Irish Dental Association Annual Scientific Conference,
Waterville,
Co. Kerry:
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"DENTAL SERVICES IN THE REPUBLIC OF IRELAND"
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D.O.A. Section
Irish Dental Association Annual Scientific Conference,

Waterville,

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"Dental Services in the Republic of Ireland",

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Department of Health,

Dublin.
Mr. President of the Association, Mr. Chairman,

Ladies and Gentlemen.

It is a great honour for me to be invited to participate in the Annual Scientific Conference of the Irish Dental Association. In the past 9 years this will be the sixth occasion on which I have participated at your annual conference: Bundoran, Ennis, Killarney, Cork, Wexford and now Waterville. The subjects on which I have spoken at these scientific meetings have ranged from the clinical aspects of dentistry for children such as Techniques of giving Local Anaesthetics, The Use of Sedation in the Management of Apprehensive Children and Topical Fluoride Applications to the more theoretical aspects of prevention like Experimental Designs used for Clinical Trials of Caries Preventive Agents and the Statistical Methods used in Analysing Caries Data.

My talk to-day is entitled "Dental Services in the
Republic of Ireland" and, even though at first glance it may not appear so, I believe it is no less scientific than my previous contributions. In the past twenty-five years there has been a tremendous worldwide increase in the science of delivering medical and dental care to population groups. The reasons for this sudden increase in interest are probably complex, but two reasons stand out. On the one hand the remedies we dentists and doctors have devised for treating diseases which affect large sections of the population have grown increasingly sophisticated and expensive and outside the resources of many patients who need treatment. On the other hand most countries now take the principle of equal rights seriously and in the case of Health this has meant increasing involvement of the state in delivering health care especially to those who cannot afford to pay for it. Inevitably, once public funds
are being spent then the need to evaluate the efficiency of the system of delivering medical and dental care is essential if we are to be reasonably happy that the system in use is the best of the available alternatives and that our money is being well spent. In dentistry it is only in the past 10 - 15 years that active research in this field has taken place and it is only in the past five or so that worthwhile research papers have begun to appear; cost benefit analysis, cost effectiveness, treatment need and demand, Health care economics are concepts which are relatively new to dentistry but, whether we like it or not are likely to play an increasing role in the theory, practice and planning of Dentistry for many years to come.

I have had some difficulty in deciding on the topics to cover in this talk to-day but after many changes of mind I have decided, taking into account the time available, to confine myself to considering
primary dental care services as distinct from specialist and consultant services. I can assure you that this decision does not mean a lack of interest on my part or that of the Department of Health in the Hospital and Consultant Dental services. Development of these services is essential and inevitable.

My talk to-day can be divided into five main sections. To begin with I would like to spend a few minutes looking at the different systems of delivering Dental care throughout the world. Although these systems vary in many ways it will then be interesting, I hope.

Slide 1.

Provision of Dental Care.

System in Ireland

Need and Demand.

Manpower.

Priority Groups.
to look at the system of delivering Dental Care in Ireland.

In the third section I will attempt to consider the need and demand for Dental treatment in Ireland taking into consideration the limited information available. Following on this it is logical to consider the manpower (Dentists) available and likely to be available to meet this need and demand. Finally since it will be apparent that neither resources or manpower will allow us to provide comprehensive Dental Care for all members of the population, the selection of priority groups will continue to occupy our minds.

In this final section I will question the basis on which priority groups for Dental Care are currently selected.

Beginning then with a brief look at the systems of delivering Dental Care worldwide the World Health Organisation has taken considerable interest in this subject in recent years.
It has classified medical and dental personnel who provide care to communities according to their method of payment or employment. Not surprisingly the method of payment or employment reflects the political and economic organisation of the country. Australia and the U.S. are countries whose political and economic philosophy favours free enterprise and the provision of dental care is based largely on private practice. It is interesting, however, that in recent years government involvement in the delivery of care in these countries has increased and it would appear that countries such as the U.S.
are gradually thinking of changing to a mixture of private and state. At the opposite end of this scale are the Eastern Bloc countries such as Bulgaria and Czechoslovakia where the system of providing dental care is mainly state-run with dentists being paid a salary. In Czechoslovakia for instance the dental service is almost entirely governmental, is developed in accordance with state economic plans, is financed from the State Budget and is delivered free of charge by salaried dentists through a network of basic and specialised dental health centres.

