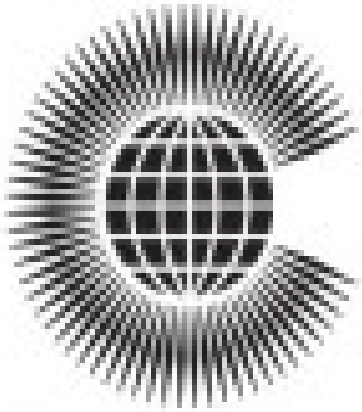
Symposium on

Oral Health for Older People in a changing world

Organized by

Commonwealth Dental Association in conjunction with the Sri Lanka Dental Association



FDI/CDA/SLDA Joint International Conference

Colombo, Sri Lanka

29th June 2013

Contents

1. Background

At the 7th Triennial Meeting of the Commonwealth Dental Association (CDA) which was held in Cape Town, South Africa , on 2nd November 2012, it was unanimously decided that the CDA them for the next three years would be "Oral Health and the Aging Population". In keeping with this them, Dr. Hillary Cooray, the Immediate Past President of the CDA requested the chairman of the Organizing committee of the FDI/CDA/SLDA conference to have a symposium on the same subject, to be held on 29 June 2013 in Colombo, Sri Lanka.

Objectives of the symposium

1. Introduce participants to the subject of Geriatric Dentistry
2. Make aware of the current status in management of Oral health in Older People in different countries in the South East Asia and Commonwealth.
3. Formulate a list of recommendations for better management of Oral Health in the Older People.

2. Opening Address – **Associate Professor W J A O'Reilly** *(President Commonwealth Dental Association, Australia)*

The meeting was opened by Associate Professor O'Reilly, President of Commonwealth Dental Association. Associate Professor O'Reilly welcomed participants and expressed his gratitude to Sri Lanka Dental Association especially to Dr Suresh Shanmuganathan for organizing this symposium. He considered the gathering of the symposium as unique as it represented the SLDA, APDF, CDA and FDI which in turn would represent 90% of the world's dental community. He also stated the importance of disseminating the deliberations of the meeting to the professionals who are in the active service.

In elaborating the importance of the theme of the symposium he stated that one of the CDA's rolling themes for next three years is 'Oral Health for Ageing Population'. He also stated that all nations whether developing or developed faces the same issue in delivering health care to the vulnerable groups. He recalled the workshop that was conducted by the CDA in collaboration with the Caribbean Dental Programme Inc. in Barbados on the vulnerable groups. He also mentioned that there are difficulties accessing dental services in rural and remote areas. This could be due to lack of income and the ability to afford, geographic difficulty in accessing dental services due to lack of workforce to serve the need or a maldistribution of the workforce, lack of targeted oral health programmes for the vulnerable, disjointed oral health programmes to help prevent dental disease, a lack of targeted oral health programmes to serve the most vulnerable and needy in our countries.

Associate Professor O'Reilly stressed that the advances in medicine, improved diet and lifestyles have improved the life expectancy of our society. Thus it is important to give due consideration in oral health for older people in a changing world.

Summarizing the agenda Associate Professor O'Reilly avowed that the meeting would provide an opportunity to learn about oral health for older people in a changing world. He also reminded participants that the final expectation of this meeting is to come out with list of recommendations that can be implemented by dentists within the Commonwealth with regard to the management of the oral health of the elderly population.

3. Business Session

3.1 Synopsis of the Presentations

3.1.1 Presentation by – Dr. Dilhara Samaraweera *(Consultant Physician , Member of the Geriatric working group, SLMA NCD Committee, Member of the Specialty Board in Elderly Medicine, PGIM, Colombo, Sri Lanka)*

Dr. Dilhara Samaraweera made a presentation on "Specialized care for elderly" where he elaborated the current concepts in medical management of elderly patients.

He stated that Sri Lanka has one of the fastest ageing populations in the world. The population of 60 years and above was 9% in 2000, in September 2010 it had increased up to 11% and it is predicted to be double that number by 2025. He spoke on the three stages of life.

