

**An
Oral Health Strategy
for
Northern Ireland
1995**



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1 Introduction

Introduction

1.1 Although there has been a gradual improvement in oral health in Northern Ireland, the most recent surveys show that the general level of oral health here is still considerably worse than in the rest of the United Kingdom, particularly among children. In 1993, the Chief Dental Officer of the Department of Health and Social Services convened an Oral Health Review Group to carry out a review of oral health in Northern Ireland and to make recommendations to the Department on how the situation could be improved.

1.2 The Oral Health Strategy set out below, which is Northern Ireland's first oral health strategy, has been produced by the Department taking account of the Review Group's recommendations. It reviews the present state of oral health in Northern Ireland, highlights the problem areas and suggests how these might be tackled over the next ten to fifteen years. The overall aim is to achieve the level of oral health defined in paragraph 2.2 for every individual. It is therefore a long term strategy, as efforts to secure improvements in oral health will take some time to have an impact.

1.3 The strategy sets targets for improving the oral health of the population of Northern Ireland as a whole. It is, however, recognised that there are variations in oral health status and needs, either amongst particular groups or in specific geographical areas. For example, as the number of elderly people in the population increases, there is a need to ensure that those with reduced mobility can gain access to treatment. Whereas the replacement of dentures can be carried out during domiciliary visits, restorative procedures require the patient gaining access to a dental surgery.

1.4 One of the main themes of the Department's Regional Strategy for the Health and Personal Social Services 1992-97 is "Targeting Health and Social Need", which recognises the existence of inequalities in health and social wellbeing within the population and seeks to ensure that resources and services are targeted where health and social care needs are greatest. This general approach applies equally to oral health. In implementing the Oral Health Strategy, Health and Social Services Boards and others will be expected to assess the oral health needs of people within their own areas and, where appropriate, to take action to address special needs and to reduce variations in oral health. This may include the setting of more specific targets at area or local level.

1.5 Securing improvements in oral health must, of course, be set firmly in the context of wider health promotion programmes, particularly as efforts to promote oral health and to prevent health problems such as obesity, coronary heart disease, respiratory diseases and some cancers are mutually reinforcing. Achieving the targets in this strategy will require the commitment not only of dental health professionals, but also of others in the wider Health and Personal Social Services, various public departments and agencies and voluntary organisations. Above all the primary responsibility for oral health, as with general health, lies with the individual.

Implementation

1.6 The Department is currently preparing its next Regional Strategy for Health and Social Wellbeing. This will establish the strategic priorities, along with associated objectives and targets, for improving the health and social wellbeing of the people of Northern Ireland over the period 1997 - 2002. The Regional Strategy will give special mention to the need to improve oral health in Northern Ireland and will identify this Oral Health Strategy as the principal means for achieving that aim. Oral health will remain a Departmental priority over the life of the Regional Strategy.

In addition, the annual Management Plan published by the Management Executive will set more specific objectives and targets for the health and personal social services in relation to oral health. The Department will work with other

government departments and their agencies and with the voluntary sector, as appropriate, where action is needed outside the Health and Personal Social Services to secure improvements in oral health.

Monitoring and Review

1.7 The main outcome measures for this strategy will be improvements in the oral health of the population. These will be measured through the Adult and Child Dental Health Surveys, which will be carried out in the years 1998 and 2003 respectively, and which will provide the baseline information against which performance will be monitored. It will also be important to monitor the actions taken to implement the strategy by the Department, the Management Executive, the wider Health and Personal Social Services and others.

The Department will formally review this strategy in the year 2000 to consider whether, in the light of changing Circumstances, it requires any adjustments to ensure the achievement of its long-term aims and objectives.

2 Definition of Oral Health

2.1 In the past the dental profession was mainly concerned with the health of teeth and gums. More recently, however, a greater awareness of the other oral tissues has developed. The term "oral health" more accurately reflects this situation than the traditional term "dental health".