It is also interesting perhaps that 60 per cent of dentists in Czechoslovakia are women - a feature in many countries in the Eastern bloc. As I said the method of employment or payment reflects the political and economic organisation of the country; Ireland is a country which has an economic system based largely on
free enterprise but has a social philosophy in which the government accepts a large responsibility for the provision of health care. Hence the system of delivery of dental care to the community in this country is a mixture of private and salaried dentistry. There is no reason to believe that this is likely to change in the near future.

A country that has many characteristics similar to Ireland is Norway. It has a

Slide 3.

| Pop. | 4 m | 3.2 |
| Pop/KM² | 12 | 44 |
| Dentists | 4000 | 900 |
| D : P | 1 : 1000 | 1 : 3500 |
| P.P. | 54% | 60% |
| P.H. | 32% | 22% |
population of 4 m compared with 3.2 in Ireland.

The density of the population is low in both countries; 12 in Norway as against 44 in Ireland; in England it is 230 km². The number of dentists in Norway is considerably greater than in Ireland. In Norway there are approximately 4000 dentists as compared with 900 or so in Ireland giving one dentist for every 1000 of the population Norway compared with 1 for every 3,700 in Ireland. Perhaps it is a sobering thought that our presence, that is dentists, does not necessarily mean that the level of dental disease will be lower. As you can see on the slide the caries experience of children aged 13-14 years in Norway in 1975 was 12.6 decayed, missing, or filled teeth; the corresponding figure in Ireland 6.9 based on our most recent national survey. In England and Wales it is 6.3. In a recent commentary on the Dental Services in Norway, Dr. Per Baerum their Chief Dental Officer
pointed out that up to the early 1970s little emphasis had been placed on prevention; the aim of the service was to restore all decayed teeth. This aim was achieved with resounding success: The mean DMFT score of 12.6 on the screen was almost entirely made up of the No untreated Decay F component. Since 1970 and particularly since 1975 many local authorities have developed programs for organised distribution of fluoride tablets. In 1976, 60 per cent of some 1,300 public health centres providing general

<table>
<thead>
<tr>
<th>Country</th>
<th>DMFT Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway (1975)</td>
<td>12.6</td>
</tr>
<tr>
<td>Ireland (1964)</td>
<td>6.9</td>
</tr>
<tr>
<td>England and Wales (1973)</td>
<td>6.3</td>
</tr>
</tbody>
</table>
maternity and child preventive services distributed the tablets. There are only about 150 Hygienists in Norway with only 45 new students being trained annually in the two-year courses run by the dental schools.

Because hygienists are in such short supply a trend is developing for dental health assistants to be trained locally to give preventive advice and distribute fluoride tablets. Retired or unemployed nurses and housewives for example—have been employed on a part-time basis after a short training course. Since the change in philosophy in the early 1970s from a treatment orientated service to a preventive orientated one there is growing evidence that it is being successful. A number of limited recent studies have shown that the decay experience of Norwegian children is beginning to reach less dramatic levels (DMFT= 8.5).

I do not wish to consider the Norwegian scene further
at this stage except to make two points. Firstly, there is a lesson to be learned. (If we here needed a lesson on this score at this stage) and that is that a treatment orientated dental service has little to offer in the long term. Secondly, the figures quoted for Ireland here are somewhat out of date and there is little doubt that studies on the level of dental disease in Ireland are required. Perhaps the figure of 6.9 quoted on this slide is less.

There are a lot of reasons why it could be.