1. Stage one - Training stage (age 0-20 years)
2. Stage two - Social, Family and Duty Responsibilities (20 to 50 years)
3. The Third - Self Responsibility and Freedom. (50- until about80 years)

He explained the historical trends of the life course where in the pre modern age there was one stage that was recognized as childhood followed by adulthood. However, in the post modern life course there is lifelong learning, working and security where a person would not be considered as an outcast at any age but will be considered as actively participating in the economical growth of the family and country. He also talked about the "womb to tomb " concept in ageing and the importance of the life course approach to health, primary health care and long term health care, age friendly environments and the importance of reinterpreting/rethinking the philosophy of ageing.

He elaborated the fact that physiology of the elderly is different thus they may be vulnerable to diseases and falls and may have cognitive impairments and susceptible to adverse effects of drugs thus caring for elderly is a different specialty. He also mentioned that the presentation of the various disease conditions may be atypical in the elderly. Diagnosis may also be difficult due to multiple pathology, multiple etiology, complex social situations, and suboptimal positions for examining. Similarly the old age will also affect the oral health. Decreased production of saliva, impaired muscles of mastication, loss of teeth, decreased taste buds, decreased sense of smell, atrophic changes in the jaw and Telengiectasia are few of the oral health related conditions that could arise in the old age.

Moreover Dr. Samaraweera mentioned the importance of assessing the functional status of the individual as it is the best indicator of prognosis and longevity. He also discussed a simple tool that can be used to assess the functional status of a patient and also the mini cog test and the get-upget-go test. Most important test was the simple assessment in detecting whether a patient is depressed or not.

He also gave a brief over view of prescribing drugs for elderly. The motto in prescribing drugs for elders should be "one disease, one drug, once daily". He also mentioned about the importance in pain management and the drug ladder.

Dr. Samaraweera also addressed the importance in avoiding Ageist policies, understanding the clinical presentation of diseases and avoiding erroneous attribution of symptoms to old age and the need of giving palliative care for terminally ill patients. Most of all he reminded the audience the fact that the elderly were the champions of the yesteryears and we live today because of them,

He addressed the principles of end of life care this includes recognize that death is approaching, encourage participation by patient, family and friends, continuous multi professional approach in management, continuous assessment of the patients needs and symptomatic treatment approach, assessment of relatives needs, continued psychosocial support and to deliver care in different settings to that of a normal hospital ward.

He also stressed the importance in the of multi disciplinary approach of managing the elderly patients. In this Physician/Geriatrician Rheumatologist, ENT Surgeon, Eye Surgeon, Dental Surgeon, Orthopedic Surgeon, Psychiatrist and General Practitioners all play an important role. Apart from the medical team he also mentioned the important role that is played by Physiotherapists, Social workers, caregivers, voluntary community health worker/Public Health midwifes, Nutritionist /Dieticians, Social services department and the Non governmental organizations.

He spoke on how to implement Geriatric Services in the country. To implement such service it is important to have a dedicated Multidisciplinary Team which would include Doctor/Geriatrician, Geriatric Nurse, Health Care Assistants, Physiotherapist, Occupational therapist and Social workers. Geriatric patients should be managed in a different ward by an old age friendly staff. The major setbacks in setting up such services are absence of infrastructure (Hospital/wards) dedicated Geriatric units/ Institutions for Intermediate care, lack of multidisciplinary team and the poor link between Social Services and Curative sector, lack of resources such as rehabilitation equipment, walking aid, daily living aid, special mattresses and above all the lack of knowledge and differences in attitude.

In concluding the presentation Dr. Samaraweera emphasized the fact that more and more people are surviving to old age, care for the elderly needs to be recognized and implemented. He also stated that the need for Geriatric units to manage elderly patients has been identified by the Ministry of Health and now prost graduate training programs are available in Geriatric Medicine. Finally he stressed the importance of having Guidelines in managing elderly patients.

