Abstract

Concerns about health risks linked to electromagnetic fields (EMF) lead the patients to ask questions to their doctor. Information on the biological effects of EMF is abundant, but controversial and potentially disturbing. Individuals suffering from electromagnetic hypersensitivity (EHS) attribute a variety of symptoms to EMF. In this context, a survey study among a representative population of French GPs was carried out to investigate what GPs know about EMF, what are their sources of information, what are the concerns of the patients about EMF, and what is the extent of EHS in France.

The French GPs believed that EMFs could have health effects, but a very large majority of them admit being misinformed about the subject. They mainly trust scientists and Academies, which is reassuring. In general, they are rarely questioned by their patients or confronted with EHS's somatic complaints.

1. Introduction

Patients who have concerns about the health risks linked to electromagnetic fields (EMF) exposure tend to go and see their GP first. Among these patients, some of them attribute symptoms to EMF exposure.

Information on health effects of EMF may come from different sources. It is abundant, but controversial and potentially disturbing. Individuals suffering from electromagnetic hypersensitivity or electrohypersensitivity (EHS) attributes a variety of symptom to EMF. Their situation is often dramatized in communication to the general public.

In this context, it is important to investigate what GPs know about non ionizing radiation, what are their sources of information, what are the concerns of the patients about EMF, and what is the extent of EHS syndromes in France.

Other major issues have motivated this sample survey study among a representative population of French GPs including: “What sources of information do GPs trust the most? Are they often confronted with patients complaining of EHS? What are the reported disorders?”

The result of this study will allow comparison of the position of GPs towards EMF in France with those previously reported in Germany, Switzerland and Austria [1-3].

2. Materials and methods

A pollster (Kantar Health, ex Sofres) competent in matters relating to health was selected to conduct the survey via the Internet from September 27 to October 8, 2010 by the quota method among 600 GPs.

The method of sampling by quota consists in making sure of the representativeness of the sample by allocating him a distribution similar to that of the general population concerning gender, age and geographical region of exercise of the GPs. It is widely used for inquiries on little sample (less or equal to 1000 units). Although empirical, this method gives very satisfactory results. It presents the advantage to be faster and less expensive than a random survey.

The questionnaire included 6 questions about personal data (gender, age, region of practice, etc.) and 16 questions divided in 4 groups.

- 2 questions on the environmental risks and sources of EMF,
- 4 questions on human perception of EMF,
- 6 questions on practical experience of the GPs,
- 4 questions about information sources and their credibility.
3. Results

Among the respondents, 73% were men, 42% were under 50 years of age (mean age 50 years), 50% had less than 20 years of seniority in the profession (average length was 21 years), 55 % worked in urban areas of more than 20 000 inhabitants, and 10% had practice in Paris and its suburb. The general medicine is the exclusive mode of exercise for 63% of them. Others had a secondary and complementary practice, the most common being homeopathy (15%).

Over 80 % of the GPs mentioned mobile phone antennas, mobile phones and high-voltage power lines as sources of EMF, but less than 20 % knew that electric shavers and hairdryers also emit EMF.

To the question “Can people perceive EMF?”, the answers were split one-thirds for yes, no or “Do not know”. A third of the GPs believed it is scientifically proven that living near a high-voltage power line causes adverse effects on health. 22 % of them who thought it is scientifically demonstrated that cell phone use is dangerous and 17 % in the case of mobile phone base stations.

A third of the GPs were frequently or occasionally questioned by their patients (44 % for the homeopaths), most often by women (69 %) than men. As for cause of this questioning, the cell phone was listed first by 54% of the doctors, mobile phone antennas by 24% and high voltage lines by 14%.

Seven GPs out of 10 have not been confronted with complaints related to EHS during the last 12 months and the most frequent symptoms reported were headaches (38 %), sleeping disorders (19 %) and asthenia (17 %).

Most of the GPs’ information (74 %) came from the mainstream media: newspapers, television, radio and the internet. The medical press and specialized websites were cited by 55 % of them. More than 90 % of the GPs trust the scientific community and particularly in Academies (Medicine, Sciences, Technology), 75 % placed their trust in government agencies (57 % for the homeopaths). Governmental agencies (43 %, 32 % for the homeopaths) came after consumers groups (54 %; 65 % for the homeopaths). In contrast, only 7 % of the doctors relied on the authorities and 4 % in the telecommunications companies. At last, 72 % of the GPs consider that public authorities are not enough attentive to the concerns of the French people about EMF.

4. Conclusion

The French GPs believe that EMFs could have health effects, but a very large majority of them admit being misinformed about the subject. Most of their information comes from the mainstream media: newspapers, television, radio and the internet. They mainly trust scientists and Academies, which is reassuring. In general, they are rarely questioned by their patients or confronted with EHS's somatic complaints.

5. References