2.2 Acceptable oral health is a level of health of the teeth and other oral structures which allows an individual to

- * Be free of pain and discomfort
- * Eat efficiently
- * Speak clearly
- * Socialise without embarrassment
- * Be free of life threatening disease

And which, if maintained, gives a reasonable expectation that these benefits will continue throughout life and will contribute to the individual's general well-being.

3 Oral diseases

3.1 There are various oral diseases and conditions. The overwhelmingly most common are caries (tooth decay) and periodontal disease (the inflammatory conditions affecting the gums and other supporting structures). These, and a number of other oral conditions, are described briefly below.

3.2 Caries

3.2.1 Caries results in demineralisation and breakdown of the tooth tissue. This in turn can result in pain, poor aesthetics, and infection and abscess formation. As a consequence, comparatively expensive restorative procedures may be required, or dental extractions may be indicated, often under general anaesthesia. (in excess of 15,000 general anaesthetics are given for all dental purposes each year in Northern Ireland, a large proportion of which are a direct result of caries.)

10.1.1 The major cause of caries is the consumption of sugar, which is converted into acid by the bacteria in the plaque on the surface of teeth. The frequency of sugar consumption is more significant than the amount consumed.

3.3 Periodontal Disease

3.3.1 Periodontal disease affects the tissues supporting the teeth, that is the gingivae (gums), the bone and the periodontal ligament, which fastens the roots of the teeth to the bone. Diseases affecting these structures can be acute or chronic. The most common periodontal disease is chronic inflammatory periodontitis, the initial feature of which is gingivitis (low grade chronic inflammation of the gums), with slight redness, minor swelling, a tendency to bleed, but no pain. With progression, the bone and periodontal ligament supporting the teeth are eroded by the inflammation until the teeth become increasingly mobile and, ultimately, require to be extracted. Being a cumulative condition, periodontal disease tends to become more severe and more prevalent with increasing age. It is a major cause of tooth loss amongst older adults.

3.3.2 The Adult Dental Health Survey of 1988 showed that most adults exhibit some degree of chronic periodontal disease. Only 6 % of those with teeth in the Northern Ireland population were free of any of the signs of chronic periodontal disease. In most cases, the destructive process progresses only slowly and is amenable to stabilising treatment. A minority of the population (approximately 10%) suffers a more aggressive form, which progresses more rapidly. Problems exist with regard to identifying this group in advance.

10.1.1 Periodontal disease is caused by dental plaque and by calculus (tartar), the mineralised form of plaque. The prevention of the condition is, therefore, related to improved oral hygiene and to the scaling and polishing of the teeth. Increased severity of periodontal disease is closely associated with tobacco smoking.

3.4 Oral Cancer

3.4.1 Oral cancer is a condition with an increasing incidence. Throughout the world, it is the fourth most common malignant disease in men and sixth most common in women. If diagnosed early enough the five year survival rate is around 80%. Without early diagnosis 60% of sufferers die within 5 years of the disease being identified. Unfortunately, early oral cancer gives rise to few symptoms, and the disease is often well advanced before diagnosis. The risk of oral cancer increases with age and is increased significantly by smoking and by high alcohol consumption.

3.5. Other Oral Conditions

3.5.1 There is an increasing problem of tooth erosion throughout the United Kingdom and particularly amongst young people. Tooth erosion is the loss of tooth substance due to the frequent intake of

acidic foodstuffs, in particular carbonated drinks. The shift from fizzy drinks containing sugar to "diet" brands does not reduce the problem of erosion, and the overall increase in the consumption of fizzy drinks is creating a problem, which is increasingly common and expensive to treat.