State involvement in providing dental care in Ireland is, as you all well know, divided into two groups: the Public Dental Service and the Social Welfare Dental Benefit Scheme. Certain sections of the population are entitled to dental treatment of varying sophistication under these schemes. No doubt you are all aware, as I am, of the limitations and problems of these schemes.
and there is certainly a need for their planned improvement and development. Extensive debates are currently in progress with this aim in mind, and I do not wish to pre-empt these discussions by going into details at this stage.

It is comforting in a way that similar debates and reviews of dental services have recently taken place or are taking place in many other countries. We are not the only country which has carried out a "comprehensive review" of the dental services.

The World Health Organisation in collaboration with the U.S. Public Health Service is currently carrying out an International Study with a view to measuring the effectiveness and efficiency of the different systems of providing dental care in different countries. To date this study has been carried out in Norway, Australia, New Zealand, West
Germany and Japan. In two countries at least the findings of the collaborative study has had a dramatic effect on the administrators who are responsible for delivering dental care. I have already mentioned Norway. Perhaps it is also interesting to mention New Zealand. Since the 1920s a comprehensive dental treatment service, making widespread use of dental therapists or auxiliaries was rendered to all children up to the age of 13 years, and in the late 1930s this comprehensive treatment service was extended up to the age of 16 years. It has recently been extended to 18 years for those still dependent on their parents. After this age dental care is provided by private practitioners on a direct fee for service basis. The recent collaborative study showed that whilst the child population had a negligible tooth loss and
untreated caries, the population aged 35 to 45 years
had the highest level of edentulousness of the five
countries studied: Sydney (Australia) 12.8%,
Trondelag (Norway) 5.8%, Hanover (West Germany) 2.0%,
Yamanashi (Japan) 0% whilst Canterbury (New Zealand)
had a staggering 35.6%. The authorities obviously
were worried by these findings and a national study,
with much wider coverage, was carried out in 1976. The
figures of the collaborative study were confirmed.

Tooth loss commences during the years 20-24 years and
steadily increases until by the age of 65 years, 73 per cent
of the population is edentulous. It is difficult to
explain this but it has resulted in a major rethink in
New Zealand.

As I said the State involvement in delivering
dental care in Ireland is divided into two groups;
the Public Dental service and the Social Welfare Dental Benefit Scheme. We do not have any figures to compare the success of our system with that of other countries. It would be helpful if we did.

Slide 5.

<table>
<thead>
<tr>
<th>Public Dental Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school children</td>
</tr>
<tr>
<td>National School children</td>
</tr>
<tr>
<td>Medical card holders and dependants</td>
</tr>
<tr>
<td>Social Welfare Dental Benefit Scheme</td>
</tr>
<tr>
<td>Qualified Insured persons.</td>
</tr>
</tbody>
</table>

Under the public dental service preschool children, national school children and medical card holders and dependants are eligible for treatment and under the Social Welfare Dental Benefit Scheme qualified insured
persons are eligible for treatment, some of the patient being required to pay a proportion of the cost. If we look at the total population, 3.162 million you will see that overall 69 per cent are eligible for state help for dental treatment of some kind or other. 0 All preschool children are eligible 2 children attending private schools (4%) are excluded in the 5-12 year-olds leaving 96% eligible overall. Only dependants of medical card holders are eligible in the 13-16 year old age group (37%), and in the 17 plus age group there is a mixture of medical card holders and those eligible for treatment under Social Welfare Dental Benefit Scheme (72%).
Dental Services Ireland

<table>
<thead>
<tr>
<th>Age</th>
<th>No. (1000s)</th>
<th>Eligible (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>338</td>
<td>100</td>
</tr>
<tr>
<td>5-12</td>
<td>556</td>
<td>96</td>
</tr>
<tr>
<td>13-16</td>
<td>240</td>
<td>37</td>
</tr>
<tr>
<td>17+</td>
<td>2,028</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>3,162</td>
<td>69</td>
</tr>
</tbody>
</table>

