

Use of herbal supplements and nutritional supplements in the UK: what do we know about their pattern of usage?

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Within the last decade there has been a dramatic increase in the sale and use of herbal supplements and food supplements by Western populations and within the UK. This increased usage has coincided with a resurgence of interest in nutritional therapy and complementary and alternative medicine (CAM) therapies, such as herbal medicine, naturopathy and homeopathy, in which therapists may provide dietary advice and advocate the use of food or herbal supplements. The rise in the use of CAM therapies by the UK population can be attributed to several factors, including: promotion via health programmes and the media; a change in public attitudes; training of more nutritional and CAM therapists as a result of the increased availability of courses; a greater use of CAM and food and herbal supplements, particularly by patients with cancer. The aim of the present paper is to identify the pattern of usage of food and herbal supplements in the UK.

Food and herbal supplements: Pattern of supplement use: Complementary and alternative medicine therapies

Over the last 10 years there has been a substantial rise in the use of herbal supplements and food supplements by Western populations and those living in the UK⁽¹⁾. Evidence of this increase in the UK is reflected in sales of herbal remedies, which have increased from £27 × 10⁶ in 1991 to £38 × 10⁶ by 1996⁽²⁾. This increased usage has coincided with a resurgence of interest in nutritional therapy and complementary and alternative medicine (CAM) therapies, such as herbal medicine, naturopathy and homeopathy, in which therapists may provide dietary advice and advocate the use of food or herbal supplements.

Factors that influence the pattern of usage of food and herbal supplements may include fashion trends, media and politics, affluence, friends and family, the type of disease, education, geography and public opinion. The prevalence of CAM in recent literature represents a level of health consumer activity that is substantial; for example, it has been reported that 25% of the UK population and 50–70% of the populations in France and Germany use CAM⁽³⁾. It can be assumed that patients who use CAM are more likely to demonstrate increased usage of herbal and nutritional supplements.

The current popularity of the use of CAM may be increasing as a result of increased interest in the use of therapies that are perceived as more 'traditional'. Within

the UK the most popular types of CAM are herbal medicine and homeopathy, probably because of their association with plant products⁽⁴⁾. Nutrition has been associated with health and healing from as far back as 400BC when Hippocrates identified a relationship between food and health⁽⁵⁾ and advocated that 'Food be medicine and medicine be food'. Herbal medicine may be regarded as traditional; its use has been reported as being as early as 2800BC⁽⁶⁾.

Promotion via health programmes and the media

More recently, programmes that have raised public awareness about nutrition have included school-based initiatives such as the Scottish Executive's 'Hungry for Success' campaign⁽⁷⁾, which involves a whole-school approach to school meals in Scotland.

While political initiatives can increase public awareness about health issues, including nutrition (a direct consequence of which can be increased use of food supplements), the role of the media can also have a substantial impact on public behaviour. The media appear to favour CAM therapies, and several recent articles have promoted the role of plant compounds and traditional therapies in

Abbreviation: CAM, complementary and alternative medicine.

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health care, highlighting, for example, the use of herbal remedies such as bog myrtle (*Myrica gale*)⁽⁸⁾ and the use of Chinese medicine in cancer therapy⁽⁹⁾. Media reports emphasising some of the side effects of drug treatments, such as hormone-replacement therapy increasing the risk of ovarian cancer⁽¹⁰⁾ and breast cancer⁽¹¹⁾, may encourage more of the population to seek the use of CAM therapies or herbal alternatives.

Celebrity behaviour may also affect the pattern of supplement use by the general public. In a collection of contemporary accounts of celebrity use of CAM from articles published during 2005 and 2006, a total of thirty-eight celebrities are quoted as using a variety of therapies including homoeopathy, acupuncture and ayurveda⁽¹²⁾. The authors suggest that some consumers use CAM in order to imitate their idols.

Changes in public attitudes

Increases in general affluence and improvements in living standards have resulted in a greater investment in health care and healthcare products by the UK population. The National Health Service costs are £74 × 10⁹/year, which includes a budget of £10 × 10⁹ for expenditure on drugs. In addition, consumers spend £10 × 10⁹ on medicines and private health care and, interestingly, approximately £1.6 × 10⁹/year on CAM⁽¹³⁾. The willingness of the general public to invest in CAM and related supplements is reflected in the substantial increase in sales of herbal remedies between 1991 and 1996⁽²⁾. Within the UK it is estimated that spending on CAM will increase by 50% every 5 years⁽¹⁴⁾. The increase in popularity and use of herbal supplements was evidenced further by the report of the Royal Pharmaceutical Society⁽¹⁵⁾. The evidence presented to the House of Lords Select Committee on Science and Technology demonstrates a 50% increase in sales of herbal products between 1994 and 1998⁽⁴⁾.

The prevalence of CAM in recent literature represents a level of health consumer activity that is substantial; for example, it has been reported that 20% of the UK population have used CAM⁽¹⁶⁾ with an average expenditure of £14.00 per month. While a smaller percentage of the population in the UK uses CAM as compared with populations in France and Germany⁽³⁾, the percentage within the UK is increasing annually, as is the number of individuals using supplements.

Therapy use among specific patient groups

There is increasing use of CAM among children⁽¹⁷⁾, which may be attributable to a greater desire by parents to minimise the amount of drugs to which children are exposed, or a greater parental awareness of CAM therapies that may be beneficial for children.