- 3.5.2 Malocclusions (crooked teeth or teeth which do not meet properly) resulting from faulty oral development or tooth loss are common. Some of these conditions require no treatment; some may be relatively minor and of minor dental health significance; and others are more severe and require treatment to improve both the dental health of the patient and give the patient a better sense of well being with regard to the alignment of their teeth. The general dental practitioner can treat some conditions; others are more difficult to treat and require treatment by specialists.
- 3.5.3 There are various severe, developmental conditions, such as clefts of the lip and palate, which require prolonged specialist treatment.
- 3.5.4 Some relatively common oral conditions, such as herpetic lesions (which include "cold sores"), candida (fungal) infections and mouth ulcers fall generally within the remit of primary dental care.
- 3.5.5 Oral trauma is common, affecting the teeth, oral soft tissues and jaws.
- 3.5.6 other less common, but troublesome oral conditions exist, such as idiopathic facial pain and dry mouth syndromes.
- 3.5.7 There are also many medical conditions, which, on occasions, may produce oral symptoms prior to any general indications. One such condition is Acquired Immune Deficiency Syndrome (AIDS), in which distinctive oral lesions may appear prior to any general symptoms. Dentists and clinical dental auxiliaries must always be alert to the possibility of early detection of such conditions.

4 Dental Caries

4.1 What is the problem in Northern Ireland?

- 4.1.1** There is general agreement that the cornerstone of future oral health is the successful management of the young. Significant surveys over the past three decades have consistently shown that the incidence of caries amongst children is higher in Northern Ireland than in the rest of the United Kingdom. The 1993 United Kingdom Child Dental Health Survey' reaffirmed this position. In relation to caries, two major findings emerged from this Survey.
- 4.1.2** Firstly, there has been a "major improvement in levels of caries since 1983" the comparative figures for children in Northern Ireland. See appendix 1
- 4.1.3** The second major finding to emerge from the Survey was that children in Northern Ireland "*have significantly higher levels of treated and active caries than the children in England, Wales and Scotland*". The comparative figures for Northern Ireland, England (which has consistently the best figures) and the whole of the United Kingdom. See appendix 2
- 4.1.4** The latest survey of Adult Dental Health' was conducted in 1988. It showed that there had been a general improvement in levels of caries in adults throughout the United Kingdom, but that Northern Ireland continues to have the highest levels. There is little to be gained by considering the number of adults who have not experienced caries. This figure is virtually zero in all parts of the United Kingdom. The figures for the percentage of dentate adults who have 18* or more sound, untreated teeth. See appendix 3
- 4.1.5** The figures for the average number of teeth, which have had caries experience amongst adults, See appendix 4
- 4.1.6** A measure of dental disease experience often used in adults is the percentage of adults with no remaining teeth. The figures for Northern Ireland, England and the whole of the United Kingdom. See appendix 5.

4.2 What targets might be set?

4.2.1 The overall aim for caries reduction is:

To reduce significantly the levels of decay in Northern Ireland.

4.2.2 A United Kingdom wide Child Dental Health Survey is conducted every 10 years. The next is scheduled for the year 2003. It is, therefore, appropriate to set targets for children for that date. When setting goals for caries reduction, it is important to bear in mind that caries experience is cumulative.

4.2.3 At present, the levels of caries in **children** are highest in Northern Ireland and lowest in England, with the United Kingdom average between these two extremes. Part of the overall aim is to bring Northern Ireland more into line with the United Kingdom average, keeping in mind the point already made about caries experience being cumulative. The following targets for children for 2003 assume the fluoridation of water supplies in Northern Ireland.

- **To increase the percentage of 5 year old children with no caries experience from 37% to 60%.**
- **To reduce the average number of carious teeth in 5 year old children from 3.0 to 1.5.**
- **To increase the percentage of 15 year old children with no caries experience from 15% to 25%.**

To reduce the average number of carious teeth in 15 year old children from 5.3 to 3.3.

(The baseline figure is that of the 1993 Child Dental Health Survey')

4.2.4 The next United Kingdom Adult Dental Health Survey is scheduled for 1998. Preventive measures introduced now would have very limited effect by that date, and it is therefore appropriate to set targets for adults for the year 2008, with an interim review of progress in 1998.

4.2.5 The level of caries in **adults** was higher in Northern Ireland than in the United Kingdom as a whole in both 19794 and 19881. The following are targets for 2008.