I would like you to take particular note of the figure for the 13-16 year-olds. You notice that the percentage eligible for treatment is the lowest of the four age groupings. Later when I deal with priority and special groups I will refer back to this point.
The allocation of eligibility for dental treatment by the age groupings which you see on the slide is historical accident and indeed follows to a degree a trend experienced by other countries. Comprehensive care, medical and dental, for children under a Public Health Service is based on the idea that a healthier start to life will ensure, in the long term a healthier total population; inclusion of the less well-off section of the population is based on, as I said earlier, the philosophy that Health is a social responsibility and the state accepts this responsibility for the health of the underprivileged hence inclusion of Medical Card Holders. A more recent development is the notion of Health Insurance, either private or state and dentistry in this development is represented in Ireland by the Social Welfare Dental Benefit Scheme. The fact that somebody is eligible for
dental treatment does not necessarily mean of course that they receive it. We know for instance that in 1977, of the half a million or so national schoolchildren, less than 50 per cent received dental treatment. Little is known about the uptake of dental treatment in the 13-16 year-olds in the Public Dental Service but at a guess it is probably less than 10%. In the case of the two million or so aged 17 and over only about 20 per cent 

But what proportion of the population need dental treatment and of those that need it what is the extent of the need? Well at the moment we can safely say I suppose that almost 100 per cent of the dentate population require some form of dental care.
Slide 7.

Need for Dental Care

Present need.

Projected need.

With regard to the extent of the need at present well, in a word, we don't know. Only one treatment need survey that I know of has been conducted in Ireland; this was carried out by Roisin Gallagher in Donegal in the early 70s in which the treatment needs of 7 and 12 year-old schoolchildren was assessed. In fact the study was mainly concerned with developing treatment need surveys because it has been realised for some time that the traditional dental survey is not
very useful in estimating dental treatment needs. However, considerable advances have been made in methods of conducting such surveys and it is about time that estimates of dental treatment needs were made in this country. With regard to projected treatment needs, well, the signs are that in the case of dental caries at least, considerable reductions can be expected. Efficient implementation of flouridation to what is now well over 50 per cent of the population, will no doubt lead to considerable reductions in the need for treatment of dental caries. For example, in a recent study in Britain it was found that as well as 57 per cent reduction in dental caries it was also found that fewer children had experienced toothache in the flouridated area (19% as against 40%) and, more relevant to this discussion, fewer had needed
extractions under general anaesthetic.

Slide 8.

<table>
<thead>
<tr>
<th></th>
<th>Toothache (%)</th>
<th>G.A. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flouride</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Non-flouride</td>
<td>40</td>
<td>34</td>
</tr>
</tbody>
</table>

The cost of dental treatment was over 50 per cent less in the flouridated area. Martin Downer, whom you heard yesterday, confirmed these results in a study comparing Birmingham and Salford. Adult populations living in flouridated areas can be
expected to show major reductions in tooth loss due to caries. The effect of preventive programmes other than fluoridation such as fluoride tablet distribution, widespread awareness of the health education message through efficient employment of health educators such as hygienists all suggest that the extent of treatment required for caries is likely to be reduced and also, and probably of more significance, the nature and type of treatment required is likely to alter; tooth loss, whether by local or general anaesthesia, is likely to fall.

Future needs as a result of periodontal disease are less clear at this stage but the evidence we have suggests that an efficient dental health education message together with increase in the demand and availability of dental care will lead to a reduction in the level of tooth loss from periodontal disease in future years.
It would seem then that with flouridation a genuine overall preventive approach the high level of tooth loss which as far as we know exists in this country at present will diminish and the need for partial and full dentures could well be less of a problem in future years.

