender, age and position, (*valid cases*)¹, %

	1994		2004	
	Respondents ² n=1135	Sampling ³ Frame n=11 728	Respondents n=962	Sampling ⁴ frame n =16 462
Gender (<i>Valid cases</i>)	(1124)		(936)	
Men	74.6	74.1	61.0	63.9
Women	25.4	25.9	39.0	36.1
Age (<i>Valid cases</i>)	(1113)	< 45 57.6 > 45 42.4	(936)	21.0
< 35	20.0		20.3	26.7
35-44	37.7		25.6	28.2
45-54	28.1		27.6	24.1
> 54	14.1		26.5	
Position (<i>Valid cases</i>)	(1099)		(940)	
Senior hospital physicians	34.7	31.3	35.1	32.0
Junior hospital physicians	18.4	21.6	21.7	30.8
General practitioners	29.8	26.6	23.8	23.1
Others physicians	17.2	20.5	19.4	14.1

¹ Cases with missing answers on the variable in question are excluded.

² Percentages for respondents in 1994 and 2004 are calculated in SPSS.

³ Percentages for sampling frame 1994 as reported in Norheim 1998 (44).

⁴ Percentages for sampling frame 2004 as given by the Norwegian Medical Association.

Table 2. Selected questions for the study, summary of yes response (*valid cases*)⁵, % with CI⁶, adjusted OR⁷ with CI, p-value for OR, significant p-values in bold

PERSONAL USE OF ACUPUNCTURE	1994	2004	OR	p OR
<i>Have received acupuncture treatment</i> ⁸	(1131) 8.3 6.7 – 9.9	(951) 17.6 15.2 – 20.0	(2010) 2.19 1.65 – 2.91	<0.001
<i>Would consider acupuncture treatment</i> ⁹	(1118) 53.2 50.3 – 56.1	(937) 55.0 51.8 – 58.2	(1983) 1.12 0.93 – 1.35	0.245
PROFESSIONAL USE OF ACUPUNCTURE				
<i>Practice acupuncture</i> ¹⁰	(1119) 3.8 2.7 – 4.9	(946) 3.8 2.6 – 5.0	(1993) 0.95 0.58 – 1.55	0.829
<i>Intend to practice acupuncture</i> ¹¹	(1061) 7.8 6.2 – 9.4	(897) 4.6 3.2 – 6.0	(1889) 0.64 0.42 – 0.96	0.033
<i>Recommend acupuncture for migraine</i> ¹²	(935) 40.5 37.4 – 43.6	(772) 37.3 33.9 – 40.7	(1658) 0.94 0.76 – 1.16	0.569
ACUPUNCTURE IN THE HEALTH CARE SYSTEM				
<i>Find acupuncture incorporated</i> ¹³	(1071) 51.9 48.9 – 54.9	(902) 44.6 41.4 – 47.8	(1911) 0.76 0.63 – 0.91	0.004

⁵ Valid cases in the analysis when cases with missing answers are excluded.

⁶ 95 % confidence interval.

⁷ Odds ratio, reference category 1994, adjusted for gender, age and position.

⁸ Question *Have you ever visited an acupuncturist to get treatment for disease or complaints? (yes/no)*

⁹ Question *If you ever got complaints or diseases for which acupuncture could be an alternative, would you then consider acupuncture as a real alternative? (yes/no/do not know)*

¹⁰ Question *Do you practice acupuncture at present? (yes/no)*

¹¹ Question *If no, do you intend to learn acupuncture to use the method to treat your patients? (yes/no/do not know)*

¹² Question *Do you recommend acupuncture for your migraine patients? (yes/no)*

¹³ Question 2004 *Acupuncture is incorporated in the health care system today (yes/no)* In 1994 there were four alternative responses to the question *What do you think the position of acupuncture should be in the health care system?* 1 *Acupuncture is already incorporated in the health care system*, 2 *Acupuncture has to be incorporated in the health care system*, 3 *Acupuncture should be forbidden as a form of treatment* and 4 *Acupuncture should be rejected until scientifically documented*. The present study reports the number that chose alternative 1 in contrast to the number that chose the other alternatives united.