- **To raise the percentage of dentate adults with 18 or more sound and untreated teeth from 25% to 35%.**
- **To increase the number of sound and untreated teeth per individual from 12.6 to 15.**
- **To reduce the number of adults with no remaining teeth from 18% to 10%.**

(The baseline figures are those of the 1988 Adult Dental Health Survey'.)

4.3 What action can be taken to achieve these targets?

4.3.1 The Health Education Authority document "The Scientific Basis of Dental Health Education" 3 lists four main ways to control caries. The advice is to *"reduce the consumption and especially the frequency of intake of sugar-containing food and drink, clean the teeth and gums thoroughly every day with a fluoride toothpaste, drink fluoridated water, and attend for regular dental checkups"*.

4.3.2 Methods by which the high caries rate in Northern Ireland can be reduced are as follows:

Reduction of the consumption of and especially the frequency of intake of sugar in the diet.

Efforts to promote oral health are entirely consistent with more general health education in the area of diet and nutrition. In particular, the importance of reducing the consumption of sugar, thereby reducing obesity and the risk of coronary heart disease, is one of the central themes of health education messages aimed at improving the diet of the Northern Ireland population. Similarly, a reduction in sugar consumption will help prevent caries. Providers of health promotion services, such as the Health Promotion Agency, should ensure that securing improvements in oral health becomes an additional objective for programmes designed to improve diet and nutrition in Northern Ireland. At the same time, initiatives such as "Sweet Free Checkouts", which are primarily sponsored by those involved in oral health promotion, should also cite the wider health benefits

to be gained by reducing sugar consumption.

There should be encouragement to food and drink manufacturers to look seriously at replacing cariogenic sugars with less harmful sweeteners, or omitting sweeteners altogether. This should apply, in particular, to the pharmaceutical industry. The prescribing of sugar free medicines should be the norm rather than the exception. The role of the community pharmacist in providing appropriate professional advice directed towards the prevention of dental caries, is an important one, particularly because of the pharmacist's frequent interface with mothers of babies and very young children.

Those working in the area of health education and health promotion in schools, including the Health Promotion Agency, Health and Social Services Boards, Health and Social Services Trusts, Education and Library Boards and teachers, should continue to encourage the promotion of healthy eating habits and the provision of nutritionally

sound food choices for school meals. Schools should also be encouraged to examine the availability of cariogenic snacks in school 'tuck shops' and to promote healthy alternatives where possible.

Since the onset of caries is predominantly in childhood, effective oral health education should be targeted at parents, particularly those of preschool children. The emphasis should be on promoting key messages to change behaviour amongst young people so that they will value oral health and good teeth throughout their lives.

The fluoridation of public water supplies. The most important environmental factor in the control of caries is the presence of fluoride in water supplies at an optimum level of 1 part per million. This is the only truly passive preventive measure available in relation to caries and is therefore, of greatest benefit to those children receiving least parental care and guidance. These are often the children with the highest caries incidence. The presence of fluoride in water will predictably reduce the prevalence of caries by more than 50%.

Implementation of the proposed water fluoridation schemes should be completed as soon as possible. **Fluoridated water should be made available to over 55% of the Northern Ireland population by the end of June 1996. Further fluoridation schemes should then be implemented with the aim of supplying fluoridated water as quickly as possible to at least 80% of the population.**

The use of fluoride tablets or drops in areas where the water supply lacks adequate fluoride. Since fluoride supplements are designed to incorporate fluoride into the developing teeth, it is important that such supplements be used from early childhood, and their promotion should form part of the advice given to mothers attending baby clinics. **Boards should promote the use of fluoride supplements in those areas where water fluoridation has not been achieved or is not practical.**

- **The use of topically applied fluorides.** Topical fluoride agents (that is fluoride agents applied to the surface of the teeth) by definition benefit the teeth only after their eruption. Even where water fluoridation exists or fluoride supplements are being taken, an additional benefit is achieved by using topical fluorides. Daily tooth brushing with a fluoridated toothpaste is the most important method of topical application.
- **The application of fissure sealants.** A fissure sealant is a plastic coating, applied to the biting surface of posterior teeth; the surface, which is most prone to caries. They have a proven effectiveness, but, because they require to be applied by a professional, they are moderately expensive. Fissure sealants should continue to be made available to those children identified to be at risk.