The effect of preventive measures on the future need for orthodontic treatment has me slightly flumuxed. On the one hand it is claimed that early loss of teeth particularly deciduous teeth is a factor leading to orthodontic problems; on the other hand retention of all the permanent teeth can lead to overcrowding which again is a major contributing factor in orthodontic problems. Researchers in the orthodontic world would appear to have not solved this one as yet.

On balance, taking into account the studies that have been conducted in this field and, I must admit one's clinical
experience, retention of all permanent teeth
particularly the first permanent molars is likely
to lead to an increase in the incidence of overcrowding
which could well lead to an increase in the need for
the more common orthodontic treatments.

The demand for dental care can again be considered
under the present demand and the projected demand. As
I said earlier, we know that in Ireland at present
the population who would be reasonably
expected to require regular dental care is less than 30 per cent.

Slide 9.
This is very low in comparison with other countries \underline{and could be regarded as an indication of a general apathy towards Dental Health. This no doubt is part of the story. However a major factor also is the availability, accessibility and acceptability of dentists and dental manpower.}

\textbf{Slide 10.}

\begin{center}
\begin{tabular}{|c|}
\hline
\textbf{Available} \\
\textbf{Accessible} \\
\textbf{Acceptable} \\
\hline
\end{tabular}
\end{center}
The demand for a service that is in many areas scarce, difficult to get to and requires much time off school or work could well be low. To take this argument to the extreme the waiting list for heart transplants in Kerry is low at the moment simply because the service does not exist. The shortest waiting list of all is the non-existent one. Waiting lists and the number of complaints can be useful indicators of the demand for a service but are likely to underestimate it if the factors shown on the screen are not satisfactory.

With regard to the projected demand for dental care well in common with other countries it is likely to increase with increasing standard of living and increasing availability, accessibility and acceptability of dental care.

Consulting the crystal ball then it would seem
that given a genuine ongoing preventive approach the need for dental care is likely to fall and the type of dental care needed is likely to change, particularly in relation to tooth loss. At the same time a larger proportion of the population is likely to demand and avail of regular dental care. If it is available and accessible to meet this changing need and increasing demand. Well if we look first of all at the availability, the numbers of dentists, in this country you will see that in the 70s there has been a steady slow increase in the numbers of dentists names appearing on the Dentists Register. We have not yet reached the magic figure of 1,000, though I have received inside information (another good tip!) from the President of the Dental Board that this figure could be reached this year.
Slide 11.

<table>
<thead>
<tr>
<th>Year</th>
<th>Dentists on Register</th>
</tr>
</thead>
<tbody>
<tr>
<td>'70</td>
<td>697</td>
</tr>
<tr>
<td>'71</td>
<td>721</td>
</tr>
<tr>
<td>'72</td>
<td>749</td>
</tr>
<tr>
<td>'73</td>
<td>776</td>
</tr>
<tr>
<td>'74</td>
<td>826</td>
</tr>
<tr>
<td>'75</td>
<td>904</td>
</tr>
<tr>
<td>'76</td>
<td>897</td>
</tr>
<tr>
<td>'77</td>
<td>901</td>
</tr>
<tr>
<td>'78</td>
<td>954</td>
</tr>
<tr>
<td>'79</td>
<td>967</td>
</tr>
</tbody>
</table>
Coming from that source it must be a good bet and I hope to be invited along when the bottle of champagne is opened. Obviously all those appearing on the register are not actively engaged in clinical practice. If we take the active figure as being 850, with a population of 3,162 million, this gives a dentist to population ratio of 1 to 3,700 considerably less than what is generally accepted as satisfactory. To give a dentist to population ratio of 1 to 2,000, 1,580 dentists would be required. On the basis of the increase in the number of dentists registering in the 1970s it can be estimated that it will be the year 2000 at least before the desired numbers will be available; this assumes, of course, no increase in the size of the population. Well will the trend shown on the screen change? Can we
Can we expect a dramatic increase in the numbers registering, or indeed can we expect a decrease? It is difficult to say; it is so dependent on numbers trained, salary structures, movement of dentists to and from the U.K. and, now with the E.E.C. directives about to come into force, to and from other E.E.C. countries. Some of you may have views on this which would be welcome.