3.1.2 Presentation by - Dr. Vajira Jayasinghe *(Senior Lecturer, Department of Prosthetic Dentistry, Faculty of Dental Sciences, University of Peradeniya, Sri Lanka)*

Dr. Vajira Jayasinghe made a presentation on "**Specialized care for elderly – Dental Perspective "** where he detailed the current concepts in dental management of elderly patients.

At the initiation he elaborated the effect of the oral health on general health. According to him tooth loss affects the function, diet and thereby the quality of life of older people. Thus Good oral health can have a positive impact on general well-being and quality of life. He also stated that retention of natural teeth into old age makes a major positive contribution to maintaining

good oral health related quality of life in older people. This makes the older people to enjoy food and improve social interaction.

He explained the connection between the oral infection and chest infection, periodontal disease and diabetes, oral infection (PDD) and cardiovascular and cerebrovascular disease. He further elaborated the importance of maintaining the natural teeth in a good condition and the importance of regular dental screening which will lead to good oral hygiene and management of periodontal disease. This is likely to be a cost-effective form of prevention for older people, with benefits extending well beyond the mouth.

He gave a detailed account of the demographics of the older population both in the world and Sri Lanka. Total Population of Sri Lanka is 20,263,723 (20.2M) where males accounts for 9,832,401 and females 10,431,322 (10.4M). Of the population 5,228,927 are 15 years and younger , 12,566,467 are in the age group of 15 - 59 years and 2,468,329 (12.18%) are 60 years and over. Furthermore according to the Department of Social Services, during the last two decades the number of institutionalized elderly has considerably gone up in Sri Lanka. The number of elderly homes in the island has increased from 68 in 1987 to 162 in 2003. In addition to them, paying institutions to provide care for the elderly are also in the rise.

Dr. Jayasinghe talked lengthily about the oral health trends of the older people. According to him there is an increase in the tooth retention rates and a decrease in the prevalence of total tooth loss (edentulism). As a result of this trend, a high level of dental disease/oral health problems are encountered. Dental caries including root surface caries, Periodontal disease, Oral cancer / precancer, Tooth wear, Xerostomia and Denture related conditions are few of them.

Edentulism - common among older people all over the world and highly associated with socio-economical status. However in certain industrial countries edentulism is in the decline and it has shifted from middle age problem to old age problem. According to the WHO reports, in Sri Lanka the edentulism is 37%, in UK 45% and in India it is 19%. He also talked about the concept of " Functional dentition". Functional Dentition means a natural dentition that is functional without the need of prosthesis. For a dentition to be considered as a functional dentition it need to have at least 20 or more natural teeth. In the United Kingdom in 2005, around 40% of 65-74 yrs and 15-20% of 75yrs and over were said to have a functional dentition and by 2025, this is expected increase up to 40%. When consider the prosthetic status partial removable dentures are common among the older population however the prevalence shows a considerable variation by socio-economic status.

Caries- A high prevalence of coronal dental caries and root surface caries have been noticed among the older population. In Sri Lanka 71.1 % of the 65-74 age group is affected by this condition. According to the National Oral Health Survey -2002-2003 the DMFT Of this age group is 17.1. Whereas in UK in 1998 around 29% of 65 yrs and over had decayed root

surfaces. The high prevalence of caries is mainly due to poor oral hygiene, gingival recession, dry mouth and denture wearing.

Periodontal Disease - There is no clear evidence to suggest that periodontal diseases are more or less active in older people. However the loss of periodontal support is generally irreversible and the cumulative effects of this through life make a real difference by old age. The reasons for high prevalence of periodontal disease may be due low education, less dental check-ups, presence of few teeth and regular smoking.

Tooth wear – The natural teeth have evolved to last a lifetime, and the gradual wear seen with age is a physiological process. Nevertheless sometimes rapid tooth wear can result due to clenching and grinding of teeth or drinking large amounts of acidic drinks and such often need complex treatment.

Xerostomia – Xerostomia is one of the most common complaint in older people. This is mostly drug related and approximately 30% of the population aged 60yrs and above suffer from this condition

He further discussed the need of the dentistry in the aging population . According to him older patients have partial tooth loss, chronic medical conditions and are on several medications which makes the dental management complex. Therefore the dental treatment need of the elderly differ from that of younger adults. Moreover the newer cohorts of elderly who has a functional dentition have significantly different need than older cohorts which are basically edentulous.