Table 3. Medical practitioners' personal use of acupuncture 1994 – 2004 separately for men, women and categories of age and position, %, adjusted OR¹⁴, p-value for OR, adjusted p-value for differences between subgroups within year, significant p-values in bold)

	Have used				Intend to use			
	1994	2004	between years		1994	2004	between years	
			OR	<i>p</i> OR			OR	<i>p</i> OR
Gender								
Men	7.2	13.2	2.00	<0.001	49.8	50.4	1.09	0.439
Women	11.3	24.7	2.62	<0.001	63.2	62.8	1.14	0.457
adj p within year	0.058	<0.001			0.030	0.001		
Age								
<35	9.0	21.1	2.49	0.004	63.6	57.9	0.73	0.148
35-44	8.3	17.5	1.95	0.011	56.7	60.4	1.13	0.501
45-54	8.7	17.5	2.13	0.005	50.0	54.4	1.09	0.627
>54	5.7	15.7	2.77	0.009	35.9	49.2	1.64	0.023
adj p within year	0.484	0.691			0.058	0.458		
Position								
Senior hospital physicians	5.0	15.5	3.26	<0.001	37.3	51.5	1.81	<0.001
Junior hospital physicians	11.4	21.1	2.09	0.011	62.9	56.2	0.66	0.056
General practitioners	8.3	18.3	2.29	0.003	64.9	63.8	0.96	0.850
Other Physicians	10.6	16.5	1.18	0.631	52.4	50.0	0.89	0.604
adj p within year	0.038	0.747			<0.001	0.015		

¹⁴ Odds ratio, reference category 1994, adjusted for gender, age and position when appropriate.

Table 4 Medical practitioners' professional use of acupuncture 1994 – 2004 separately for men, women and categories of age and position, %, adjusted OR¹, p-value for OR, adjusted p-value for differences between subgroups within year, significant p-values in bold)

	Practice ²		Recommend for migraine				Intend to practice			
	1994	2004	1994	2004	between years		1994	2004	between years	
					OR	p OR			OR	p OR
	Gender									
Men	5.0	4.9	39.9	38.0	*	*	8.4	3.4	0.46	0.007
Women	0.7	2.2	42.4	36.6			6.1	6.0	1.19	0.631
<i>adj p within year</i>	0.012	0.653	0.699	0.196			0.037	0.216		
Age										
<35	1.3	1.1	37.0	22.7	0.54	0.015	10.6	7.6	*	*
35-44	4.1	1.7	42.9	38.3	0.85	0.410	9.9	5.2		
45-54	5.2	5.4	44.1	47.2	0.97	0.883	5.2	3.0		
>54	4.5	6.5	31.1	40.1	1.37	0.203	3.5	3.5		
<i>adj p within year</i>	0.288	0.022	0.039	0.007			0.114	0.282		
Position										
Senior hospital physicians	1.6	2.4	27.8	31.6	1.18	0.417	3.5	2.2	0.66	0.401
Junior hospital physicians	0.5	1.5	33.3	24.0	0.67	0.113	6.7	5.1	0.68	0.399
General practitioners	9.6	10.8	54.7	57.6	0.96	0.817	15.2	9.2	0.60	0.110
Other Physicians	2.7	0.6	40.2	31.5	0.67	0.123	5.7	2.8	0.34	0.064
<i>adj p within year</i>	<0.001	<0.001	<0.001	<0.001			<0.001	0.004		

¹ Odds ratio, reference category 1994, adjusted for gender, age and position when appropriate.

² * Multivariate analyses were not possible to carry out due to low number of valid cases.

Table 5. Medical practitioners' opinions of the position of acupuncture in the health care system 1994 – 2004 separately for men, women and categories of age and position (% , adjusted OR¹, p-value for OR, adjusted p-value for differences between subgroups within year, significant p-values in bold)

		Acupuncture is incorporated			
		1994	2004	between years	
				OR	<i>p</i> OR
Gender	Men	53.8	44.8	0.70	0.003
	Women	46.6	45.0	0.92	0.637
	adj p within year	0.192	0.287		
Age	<35	46.4	38.0	0.74	0.162
	35-44	54.3	42.0	0.67	0.024
	45-54	53.7	46.4	0.73	0.074
	>54	50.0	51.1	1.00	0.988
	adj p within year	0.703	0.034		
Position	Senior hospital physicians	48.2	42.9	0.82	0.234
	Junior hospital physicians	45.3	39.8	0.82	0.365
	General practitioners	61.7	51.2	0.57	0.004
	Other physicians	51.1	45.6	0.84	0.448
	adj p within year	0.001	0.125		

¹ Odds ratio, reference category 1994, adjusted for gender, age and position when appropriate.