One way or the other we have problems with the number of dentists available. However when we look at the distribution, the accessibility of dentists then the problem is even worse and less amenable to a solution.

Ireland has a low density of population for its size. Like in comparison with countries such as Holland, Belgium, and the U.K. countries such as Ireland, New Zealand, Norway and Australia are sparsely populated.
### Population per KM²

<table>
<thead>
<tr>
<th>Country</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>375</td>
</tr>
<tr>
<td>Belgium</td>
<td>319</td>
</tr>
<tr>
<td>U.K.</td>
<td>230</td>
</tr>
<tr>
<td>Ireland</td>
<td>44</td>
</tr>
<tr>
<td>New Zealand</td>
<td>12</td>
</tr>
<tr>
<td>Norway</td>
<td>12</td>
</tr>
<tr>
<td>Australia</td>
<td>2</td>
</tr>
</tbody>
</table>

As well as having an overall low population density, countries like Ireland also have the fact of increasing urbanisation in which a larger and larger proportion of the population live in the larger cities.
and towns and their surrounds. Extreme examples here are the counties of Dublin and Leitrim. From the Health Services point of view one third of the population here live in the Eastern Health Area. Coupled with this is the fact that dentists tend to prefer to live and practice in the more urban areas, one third of the population live in the Eastern Health Board Area but also one half of the available dentists practice there. This phenomenon is illustrated on this slide.
As you can see the Eastern Health Board has by far the highest population number per square kilometre but it also has the greatest dentist to population ratio. The dentist to population ratios are arranged in decreasing rank order here whilst in brackets are
the rank orders of the density of population. The population densities in the remaining health Board areas are all very similar and no consistent trend emerges in the relationship between the dentist to population ratio and the density of the population.

Time does not permit me to breakdown into counties. But as I am sure most of you know even within the Health Board Areas there are wide discrepancies in the availability of dental manpower. This problem of course is not confined to Ireland and neither is it confined to dentistry. Many other services tend to be concentrated in the urban more densely populated areas.

Solutions to the problem of shortage of dental services in the less densely populated areas are difficult to come by. It has been suggested that
given an overall increase in the number of dentists the problem will solve itself; that new dentists entering the profession will tend to go to those areas where dentists are scarce. Well experience in other countries would suggest that this is unlikely. What tends to happen is that areas with the more favourable dentist to population ratios tend to become better off and those areas with a scarcity of dentists tend to improve very little if not at all. This trend would also appear to be occurring here. The increase in the number of dentists in the past 10 years, modest as it is (300), has made little or no difference to areas such as the North West and the Mid West. The problem exists then and is unlikely to go away, even if we have a dramatic increase in the number of dentists practising here.
In countries where a comprehensive dental service is not available at all, efforts are made to do so partially and to select priority groups. The criteria used to select these varies and some of the following criteria are used or are proposed in textbooks.

Slide 15.

Selection of Priority Groups

- Dentally Handicapped
- Prevention most effective
- Irregular Attenders
- Low Income

Those for whom Dental disease or dental treatment is a problem, in other words the dentally
handicapped.

(ii) Those for whom prevention both primary and secondary, is likely to have the most beneficial effect in the long run; this is why children are invariably included.

(iii) Those who attend a dentist only in emergencies - presumably in the hope of making them regular attenders.

(iv) And finally those who cannot afford to pay for regular treatment – the low income group.

If we concentrate for the moment on the second criterion, emphasis is generally given to the young because it is hoped that by exposure to dentistry at that age the young will eventually grow up
with better dental health and be more capable of looking after their dental health. In other words it is a good investment from the state's point of view. In Ireland at present the group with the least entitlement to dental care of any kind are the 13 to 16 year-olds. If you remember in a slide I showed earlier it was estimated that less than 40 per cent were eligible in this age group and in all less than 10 per cent received treatment. However it is known that between ages 13 to 17 many of the teeth and surfaces which contribute a major part of the total caries increment erupt and develop contact points with their neighbours. At the age of 12 for instance only 50 per cent or so
of the upper and lower 7\textsuperscript{8} are erupted and approximately one third of the L 5\textsuperscript{8}.