Dr. Jayasinghe also gave a brief over view of "Comprehensive Dental Care for elderly Patients beyond dentures" . Providing comprehensive care includes maintenance of natural dentition and replacement of the lost teeth with prosthesis. Maintenance of the natural dentition – This includes replacement or repair of fillings, restoring of root surface caries and complex secondary caries, restoration of caries which are superimposed with periodontal diseases. Such treatment has now been feasible with the new generation of restorative materials that provide more options, better technique for restoring mature adult teeth and less expensive aesthetic procedures. Use of chemotherapeutic agents (products with high F and casein phosphopeptide) also an important measure in managing caries in the older people.

Replacement of natural teeth with prosthesis - Large intermediate group between edentulous and functional dentition need prosthetic help for function. The prosthesis could be in the form of removable partial dentures, fixed partial dentures or implant supported prosthesis

To provide Comprehensive Dental Care, properly trained oral health care providers are of paramount importance. Accumulation of chronic conditions, Hypertension, diabetes, arthritis, neuromuscular disorders, presence of side effects of medication, cognitive impairments,

dementia, chronic illnesses and physical challenges are few of the difficulties that are encountered in treating old age people.

He discussed as to why the present current dental care delivery systems have failed to meet the needs of elderly. The failures may be due to:

1. Inadequate facilities and equipments
2. Lack of special equipments for special patients
3. Lack of or no geriatric component in undergraduate curriculum and dental education being limited largely to working on well patients
4. Lack of medical integration with oral health care,
5. Lack of Dental insurance or financial resources
6. Lack of knowledge and low expectations about oral health and its value, which influence care-seeking behavior.

Finally he discussed the measures that need to be taken in order to improve the oral health of the elderly people. The most important measure in doing so is to improving the accessibility of the older people to the dental care givers and taking the dental office to the site where the older people are residing. He also briefly discussed the concept of "Senior friendly Dental office" , where there is ease of access, ease of being seated and standing again, reduced risk of fall, adequate lighting to reduce age related vision, measures to overcome age related hearing loss and provisions for communication enhancement.

He also elaborated on the necessity of training caregivers as well as primary health care providers in nursing, dentistry and medicine. He stressed the importance of the interdisciplinary training in the learning and interdisciplinary collaboration in the workplace. The care givers should know the importance of daily oral hygiene care, the use of basic oral hygiene devices (toothbrush and floss) to clean someone else's teeth and should be able to provide oral hygiene services while practicing effective infection control measures. Further, they should know when to seek professional dental help. Finally he stressed the importance of incorporating Geriatric Dentistry in to the Undergraduate, Graduate and Residency Training and having Continuing Education for Dental Professionals on Geriatric Dentistry .

Concluding the presentation, Dr. Vajira Jayasinghe stated that the old age provides the biggest challenge in delivering oral care nevertheless oral health care should be available to all older people regardless of their age or circumstances. The magnitude of these challenges could be reduced if steps were taken to ensure that good oral health is achieved before they became frail.

3.1.3 Presentation by - Dr. Hilary Cooray *(Immediate Past President of the Commonwealth Dental Association and Past President of the Sri Lanka Dental Association)*

Dr. Hillary Cooray gave a presentation on "**Managing the Oral Health Care of the Elderly in the Commonwealth"** with an emphasis on the Sri Lanka situation and the contributions of the General Dental practitioners in managing the elderly population.

According to him, 22% of the Sri Lankan population can be considered as elderly and he gave different perspectives of Geriatric Dentistry in the inception. What the General public understand by the term "Geriatric Dentistry " include provision of dentures, doing extractions, visiting homes and providing casual dental care. However the dictionary defines Geriatric Dentistry as the discipline of dentistry which deals with diagnosis, treatment, and prevention of oral diseases including caries, and periodontal disease, oral mucosal diseases, salivary dysfunction, impaired chewing and swallowing in the elderly population with an interdisciplinary approach.

