Typical general health in the world

It is generally recognized that oral health is fundamental to general health. In the world, the health promotion program has different situations. Each country has its own generation organization. Particularly there is a great difference between developed countries and developing countries, as shown by table 1.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of survey</th>
<th>Population</th>
<th>Age 0-14</th>
<th>Age 15-64</th>
<th>Age over 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>2001</td>
<td>127,291</td>
<td>14</td>
<td>68</td>
<td>18</td>
</tr>
<tr>
<td>Korea</td>
<td>1999</td>
<td>46,858</td>
<td>22</td>
<td>71</td>
<td>7</td>
</tr>
<tr>
<td>China</td>
<td>2000</td>
<td>1,265,830</td>
<td>23</td>
<td>70</td>
<td>7</td>
</tr>
<tr>
<td>Turkey</td>
<td>1998</td>
<td>63,451</td>
<td>31</td>
<td>64</td>
<td>5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1998</td>
<td>127,442</td>
<td>43</td>
<td>53</td>
<td>3</td>
</tr>
<tr>
<td>Jordan</td>
<td>1997</td>
<td>4,600</td>
<td>42</td>
<td>55</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>1993</td>
<td>57,527</td>
<td>20</td>
<td>66</td>
<td>15</td>
</tr>
<tr>
<td>Romania</td>
<td>1998</td>
<td>22,503</td>
<td>19</td>
<td>68</td>
<td>13</td>
</tr>
<tr>
<td>Russia</td>
<td>1995</td>
<td>147,774</td>
<td>21</td>
<td>67</td>
<td>12</td>
</tr>
</tbody>
</table>

In the beginning, general health will be stated briefly before mentioning oral health.

The comparison among 9 countries is shown in table 2. The principal criteria is the following:

1) average life span;
2) death rate of babies and infants under 5 years;
3) supplied calories;
4) percentage of secondary education attendance;
5) literate rate;
6) number of doctors per 1000 people.

This permits us to recognize certain relation between the average life span and the literate rate.
Considering the general health, the number of doctors is also important. Table 3 shows the number of doctors, dentists and R.D.H.

<table>
<thead>
<tr>
<th>Country</th>
<th>Dentists</th>
<th>R.H.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>90,857</td>
<td>67,276</td>
</tr>
<tr>
<td>Korea</td>
<td>18,360</td>
<td>19,331</td>
</tr>
<tr>
<td>Singapore</td>
<td>1,126</td>
<td>-</td>
</tr>
<tr>
<td>Taiwan</td>
<td>8,553</td>
<td>-</td>
</tr>
</tbody>
</table>

### Oral health in Japan

1. **School dentists and school dental associations**

The last year, 2001, was highly significant for school dentist associations in Japan, as it marks the 70th anniversary of the official recognition of school dentists by Japanese government. It is also the 30th anniversary of the establishment of Japanese Association of School Dentists. Among the Japanese dentists, 27,448 dentists work as elementary school dentist, 13,331 as junior high school dentist and 6,149 as high school dentist. They give instructions of:

1. TBI;
2. guidance of daily life and nutrition;
3. treatment advice.

2. **The advent of school dentists and later change**

School health has two main aspects: health, administration and health education. The two go hand in hand and are mutually helpful. Health administration has many elements for medical care and health science and constitutes part of a community's health effort. Health education is part of school curriculum, and medical and dental science are vital subjects. Health administration and education - the two must be harmonized in order to ensure the well-being of children. School dentists must form a blend of the two items in their activities.

As we entered an era of school health based on the concept of health promotion, in 1999 oral health examinations were greatly improved and health oriented.

3. **Change in school dental health examination**

In 1994 the enforcement regulations for the School Health Law were revised, with the method and nature of dental and oral checkups largely changed. School physical checkups were based on screening pupils having problems or doubts rather than standard examinations, from the viewpoint of learning a child's physical condition, aimed at the maintenance and
promotion of health and to detect possible illness or abnormality. Oral examinations evolved to checking a student's dentition and occlusion, temporomandibular joint, plaque, condition of gums and the teeth themselves, and separate the children into those with no disease or abnormality, those needing further observation, those requiring examination and treatment by dentists, while necessary instruction, etc. would be given as a post-measure. The classification of dental caries by degree was abolished.