APPENDIX

QUESTIONNAIRES 1994 - 2004

Norske legers holdninger til akupunktur

Kjære mottaker!

En nylig publisert studie har beskrevet holdningene til akupunktur blant medisinstudentene i Tromsø. Denne studien tar sikte på å få frem norske legers syn på det samme.

Studien er et NFR-støttet prosjekt som utføres av Institutt for samfunnsmedisin ved Universitetet i Tromsø.

Også legeforeningen støtter prosjektet og har gjort et EDB-basert tilfeldig utvalg av 1500 norske leger som mottar denne henvendelsen. Spørreskjemaet har et løpenummer for purreformål, som bare er kjent for legeforeningen. Resultatene sendes inn anonymt til undersøkerne.

ISM, Universitet i Tromsø.

Arne Johan Norheim

Vinjar Fønnebø

Personalialia

Bosted:

- Østlandet
 Vestlandet/Sørlandet
 Trøndelag
 Nord-Norge.

Kjønn: Mann
 Kvinne.....

Utdanningssted:

- Oslo
 Bergen
 Trondheim....
 Tromsø
 Utlandet.....

Embetsseksamen (år): 19__

Alder: __ år

Nåværende stilling:

- Overlege.....
 Underordnet lege
 Almenpraktiker
 Praktiserende spesialist.....
 Bedriftslege
 Administrativ stilling
 Forskning/Utdanning
 Annet.....
 (spesifiser) _____

Egenerfaring med akupunktur

1. Har du selv noen gang oppsøkt akupunktør for behandling av sykdom eller plager?

Ja
Nei.....

Hvis ja, hadde du noen nytte av akupunkturbehandlingen?

Ja
Nei.....
Vet ikke.....

2. Hvis du fikk plager eller sykdommer der akupunktur kunne være et alternativ, ville du da vurdert akupunktur som et reelt alternativ?

Ja
Nei.....
Vet ikke.....

3. Har noen i din nærmeste familie (foreldre, ektefelle, søsken, barn) fått akupunkturbehandling?

Ja
Nei.....
Vet ikke.....

Hvis ja, vurderer du akupunkturbehandlingen som nyttig for disse personene?

Ja
Nei.....
Vet ikke.....

Henvisningspraksis

4. Migrene er en form for hodepine der skolemedisin ikke alltid hjelper. Akupunktur kan hos noen av disse være et behandlingsalternativ.

Ja.....
Nei
Vet ikke

Anbefaler du akupunktur for dine migrenepasienter?

Ja.....
Nei

5. Du har en kreftpasient i din praksis som du ikke kan hjelpe med skolemedisinsk behandling.

Hva er din holdning dersom pasienten ønsker å prøve akupunktur?
(NB: Kun **ett** kryss)

Vil fraråde pasienten
å prøve akupunktur

Vil anbefale pasienten
å prøve akupunktur

Lar pasienten på fritt
grunnlag bestemme dette
selv uten å påvirke han
i noen retning

Akupunktoreffekter

6. Ved kroniske ryggsmarter kan akupunktur være et behandlingsalternativ.

Hvor stor andel av effekten mener du kan tilskrives ren placebo-effekt?

0% 25% 50% 75% 100%

Hvis du sammenligner placebo i akupunkturbehandling med placebo ved fysioterapi, mener du placebo i fysioterapi er:

Større enn ved akupunktur

Omtrent den samme som ved akupunktur.....

Mindre enn ved akupunktur

Akupunktorens stilling/forskning

7. Hvilken stilling mener du akupunktur bør ha i dagens helsevesen?
(NB: kun ett kryss)

Akupunktur er allerede integrert i helsevesenet.....

Akupunktur må integreres i helsevesenet.....

Akupunktur bør forbys som behandlingsform.....

Akupunktur må avvises til det foreligger vitenskapelig dokumentasjon...

8. Noen leger mener akupunktur er en useriøs behandlingsform.

Hva mener du er akupunktorenes viktigste bidrag til skolemedisinsk anerkjennelse?

(Prioriter mellom **alle** svaralternativene, skriv 1 på det viktigste, 2 på det nest viktigste, osv)

Ikke presentere akupunktur som et universalmiddel.....

Inngå samarbeidsavtaler med leger (henvisningssystem).....

Arbeide for offentlig godkjenningssystem.....

Fremlegge vitenskapelig dokumentasjon.....

