

Review of report of workshop on “Effective Use of Fluoride in Asia”

Professor Denis O’Mullane

Over the last decade there is an increasing collaboration between the World Health Organisation (WHO), the World Dental Federation (FDI) and the International Association for Dental Research (IADR) in identifying and proposing solutions to major oral health concerns worldwide. In November 2006 the three international organisations convened a meeting of over 80 experts from 30 countries in Geneva and in Ferney Voltaire in France for a “Global Consultation on Oral Health through Fluoride”. The report of this meeting expressed deep concern about the growing disparities in oral health throughout the world and the apparent lack of progress in tackling the burden of dental (tooth) decay. The essential role of fluoride administered on a community basis, professionally or on a self basis was unanimously adopted. This welcome tripartite collaboration between WHO, FDI and IADR has continued and the day long session reporting on the work of the IADR Task Force on “Global Health Inequalities: The Research Agenda” held prior to the 88th IADR General Session in Barcelona in July 2010 further advanced the idea of developing a clear agenda for identifying and solving oral health inequalities worldwide (Pitts *et al.*, 2011).

In March 2011, the WHO, FDI and IADR co-sponsored a three day workshop in Phang-Nga Thailand on “Effective Use of Fluoride in Asia”, the proceedings of which are now published (thaidental.net/fluorideasia). The workshop was organised by the Dental Association of Thailand and the Faculty of Dentistry of Thamasset University. The Report is prefaced by a statement by the WHO on the public health issues of inadequate or excess fluoride which outlines the current thinking of the WHO on the use of fluoride in the control of dental caries and on the procedures to follow when inadequate or excessive levels of fluoride are present in drinking water.

The report itself is divided into two main sections. The first section summarises the contributions of the eleven invited international experts, e.g. a brief outline of recent developments in our understanding of the aetiology of dental caries, the early detection of incipient carious lesions, oral health and use of fluorides in Japan and a detailed account of the use of fluoride in promoting oral health in Brazil. These summaries are well referenced and provide an important source of information on our current thinking on fluorides and dental caries.

The second section of the report of the proceedings is probably the most interesting from the point of view of the readership of Community Dental Health as it contains reports from 21 Asian countries on the use of various forms of fluoride in the control of dental caries. Starting alphabeti-

cally with Bhutan with a population of 635,000 and ending with Vietnam with a population of 89 million, each of the 21 countries provides an account of the use of fluoride in the control of dental caries. Whilst there is an attempt to make sure that each country provides broadly similar information this has not been fully achieved; nevertheless the accounts given are fascinating and are an important source of information on the history of the use of fluoride in the different countries, the problems encountered and the current use and plans for its use in the future.

It is not possible in this short review to give details of the achievements of each country, nevertheless a number of points deserve mention. Firstly it is notable that in some countries the level of fluoride in the toothpastes available is often less than that given on the label; the shelf life of the toothpastes for sale is often not satisfactory. A feature of the Report from the different countries is the wide variation in the level of caries reported e.g. in Brunei Darussalam the mean DMFT for 12 year olds is around 4.8 whereas in China it is approximately 0.6. It is also worth noting that in a number of countries in the region the level of caries in the primary dentition seems to be high in comparison with that in the permanent dentition. Another feature in the Report is the wide variation between countries not only in population size but also in GNP so that the level of dental services provided and the attention to prevention of dental caries varies widely.

A number of recommendations in different countries deserve special mention e.g. in India it is recommended that fluoride toothpaste should not be used under the age of 4 years. Also, a novel approach to caries prevention is reported from the Philippines where use of wild tea as a source of fluoride is being tested. The successful fluoridation programmes are well documented including those in China, Hong Kong, Malaysia and Singapore.

In general this is a most interesting report of an important workshop. It is recommended that other similar country reports be prepared and reported in order to be in a position to monitor the pattern of use of fluorides in the control of dental caries throughout the world. Also those who promote the ongoing collaboration between WHO, FDI and IADR deserve our congratulations.

References

- Pitts, N., Amaechi, B., Niderman, R., Acevedo, A.M., Vianna, R., Ganss, C., Ismail, A. and Honkala, E. (2011): Global Oral Health Inequalities: Dental Caries Task Group-Research Agenda. *Advances in Dental Research* 23: 211-220.
Report of the Proceedings of the Workshop on Effective Use of Fluoride in Asia (2011): www.thaidental.net/fluorideasia