Patients who suffer from cancer are more likely to choose CAM^(18,19); indeed, it has been suggested^(17,20) that 32–70% of patients with cancer use CAM. It can be assumed that these patients are also more likely to use considerable amounts of food and herbal supplements. A survey has reported that in 1998 70% of hospitals in

England offered one or more CAM therapies to patients, especially those with cancer⁽¹⁸⁾. Another group who may be more inclined to use CAM and demonstrate an increase in the use of supplements are patients suffering from hepatitis C. There is an active hepatitis C programme in Ireland that offers support to patients suffering from hepatitis C, some of whom may be co-infected with HIV. Patients participating in support groups are more likely to use CAM and supplementation (M Ritchie, unpublished results).

Data collected during the 1994 Canadian National Population Health Study, have identified a group of individuals who are more likely to use CAM. It is not surprising to note that this group tends to contain more females, those who are younger to middle-aged, affluent and more educated⁽²¹⁾. A similar trend would also be expected in the UK. While patients with cancer tend to be greater users of CAM^(18,19) and of herbal and food supplements, females suffering from breast cancer are among some of the highest users of CAM^(20,22).

Research on nutrition and phytochemicals

Research and education within universities and colleges of further education have resulted in increased public awareness about the potential effects of nutrition and phytochemicals. In addition to phytochemicals, plants contain ≥12 000 natural chemicals^(23,24). There are about 400 potentially-useful plant compounds currently under investigation via phase I, phase II and phase III trials. At least 4000 flavones have been identified⁽²³⁾. One serving of vegetables contains >100 different phytochemicals⁽²⁵⁾. Databases of the phytochemical content of a variety of foods have been published⁽²⁶⁾.

The emphasis on disease prevention⁽²⁷⁾ has been another method of raising public awareness about the importance of nutrition.

Specialist training programmes

The increased use of CAM therapies by the UK population may also be a result of the greater availability of specialist training courses (one professional training programme for medical herbalists in 1991 has increased to seven institutions currently offering BSc degrees in herbal medicine), and therefore more qualified nutritional and CAM therapists. There are approximately sixty-one complementary medicine courses in universities in the UK, which include nutritional therapy, homeopathy, herbal medicine and naturopathy.

Interestingly, in 2000 there were approximately 50 000 CAM practitioners of whom 10 000 were registered⁽²⁸⁾. Since then the number of practitioners has increased and statutory registration will ensure more practitioners will be registered. The rise in the number of practitioners as a result of more courses and more registered practitioners is likely to increase the use by the general public of CAM and herbal and food supplements. This trend may be further enhanced by an increase in the number of UK general practices offering CAM services; in 1995 40% of

general practices offered a CAM service as compared with 50% in 2001⁽¹⁴⁾.

Role of the internet

The internet and relative ease with which individuals can access information on an extensive number of topics has increased further the interest in and use of food and herbal supplements. Although various studies have claimed that 36–55% of all internet users have accessed medical information⁽²⁹⁾, what is noteworthy is evidence that 40% of patients with breast cancer in Canada and the US have used the internet to obtain information about the disease and its treatment⁽³⁰⁾. It can be assumed that a similar pattern of internet use can be demonstrated within the UK. Such motivated patients have already been reported to be more likely to use CAM and food and herbal supplements^(18,19). This increased usage may be a result (in part) of the amount of information readily available on the internet.

The internet also provides a considerable amount of information about CAM. An American study has reported that 48% of those seeking information about CAM had used the internet⁽²⁹⁾. Once again, this pattern may be similar in the UK.

The consequence of increasing availability of information about CAM and food and herbal supplements via the internet, via books (including self-help books) and self-help groups may be partly responsible for a scenario reported in a Canadian population study. In 1998 it was reported that 7% of those given a conventional prescription substituted it with a natural product^(31,32). There appears to be no published information to suggest that this percentage is different in the UK, or indeed that it has changed since the report was published.

Conclusions

In conclusion, the substantial increase in the use of CAM, food supplements and herbal supplements within the UK is attributable to a variety of factors including education, media, health-promoting programmes, affluence, fashion trends, the type of disease, geography and ultimately public opinion. Patients who are more likely to use CAM and take food or herbal supplements tend to wish to have a choice in their health care. Affluent patients also tend to opt for CAM as a method of treatment. Such patients may also be more likely to seek out their own information and question authority. An attraction of CAM and the use of supplements is that they are perceived by some patients to be safe and traditional. Such patients may be more reluctant to use drugs or medicines. These patients may be dissatisfied or disappointed with previous experiences of drugs or medicines, or they may prefer to use a different approach to healing and health, i.e. they wish to substitute the 'low-touch, high-tech' approach of conventional medicine for the 'low-tech, high-touch' approach of CAM.

Recipients of health care see themselves as consumers with an increased capacity and desire to be involved in decision making. Currently, consumers are less likely to

assume a passive role in health care and consequently demand more information about conventional and complementary medicine. Public opinion regarding the use and practise of CAM and the use of supplements is also likely to be influenced by the requirement for all CAM practitioners to be registered. This factor may increase public confidence in CAM and CAM practitioners. A further consequence may be increased usage of food and herbal supplements.

Finally, public opinion has a profound affect on the use of CAM and food and herbal supplements. As a result of the availability of more university courses in CAM, the increased availability of information about CAM and food and herbal supplements and a general public demanding to be more involved in making informed decisions regarding their health, the use of supplements has changed over the last decade and is likely to increase. It is also likely that usage of supplements will be a factor that needs to be addressed during patient interviews.

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