Samordne/standardisere akupunktur-utdanning, betalingssatser, indikasjonsgrunnlag.....

9. Mener du forskning på akupunktoreffekter skal foregå med hjelp av statlige midler?

Ja.....

Nei.....

Vet ikke.....

10. En undersøkelse viser at helsepersonell er den faggruppe/yrkesgruppe som benytter seg mest av alternativ medisin.

Hva tror du kan være grunnen til dette?

(Prioriter mellom **alle** svaralternativene, skriv 1 på det viktigste, 2 på det nest viktigste, osv)

Kjennskap til skolemedisinens bivirkninger og skadevirkninger

Skolemedisinske metoder ga dårlig resultat.....

Lyst til å prøve en "eksotisk" behandlingsform.....

Skolemedisinen gav for dårlige svar på årsaker, sykdomsutvikling, og behandlingsstrategi.....

Alternativ medisin tar seg bedre tid, yter større omsorg, og det skapes bedre kontakt mellom behandler og pasient.....

11. Praktiserer du for tiden akupunktur?

Ja

Nei.....

Hvis nei, har du planer om å tilegne deg kunnskaper om akupunktur for selv å benytte metoden?

Ja

Nei.....

Vet ikke.....

12. Har du noen gang i din legepraksis møtt på pasienter med komplikasjoner etter akupunkturbehandling?

Nei.....

Ja, akupunktur gitt av meg.....

Ja, akupunktur gitt av andre.....

Hvis ja, i tilfelle hvor mange pasienter?

Hvilke komplikasjoner?

Vennligst returner besvart spørreskjema i vedlagt konvolutt så snart du er ferdig med det.

Tusen takk for hjelpen !

Kommentarer til undersøkelsen:



Norske legers holdninger til akupunktur 2004

Kjære kollega!

Holdninger til akupunktur har vært undersøkt tidligere både hos leger, medisinstudenter, pasienter og akupunktører. Denne studien tar utgangspunkt i en tilsvarende undersøkelsen for 10 år siden og ønsker å se på norske legers syn i dag.

Studien er støttet av universitetet i Tromsø, og utføres av Nasjonalt forskningscenter innen komplementær og alternativ medisin (NAFKAM). Undersøkelsen er godkjent av regional etisk komitè og er meldt til personvernombudet for forskning, Norsk samfunnsvitenskapelige datatjeneste AS.

Også legeföreningen støtter prosjektet og har gjort et EDB-basert tilfeldig utvalg av 1500 norske leger som mottar denne henvendelsen. Spørreskjemaet har et løpenummer for purreformål, som bare er kjent for legeföreningen. Resultatene sendes inn anonymt til undersøkerne, og resultater i sluttrapport kan ikke tilbakeføres til enkeltindivider.

Deltakelse er frivillig, og ved å sende inn besvart spørreskjema samtykker du i å delta i undersøkelsen. Du kan når som helst trekke deg og få dine opplysninger slettet helt frem til anonymiseringsdato som legeföreningen har satt til 1. juni 2005.

NAFKAM. Universitetet i Tromsø. Tlf: 77 64 66 50

Arne Johan Norheim

Vinjar Fønnebø

Bosted:

Østlandet

Vestlandet/Sørlandet

Trøndelag

Nord-Norge

Kjønn: Mann

Kvinne

Utdanningssted:

Oslo

Bergen

Trondheim

Tromsø

Utlandet

Embetsksamen (år): _____

Fødselsår: _____

Fødested: Norge

Utlandet

Nåværende stilling:

Overlege-sykehus

Underordnet lege-sykehus

Allmennlege/Spes allmennmed

Privatpraktiserende spesialist

Bedriftslege

Administrativ stilling

Forskning/Utdanning

Annet

(spesifiser) _____

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Nei.....

Hvis ja, hadde du noen nytte av akupunkturbehandlingen?

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Nei.....
Vet ikke.....

2. Hvis du fikk plager eller sykdommer der akupunktur kunne være et alternativ, ville du da vurdert akupunktur som et reelt alternativ?

Ja
Nei.....
Vet ikke.....

3. Har noen i din nærmeste familie (foreldre, ektefelle, søsken, barn) fått akupunkturbehandling?

Ja
Nei.....
Vet ikke.....

Hvis ja, vurderer du akupunkturbehandlingen som nyttig for disse personene?

Ja
Nei.....
Vet ikke.....

