menopausal symptom control, e.g. hot flushes, and also did not report the effects of HRT on urinary and vaginal health. Overall quality of life measures were not reported. In particular it has not yet reported on the effect of HRT on brain function and dementia. It therefore does not allow assessment of the overall balance of all risks and benefits of long-term HRT. Nevertheless, it does indicate that the particular combination utilised should not be used for long-term disease prevention in postmenopausal women because the benefits are not sufficient to justify the risks of such use. Although this conclusion could potentially apply to all oestrogen/progestin combination hormone products, there are currently no large randomised clinical trials (RCTs) that definitively prove a better long-term effect associated with utilisation of other formulations or routes. This must become a research priority, especially as the metabolic effects of different regimens are different,[3] which may have an impact on their cardiovascular and possibly other effects. Results of experimental studies in primates have demonstrated that MPA can antagonise the positive effects of oestrogens on arteriosclerosis and vasodilatation.[4,5] It is conceivable that this is because of the slight glucocorticoid action of MPA, which induces thrombin receptor expression.[6] The issue of lower dosage also requires long-term RCT studies.

The relevance of the WHI findings to the use of the particular HRT regimen in short-term treatment of symptoms in women at the time of the menopause is less certain. However, treatment should not be initiated for the sole purpose of prevention of cardiovascular disease. For those already on such treatment, it is mandatory that they are informed of the WHI findings, and those who elect to continue on it should probably limit utilisation to 4 years. Those who choose to discontinue HRT or to convert to other preparations or routes should probably be weaned off gradually. Above all, individualisation and patient information are paramount.

Professor A H MacLennan (personal communication, 24 July 2002) makes the following helpful points. Most women initiate HRT for symptom control. For the first 4 years the serious risks may be few. At 4 - 5 years, if there are no other indications to continue HRT, it may be reasonable to wean the patient off HRT and try without it. Up to 40% of women previously on HRT may experience a recurrence of sufficient symptoms to warrant further years of treatment.

A decision to continue HRT after 4 - 5 years is currently understandably difficult when it brings potential risks as well as potential benefits. It is to be hoped that more information to help in making these decisions will come from other ongoing WHI trials and another long-term trial abbreviated as WISDOM (Women's International Study of Long Duration Oestrogen after Menopause). The latter, begun in 1999, is being run in the UK, Australia and New Zealand, and will eventually recruit a total of 22 000 women aged 50 - 69 years.

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WATER FLUORIDATION IS THE RIGHT THING TO DO

Regulations were gazetted during September 2000 (Regulation Gazette No. 6874) under the Health Act (Act No. 63 of 1977) providing for the implementation of water fluoridation in South Africa.[1] The countrywide implementation of this primary health care measure now becomes imminent.

Community water fluoridation is the process of adjusting the amount of fluoride that is present naturally in the community's water to the best level for protection against tooth decay. Tooth decay remains the most prevalent chronic infectious disease in South Africa, and is a major public health problem. In terms of the regulations public consultation is provided for and criteria for exemption from water fluoridation would be considered. The benefits of the use of fluoride as a public health measure have been repeatedly well demonstrated and documented over the past 50 years.[2]

Global trends. Water fluoridation benefits more than 370 million people throughout the world. It is the major delivery system of fluorides in the USA, available in most large cities and benefiting 65.8% of the population. It is also the primary method of delivery in countries such as Australia, New Zealand, Ireland, Singapore, Malaysia and Hong Kong, and in major cities in a number of countries. The use of fluorides has long been accepted and recognised by all the established health and public health authorities to be one of the most successful

health promotion systems conceived, and its safety and effectiveness have been endorsed.[3] It has been identified as one of the 10 greatest public health achievements of the 20th century by the Centers for Disease Control and Prevention in the USA.

Tooth decay. More than 90 out of every 100 South Africans experience some tooth decay by the time they reach adulthood.[4] In some urban areas, 60 - 80% of children under the age of 6 years suffer tooth decay. For most of the citizens in South Africa, adequate dental treatment is unaffordable and unavailable. In parts of the country more than half of the adult population have lost all their teeth. The prevalence of dental caries needs to be understood within the context of broader public health issues, particularly the emergence and re-emergence of infectious diseases. South Africa finds itself at the epicentre of the HIV/AIDS and tuberculosis epidemics. For these diseases, and for dental caries, infection control is a major concern. Prevention and control of dental caries is especially important because of the relief measures available — extraction of affected teeth tends to be the predominant mode of treatment.

Benefits. Tooth decay is a preventable disease. Use of fluoride has resulted in an enormous decline in the incidence and prevalence of dental caries throughout the world. The fluoridation of water supplies remains the safest and most practical, economical, equitable and effective oral health promotion measure for the prevention of tooth decay. Some studies confirm that people drinking fluoridated water show a reduction of tooth decay in primary teeth by 40 - 60% and of tooth decay in permanent teeth by 25 - 40%.

Public support. Studies show that most South Africans (6 out of 10) support the addition of fluoride to water if it can reduce tooth decay.[5] Despite powerful evidence to favour fluoridation as a public health policy it has met vigorous opposition. Apart from specific arguments on lack of effectiveness and health effects, issues around environmental sensitivity, lack of choice and cynicism about governmental policies and officials have been raised. In the last 50 years the legality of fluoridation has been tested several times. In the USA the highest courts have repeatedly established that fluoridation is not an unconstitutional invasion of religious freedom or other individual rights guaranteed by the First, Fifth or Fourteenth amendment. The most searching courtroom scrutiny of water fluoridation, especially in respect of health, came from Scotland. It was the longest case in British legal history and the presiding judge ruled that the evidence for the safety of fluoridation was convincing.

Equity. Water fluoridation will benefit everyone with natural teeth. It transcends the barriers of race and class and levels out the differences in oral health between rich and poor.[6] The lower socio-economic groups, those with the highest levels of untreated tooth decay, will benefit most from the reduction in levels of tooth decay. It means better looking teeth, fewer dental bills and fewer days spent away from school and work.

Cost. The addition of fluoride to water will cost less than R2 per person per year. Water fluoridation is the most cost-effective way of preventing tooth decay in South Africa. It is 18 times cheaper than toothpastes, 50 times cheaper than current preventive measures, and 61 times cheaper than filling a tooth. The preventive benefits of water fluoridation will save many days lost at work and school.

The challenge facing the health professions is to bring the facts on water fluoridation to the attention of elected officers, administrators and their constituencies. It must be stated clearly and dramatically that public office bearers have no reason to abdicate their responsibility to implement water fluoridation without any further delay. There is no valid reason for denying the benefits of water fluoridation, a 50-year-old scientific measure, to the people of South Africa.

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