Quoting a WHO report on population growth he stated that between 2000 and 2050, the proportion of the world's population over 60 years will double from about 11% to 22%. The absolute number of people aged 60 years and over is expected to increase from 605 million to 2 billion over the same period. Low and middle-income countries will experience the most rapid and dramatic demographic change.

He stressed the importance of taking a holistic approach in managing the oral health of the elderly where the profession should integrate functional, psychosocial, perceived needs and normative need. Mention was made that different countries have different age limits for a person to be considered as elderly. Evaluation must include their cultural, psychological, educational, social, economical backgrounds, dietary patterns and medical conditions . However depending on the physical ability of the elderly, 3 categories of elderly people exists i.e. functionally independent old people, frail old adults and functionally dependent old people. Out of all theses only 5% of all elderly persons are institutionalized and requires domiciliary visit while others are physically able to visit a clinic.

In Sri Lanka elderly people become eligible for various concessions regulated by the government (travel, health, institutions) and other agencies like the EPF & banks. The Protection of Rights of Elders Act No 9 of 2000 recognized the elders as a group of persons who need to be cared for and protected by the state by treating them with dignity and respect. Thereby they are entitled to live a life which is socially, economically, physically, and spiritually fulfilling. The Sec 15 of the said act further states that Children shall not neglect their parents willfully and it shall be the duty and responsibility of children to provide care for, and look into the needs of their parents. The said Act of Parliament has setup the punishment for children who willfully neglect their parents. The Sri Lankan Law also has special provisions where parents could

revoke a deed of gift if children have willfully neglected their parents after receiving such gift, without going through lengthy court procedures.

Dr. Hillary listed out the Oral disease and conditions which the elderly are more prone to including Root caries; Periodontal Disease; Mucosal diseases; Oral ulcerations; Oral cancer; Dry mouth and Missing teeth. The Sri Lanka Government target is to preserve 20 teeth of the 60% of the 60 year old population. To achieve this the workforce that the county has comprise of 1800 Dental Surgeons out of which 1350 work in the State Sector and 450 in the Private Sector. In addition to this there are 29 Dental laboratory technicians in the State Sector and 450 in the Private Sector. The dental work force in Sri Lanka is complemented with approximately 500 Dental Therapists, and 2000 Family Health Workers.

It is important to have a sufficient number of Dental Technicians to provide the required prosthetic services to the elderly. In the Private sector, it was noted that Prevention, Extractions, Restorations, Periodontal treatment, Prosthetic treatment (including advanced treatment procedures such as implants), Orthodontics are available for the elderly persons. Some General Dental practitioners also provide domiciliary visits to the institutions.

He emphasized that the burden of providing dental care for the aging population must be equally shared by the State Hospitals and Private Dental Practitioners. He showed how important it is to communicate with the family, health care givers such as Dental Hygienists, Dental Assistants, Administrators of Institutions to achieve maximum benefits to the patients. The importance of having a mechanism for Financing of services was also discussed in his presentation as well as the need for extensive Government Policies in providing care for the elderly people.

In conclusion he stressed the importance of educating the family doctor and other primary health care workers in order to achieve optimum benefits while integrating and harmonizing Geriatric Dentistry into General Health Care and the requirement of training the dental professionals in this regard. Finally he talked about the value of Education and Creating awareness on abuse and neglect of the elderly among dental professionals.

3.1.4 Presentation by - Prof T V Padmanabhan *(Professor & H.O.D. Department of Prosthodontics, Sri Ramachandra University, Chennai, INDIA.)*

Prof T V Padmanabhan made a presentation on "**Tooth loss and quality of life in the elderly – a challenge for the NDAs."**

Prof Padmanabhan stated that the advent in the field of medicine have increased the life expectancy of the population with about 600 million people are currently aged 60 years or older, and this number is expected to double up by 2025. Recent research suggests systemic disease in

elderly population have a relationship between oral disease. This requires practice of geriatric dentistry. Geriatric dentistry or gerodontics is the delivery of dental care to older adults. Though Geriatric health is practiced, it is an ignored and underexplored area worldwide.

He also mentioned that the success of oral health professional in elderly population is not only in restoring esthetics and function but on relieving pain and improving Quality of life (QoL). The aging population can be categorized into functionally independent older adults; frail older adults; functionally dependent older adults. Age, general health and oral health are vicious circle. The World Oral Health Report 2003 emphasizes that oral diseases are age related, that the risk factors for chronic disease are common to most oral diseases, and that oral health is an integral part of general health and an important component of QoL.

Prof Padmanabhan further stated that in elderly population, hygiene is usually compromised due to physical or mental disability leading to increased plaque levels ultimately causing poor mucosal condition and loss of teeth. This lead to poor nutritional intake of aged people. Poor nutrition causes exacerbation of chronic illnesses such as cancer, diabetes, hypertension , heart disease. It is also suggested that ageing, soft diet, malnutrition and loss of occlusal support could accelerate osteoporotic changes of the mandibular bone and femur, and cause a decrease of bodily activities and sensory deprivation. Hence, it is essential to manage dental disease to curb the systemic diseases, most importantly assist in nutritional intake and to reduce behavioral problems. The ultimate aim of oral health care professional is to decrease the rate of edentulism, tackle complex problems both medical and dental at advanced age and formulate treatment decisions which are less complicated!

According to Prof Padmanabhan the oral health related quality of life is diminished with more loss of teeth like 10-20 and partial dentures drastically improved the impact on QoL. According to a study on Sri Lankan population, OHRQoL was poorer in edentulous non-denture wearers compared to edentulous denture wearers, which indicates that complete dentures improve the psychosocial well being of elderly edentulous patients. Ill fitting, deflective dentures can compromise OHRQoL .The difficulty with partials was more because of food stagnation and concomitant oral hygiene measures. To assess the quality of life, there should be only one core indicator and may be different expanded level of instrument for assessment of QoL depending upon the specialty needs. There are 24 different instruments of which certain core indicators are OHIP-49, OHIP 14, OHQoL- UK, OIDP while expanded level of instruments are GOHAI, COHQoL, OQoLQ, OHIP-20.

He also stressed the importance of the treatment protocols for elderly population being started with general health evaluation which should be a part of the dental treatment planning. Treatment plan should involve preventive measures and cost effective and easily available treatment. Alternative effective treatment planning should be thought. Care and compassion is also essential in treatment procedure. One example of relatively simpler chair side and laboratory procedures for management of edentulous state in elderly population is a single implant to retain

the problematic mandibular overdenture. Due to inappropriate treatment planning, the actual requirement of geriatric patient is neglected. A case series and expert opinion articles provide valuable information to the reader on efficacy and effectiveness of any treatment planning to elders.

He made the following recommendations to improve the geriatric treatment requirements.

i. The Government should set up exclusive health care centers for the elderly

ii. The Government health care centers for the elderly should have trained doctors for Medical and dental treatments

iii. The non- institutional patients should be recommended to attend theses clinics

iv. The non-institutional patients will be the ambassadors for the centers

v. The statutory boards like the dental councils can also take the responsibility of setting this clinics

vi. The dental councils should change the curriculum to include geriatric dentistry as part of under grad education. Post graduation specialty training should be considered

vii. The private practitioners should be compelled to do subsidized treatment for these elders

viii. The school children should have to spend few days in these institutions

ix. The Government should insist on setting up these subsidized geriatric clinics in all private hospitals

x. The academicians should think of newer treatment planning which are costs and function effective

xi. The Government should encourage citizens to nurture the elders at home and incentives given these families

xii. The citizens of the countries should be educated and encouraged to take care of elders of the family and they should also realize their responsibilities in taking care of them

xiii. The cost of materials should be brought down by the manufacturers

xiv. The NGOs play a major role in educating the public and bringing in awareness about the special needs for the elders.

3.2 Country Presentations

The following countries made presentations.