Henvisningspraksis

4. Migrene er en form for hodepine der skolemedisin ikke alltid hjelper. Akupunktur kan hos noen av disse være et behandlingsalternativ.

Ja.....
Nei
Vet ikke

Anbefaler du akupunktur for dine migrenepasienter?

Ja.....
Nei

5. Du har en kreftpasient i din praksis hvor skolemedisin *kun* har palliativ behandling å tilby.

Hva er din holdning dersom pasienten ønsker å prøve akupunktur som kurativ behandling?
(NB: Kun **ett** kryss)

Vil fraråde pasienten å prøve akupunktur

Vil anbefale pasienten å prøve akupunktur

Overlater til pasienten på fritt grunnlag bestemme dette selv uten å påvirke han i noen retning

Akupunkteffekter/forskning

6. Ved kroniske rygg smerter kan akupunktur være et behandlingsalternativ. Hvor stor andel av effekten mener du kan tilskrives ren placebo-effekt?

0% 25% 50% 75% 100%

Hvis du sammenligner placebo i akupunkturbehandling med placebo ved fysioterapi, mener du placebo i fysioterapi er:

Større enn ved akupunktur

Omtrent den samme som ved akupunktur.....

Mindre enn ved akupunktur

7. Mener du forskning på akupunktur-effekter skal foregå med hjelp av statlige midler?

Ja

Nei.....

Vet ikke.....

Akupunktorens stilling

8. Akupunktur er integrert i dagens helsevesen

Ja

Nei.....

Hvis nei, hvilken stilling mener du akupunktur bør ha i dagens helsevesen? (**NB: kun ett kryss**)

Akupunktur bør integreres i helsevesenet.

Akupunktur bør forbys som behandlingsform.

Akupunktur må avvises til det foreligger mer vitenskapelig dokumentasjon.

9. Hva mener du er akupunktørens viktigste bidrag til skolemedisinsk anerkjennelse?

(Prioriter mellom **alle** svaralternativene, skriv 1 på det viktigste, 2 på det nest viktigste, osv)

Ikke presentere akupunktur som et universalmiddel.....

Inngå samarbeidsavtaler med leger (henvisningssystem).....

Arbeide for offentlig godkjenning-ordning.

Fremlegge vitenskapelig dokumentasjon

Samordne/standardisere akupunktur-utdanning, betalingssatser, indikasjonsgrunnlag

10. Undersøkelser viser at helsepersonell er den faggruppe/yrkesgruppe som benytter seg mest av alternativ medisin.

Hva tror du kan være grunnen til dette?

(Prioriter mellom **alle** svaralternativene, skriv 1 på det viktigste, 2 på det nest viktigste, osv)

Kjennskap til skolemedisinens bivirkninger og skadevirkninger

Skolemedisinske metoder ga ikke god nok effekt.....

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Skolemedisinen gav for dårlige svar på årsaker, sykdomsutvikling, og behandlingsstrategi.....

Alternativ medisin tar seg bedre tid, yter større omsorg, og det skapes bedre kontakt mellom behandler og pasient.....

11. Praktiserer du for tiden akupunktur?

Ja

Nei.....

Hvis nei, har du planer om å tilegne deg kunnskaper om akupunktur for selv å benytte metoden i pasientbehandling?

Ja.....

Nei

Vet ikke

12. Har du noen gang i din legepraksis møtt på pasienter som på grunn av akupunkturbehandling har fått forsinket nødvendig/viktig skolemedisinsk behandling (doctor-delay)?

Nei.....

Ja.....

Hvis ja, hvor mange pasienter? _____

13. Har du noen gang i din legepraksis møtt på pasienter med komplikasjoner etter akupunkturbehandling?

Nei.....

Ja.....

Hvis ja, hvilke komplikasjoner har du møtt på i din legepraksis?

Stikksmerte.....Antall _____

Hematom.....Antall _____

Uvelhet/SvimmelhetAntall _____

BesvimelseAntall _____

PneumothoraxAntall _____

Lokale infeksjonerAntall _____

Alvorlige infeksjoner (spesifiser type/ant) _____

Annen organskade (spesifiser type/ant) _____

Andre komplikasjoner/bivirkninger/skader (spesifiser type/ant) _____

Vennligst returner besvart spørreskjema i vedlagt konvolutt så snart du er ferdig med det.

Tusen takk for hjelpen !

Kommentarer til undersøkelsen: