Attitudes of recent medical graduates and East Rand doctors to water fluoridation

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Summary

Samples of medical practitioners on the East Rand and 1979 graduates from two medical schools in the Transvaal were asked to complete a questionnaire dealing with the fluoridation of drinking water. Of the 94.9% who responded, 78.4% supported the fluoridation of drinking water, 7.2% did not, 13.4% were doubtful, and 1% declined to answer. The majority of the subjects did not have any formal education dealing with the fluoridation of drinking water during undergraduate medical courses, and 94.8% of the East Rand practitioners had not attended postgraduate courses on the subject. In order to improve community health on an individual and on an organizational level, it is important that the medical profession effectively assess the question of water fluoridation. Adequate medical undergraduate and/or postgraduate education dealing with the fluoridation of drinking water as well as oral health is therefore necessary.

The Commission of Inquiry into Fluoridation1 appointed by the State President in 1966 recommended that "steps should be taken to encourage, advise and assist local authorities to fluoridate the water supplies of their communities as soon as possible". More than a decade later, the health professions have failed to ensure that the South African public are benefiting from this preventive measure.

Although the attitudes of various public groups to the fluoridation of water have been described,2,4 these may in most cases be based on criteria which detract from the objective assessment of the fluoridation of drinking water. René Sand's statement: 'Health cannot be given to people, it demands their participation', quoted by Schwartz and Hansen,1 is valid. It is, however, the health professions who have the means to assess a preventive procedure. Once satisfied with its safety and effectiveness, they should encourage the general population to participate in deriving the benefits from a particular health regimen. An important component of the health profession in this regard is the medical profession.

Taljaard,4 in a survey based on a 30% response to questionnaires distributed to officials of the Department of Health, reported the responses of a selected sample of South African medical practitioners to water fluoridation. Six per cent of the 179 replies received revealed that they had never read or heard about the fluoridation of drinking water. Of the remaining 94%, approximately 86% supported water fluoridation, 5% were against this measure, and 9% were doubtful about it.

Since various regions in South Africa do not have optimal fluoride levels in drinking water, dentists often advise patients to use fluoride tablets if the water fluoride levels are substantially low. Many of these patients request advice from medical practitioners in this regard. It is therefore imperative that dentists and doctors have the necessary background information in order to correctly advise patients, as well as to use the opportunity to enlighten patients as to the safety, effectiveness and economic advantages5 of water fluoridation over fluoride tablets and other known regimens.

The purpose of this investigation was to determine the attitudes of samples of East Rand medical practitioners and recent Transvaal medical graduates to water fluoridation, and to assess whether they had received adequate education on this subject.

Subjects and methods

Proportional random samples (area stratum) of East Rand medical practitioners registered with the Eastern Transvaal Branch of the Medical Association of South Africa and random samples from each of the 1979 classes of graduates from the Universities of Pretoria and the Witwatersrand were asked to complete a questionnaire (Fig. 1) on the fluoridation of drinking water. The retrieved questionnaires (94.9%) were recorded on computer cards and analysed in an IBM 370/158 computer using the Statistical Package for the Social Sciences.7

Results

Of the 94.9% who responded, 78.4% supported the fluoridation of drinking water, 7.2% did not, 13.4% were doubtful, while 1% declined to answer. The results of this study indicate that there are no obvious differences between the East Rand medical practitioners and the two groups of recent graduates with regard to their responses to the fluoridation of drinking water. Variables such as age, sex, race, university of graduation and home language did not reveal obvious differences in response to the question of the fluoridation of drinking water. It is of interest to note that none of the specialists was opposed to water fluoridation, although more than 20% of them did not know whether or not to support it.

Of those who opposed the fluoridation of drinking water, 21% did so because of lack of knowledge, preferring a conservative rather than a radical point of view, and 26% because they felt that the effects of fluorides on humans were not completely known.

In the group of medical practitioners who did not visit a dentist (except when in pain) a relatively lower percentage (65.4%) supported fluoridation and a relatively higher percentage (19.2%) did not support fluoridation than in the two groups that visited a dentist at least once a year.

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The majority of individuals had received no teaching on the fluoridation of drinking water during their undergraduate medical course and 94.8% of the East Rand practitioners did not attend postgraduate courses on this topic.

Discussion

The pooled and East Rand practitioners' responses to the fluoridation of drinking water appear to differ from those in the investigation by Taljaard, in which a higher percentage of subjects supported water fluoridation. This difference may be attributed to sample selectivity, the 30% response obtained and/or questionnaire differences.

The correlation of attitudes to water fluoridation and the frequency of dental visits are similar to the trend displayed by Schwartz and Hansen in a study which assessed the attitude of the Danish public to water fluoridation. They showed that the smallest percentage of support for water fluoridation was found in the group that did not visit a dentist.

The comparison between the responses of groups which did and did not have undergraduate or postgraduate fluoridation education did not display definite trends. There were contradictions with regard to undergraduate courses concerning fluoridation from the responses of members of the same class. This may be attributed to variable patterns of course attendance or to the fact that formal courses on this subject are not always made available.

The majority of subjects received no formal education on the fluoridation of drinking water. In order to improve community health on an individual and on an organizational level, it is important that the dental profession effectively assess the question of water fluoridation. Adequate medical undergraduate and/or postgraduate education dealing with the fluoridation of drinking water, as well as oral health, is therefore necessary.

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REFERENCES