3.2.1 ***India - Prof T V Padmanabhan*** *(Professor & H.O.D. Department of Prosthodontics, Sri Ramachandra University, Chennai, INDIA.)*

India was represented by Prof T V Padmanabhan. Due to the advances in medicine, improved access to good health facilities, and decline in fertility rates has resulted a rise in the older

population in India. By the year 2050 it is predicted to have greater population of Older people than younger people. The average life expectancy of an Indian was 41. 64 years in 1960 and this has increased to 67.08 years by 2011. According to the UN statistics 7.4% of the population in 2009 was above 60 years of age. The treatment for elderly should be of low cost and should be given at or near door step. The maintenance free prosthesis should be the ideal treatment and he also stated the importance of care and compassion in delivering services to the old age people. The approximate cost of a conventional complete denture in India is 300- 30000 INR and the cost of single implant is between 3500- 17500 INR. The total treatment cost thus depends upon the treatment plan formulated and the number of implants to be used for ISOD. The key to the successful treatment protocol is simplicity and acceptability of the patients.

3.2.2 *Malaysia - Prof Dato A Ratnanesan* (*President, Asia Pacific Dental Federation/Asia Pacific Regional Organization, Past President of the Commonwealth Dental association and Past President of the FDI Dental Federation)*

Malaysia was represented by Prof Dato A Ratnanesan. He talked on the importance of including Geriatric Dentistry in the undergraduate dental curriculum in length and how it has been done in Malaysia. The importance of the Non Governmental Organizations (NGO) in carrying out health care programs for elderly has been identified and it has been successful in Malaysia. He also mentioned that the Dental Health Care service is a part of the National Health Care delivery system in Malaysia and the importance of this integration. Prof Ratnanesan was in the opinion that having more clinicians in administrative positions in the field of healthcare provision has made a positive effect on the Health Care delivery System.

3.2.3 Sri Lanka - Dr Pubudu C. Perera *(Consultant in Restorative Dentistry, Military General Hospital, Sri Lanka)*

Sri Lanka was represented by Dr Pubudu C. Perera. The total population of Sri Lanka in 2012 was 20.27 million and 8.1 %of the population was 65 years and above. The Life expectancy of an average Sri Lankan is 75.94 years. He considered that the extended life expectancy is a great achievement, but it does not mean that extra years will be healthy. The quality of life is not accounted.

He elaborated on the oral disease pattern of the elderly population in Sri Lanka. In this age, prevalence of the category caries /active caries has increased. However the Periodontal disease prevalence has reduced and need for complex treatment has also reduced but presence of calculi in the mouth has increased. The edentulousness has reduced by 50%. Where the mean number of teeth retained has increased. Nevertheless, the need for prosthetic treatment has increased which is mainly due to the expansion of the dental services to the rural areas. As a result of all

these, dental clinic visits have increased among the Sri Lankan older population. He also stated that the cost of the special cleaning equipments such as inter-dental brushes and dental floss are high and not freely available to the elderly population in Sri Lanka. Thus educating the suppliers as well as the general public is important. Dr. Perera talked about the perception of the general public towards wearing dentures. For some people dentures are sort of ornaments where they would wear to improve the physical appearance. He urge the local dental associations to promote more research on Geriatric Dentistry.

Dr. Perera stated that optimal treatment planning for older adults requires an understanding of the overall health of the patient and the relationship between any systemic problem and the patient's oral health. Therefore, special knowledge, attitudes, and skills are necessary to provide oral health care to the elderly. Some of the geriodontic problems are believed to be due to physiological tissue changes and some are the basic diseases and disorders intensified by age changes.

As the national dental association SLDA will be facing the challenge of educating its membership on the above aspects. Employment of preventive strategies such as fissure sealing, use of fluorides in elderly may be beneficial and cost effect for the Sri Lanka. Knowledge about new adhesive dental materials should be improved in order to preserve tooth substance as much as possible. Practicing less invasive and less complicated treatment techniques is another strategy that could be applied for Sri Lanka.

At the end of the presentations a panel discussion was held.