4. Forming the School Dentist Association

Since checking for dental caries was included in the 1900 revision of physical examination rules, school physicians made dental examinations, but dentists deputized by them gradually came to give these examinations. In the 1920s the number of dentists entrusted with the examinations grew nationwide, and the School Dentist Association was formed on a prefectural level, which spawned publicity concerning school dental health and treatment at schools in addition to oral examinations.

5. Dental health in health education

It can be said that health education in schools was promoted based on the idea that having children gain proper knowledge about health would help form a positive attitude toward health and change it to desirable health behavior.

Today, however, health education has shifted from this type of guidance-based to the learning-assist method of health education. It means that learning whereby children receive assistance from teachers and occasionally from other children while independently learning about health problems of their own and others, has become the mainstream. Now dental health education is being advanced in line with this trend. "Problem-solution type learning," as cited in the "Handbook for Oral Health Guidance for Primary School (Revised edition)", issued in 1992 setting the ideal that school dental health programs should not be limited to dental caries prevention but contribute to well-being in both body and mind by personal care of dental and oral health, is one such example.

In this problem-solution type learning, the following process is considered:
1) Detect dental and oral health problems;
2) Seek and grasp the cause of health problems;
3) Find ways to resolve health problems;
4) Practice ways of solution and make it a rule.

Advice and assistance for learning are indispensable at each stage of this educational process; while children deepen their understanding of importance for health, they accumulate trials and confirm them, and they settle their health behavior.

Thus each child's lifelong dental health behavior will take form with support like advice and assistance given while learning. This is why dental health instructors are said to give the key in educating today's children on health.

6. Future of the school dental health program

Japan's school dental health effort began as part of educational activities and has evolved under a blend of health education and administration, aiming to lay a foundation for enjoying good health on a lifelong basis and foster adults sound in mind and body. The concept of health promotion widely recognized in the world today is linked with the school dental health activities developed in Japan. The status of dental disease in other parts of Asia naturally differs country by country, and that demands a variety of countermeasures.

The history of our school dental health program has proved that dental health activities can imbue children with a firm idea of health, recognize it as a vital necessity, and help them understand that health can greatly improve their own quality of life, to include self-realization. In that sense we should not limit the objective of our school dental health effort to preventing caries and periodontal diseases, as dental health is not something to forget about merely because a child has good teeth. Children with mental or physical problems should acquire opportunities and skills to overcome their problems with the help and cooperation of school, family and community. And to maintain oral health and prevent dental diseases, they must develop a sense of self-care. If this is done, they will gain lifelong improvement of their quality of life, such as the joy of eating, confidence in communication, more expressive looks, and in many other ways. Through these learning and attitudes, and by cultivating good habits, they will be able to look at themselves and judge the worth of their own physical and mental health. They will also learn to value the health of those
around them. Oral health issues are common and easy for children to understand. And they make good reference material as themes for promoting health in context with mastication, pronunciation and general body function, without so much as a hint of disease.

To be most effective, a school dental health program requires developing a method and a form of practice that will enable children to nurture their health and improve their quality of life with full awareness of what they are doing.

**Conclusion**

Among the total national budget of $694,273,504,273, $166,869,230,769 is applied for the budget of the Ministry of Health Labor and Welfare, and $18,623,931 is for dental health bureau. In addition to the dental instruction in school education, the Japanese government established the Long-Term Care Insurance Law and handicapped people insurance. And a measure of free charge in the Health and Medical Service Law for the Elderly has been carried out. In connection with them, the trials for keeping QDL and ADL (active of daily living) have been done. But unfortunately the insurance for oral health will be charged in 2003 because of the national recession.

The Ministry of Health, Labor and Welfare have been promoting since 1989 what we call the "8020 Movement," aiming to help our people keep twenty or more of their own teeth until reaching age eighty. Also, the "Kenko, of Health, Nippon 21" Plan, we just started last year, sets out a dental health objective to be attained by 2010, which is to increase the percentage of people who still have twenty of their own teeth at age eighty to 20% or more.

Then we have the "Kenko, or Health, Nippon 21" plan as proposed by Ministry of Health, Labor and Welfare last year. The plan established oral health objectives for each stage of life based on:

1) preventing dental caries for preschool children;
2) preventing dental caries for children of school age;
3) preventing periodontal diseases in adults;
4) preventing the loss of teeth.

**References**


Correspondence to: Dr. Toshitaka Kaketa, D.D.S., PhD, 1-2-16 Hon-cho Aoba-ku, Sendai city, 980-0014, Japan, tel: 0081-22-262 6121