Slide 16.

<table>
<thead>
<tr>
<th>Age</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>u4</td>
<td>85</td>
<td>93</td>
<td>97</td>
<td>98</td>
</tr>
<tr>
<td>u5</td>
<td>65</td>
<td>79</td>
<td>90</td>
<td>95</td>
</tr>
<tr>
<td>u7</td>
<td>49</td>
<td>67</td>
<td>91</td>
<td>98</td>
</tr>
<tr>
<td>L5</td>
<td>56</td>
<td>71</td>
<td>86</td>
<td>92</td>
</tr>
<tr>
<td>L7</td>
<td>59</td>
<td>77</td>
<td>93</td>
<td>98</td>
</tr>
</tbody>
</table>
It is not until children have reached the age of 15 or so that all posterior teeth are erupted and of course it will be some time after that before full contact points are established. We know that teeth are particularly prone to caries for a few years after eruption and we also know that during this time they are particularly amenable to some preventive techniques. This high incidence of dental caries during the ages 13 - 16 is borne out in many studies. In the National Study conducted here in 1964-'65 the average caries experience at the age of 17 was 11.5 D M F T. At the age of 12 the figure was 5.9. In other words almost 50 per cent of the caries experience of 17 year-olds occurred between
the ages 13 to 17. In the case of caries therefore, both from the point of view of its prevention and early treatment there is a strong argument to be made for regarding 13 to 17 year-olds as a major priority; that it would be a sound investment to include them in a comprehensive dental care scheme. Indeed it could be argued that 13 to 17 year-olds are a greater priority than say 4, 5, and 6 year-olds or 8, 9, and 10 year-olds. With regard to periodontal disease there are again strong arguments to be made for inclusion of young teenagers in a dental service.

Slide 17.

<table>
<thead>
<tr>
<th>Age</th>
<th>Mean DMFT</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>5.9</td>
</tr>
<tr>
<td>17</td>
<td>11.5</td>
</tr>
</tbody>
</table>
We know for instance that early bone loss is **sizeable** already present in a large proportion of this age group and we also know that teenagers are particularly amenable to advice on oral-hygiene practices. The priority rating that should be accorded to different age groups in a dental service could be easily the subject of one or more entire lectures and seminars.

However at this stage I hope I have made the point that it is difficult to justify the present position whereby teenagers occupy the lowest priority rating in which less than 40 per cent of 13 to 16 year-olds are eligible for dental treatment and less than 10 per cent actually receive it.

In conclusion may I summarise briefly what I have been saying. The system of providing dental care in Ireland has some characteristics
which are common to many other countries. How effective this system is in preventing and treating dental disease and in achieving the long term aim of any dental service, namely the retention of all natural teeth, is not known. We lack basic information at this stage. This kind of information is required not alone to let us know where we are but also to allow us to evaluate later any changes that are made. I pointed out that even though the present need and demand for dental care is not known we do know that they are not being met at this stage. I suggested that the future need for dental care could well fall and that the type of treatment needed could alter, particularly as
a result of a reduction in common
with many other countries we are short of dentists
and it is difficult to predict how quickly this
will be solved but it will. We have a particular
problem of unequal distribution of dentists and
on the evidence we have available it would seem
that this is much less amenable to a solution;
that even with a major increase in the number of
dentists some areas will still be without reasonable
numbers.
Finally in a state such as ours whose resources are
unlikely to permit a complete and comprehensive
dental care service for all it is important that groups
selected for care are selected on rational grounds
to ensure the best investment for money.

Thank you for your attention.