4.3.3 An additional aim is:

To manage effectively the treatment of existing and future disease.

4.3.4 There is much untreated caries in Northern Ireland at present. Furthermore, the measures described above might reasonably be expected to reduce the incidence of caries, but not eliminate it. Therefore, any oral health strategy must also address the management of disease. In Northern Ireland, this should be achieved by the following measures:

- Boards should ensure that their Community Dental Service screens all children on at least three occasions during their school career and more frequently where particular need exists.
- Boards should continue to encourage parents to register children with general dental practitioners from shortly after birth.
- Boards should take measures to increase the percentage of children registered with a general dental practitioner under the capitation scheme.

- Boards should take measures to increase the percentage of adults registered with a general dental practitioner for continuing care.
- Boards should maintain a sufficient number of centres of excellence in which general anaesthesia can be provided for the extraction of teeth.

5 Chronic Periodontal Disease

5.1 What is the problem in Northern Ireland?

- 5.1.1 Although gingivitis is common in children, signs of destructive periodontal disease do not usually occur until adult life. The Adult Dental Health Survey of 19881. Demonstrated only minor, insignificant differences in the disease between the various parts of the United Kingdom.
- 5.1.2 In Northern Ireland, of the 82 % of adults with some remaining teeth, 94% had at least minor signs of chronic periodontal disease, with 72% showing a degree of destruction of the supporting tissues of the teeth and 5 % with advanced problems.
- 5.1.3 As the main causative agents, plaque and calculus differ only in that plaque can normally be removed by an individual's oral hygiene measures, whereas calculus requires to be removed by a dentist or dental hygienist.
- 5.1.4 In Northern Ireland the 1988 Survey' showed that 83% of the population had calculus present in association with their dentition and that fewer adults had received oral hygiene advice from their dentist than elsewhere in the United Kingdom.

5.2 What are the ways to reduce periodontal disease?

- 5.2.1 Personal oral hygiene measures are the principal methods of controlling periodontal disease. Evidence would suggest that, for most people, the aim in relation to chronic periodontal disease should be to achieve an adequate standard of oral hygiene which will minimise the level of periodontal disease progression. Minor levels of the disease are acceptable, provided the destructive progress is not sufficient to cause loss of the teeth in a lifetime.
- 5.2.2 For this group of adults (approximately 90%) advice should be made available in relation to oral hygiene measures, with access to scaling and polishing by either dentists or dental hygienists.
- 5.2.3 Research will continue to help identify the individuals who are particularly susceptible to the destructive processes. This group (10%), once identified, should receive more intensive treatment to prevent periodontal breakdown leading to tooth loss. Until the results of such research are available, those found on examination to have had more extensive breakdown should receive appropriately more intensive care.

5.3 What action can be taken?

- 5.3.1 Quantifiable targets in this disease area are inappropriate. However, the following measures should be taken. In Northern Ireland, auxiliary dental personnel are not as readily available as in many other parts of the United Kingdom. Oral hygiene advice can be made more economically and widely available if oral health educators are used. In recent years, part-time training courses leading to Oral Health Educator qualifications have been established in Northern Ireland and have made a valuable contribution to oral health education.

The Department of Health and Social Services will continue to work with the education sector to promote oral health education courses, and Boards should encourage general dental practitioners to enroll suitable staff.

- 5.3.2 Scaling and polishing of the teeth may, by law, only be carried out by dentists or dental hygienists. These procedures would be made more economically and widely available by the increased use of dental hygienists. A School for Dental Hygienists has now opened in Belfast, and five students will be trained each year. The Department of Health and Social Services will continuously assess the manpower requirements in relation to dental hygienists with a view to adjusting the training capability of the school accordingly.

- 5.3.3 Boards should continue to ensure that specialist advice is available to general dental practitioners in relation to those patients suffering from more aggressive chronic periodontal disease.

6 Oral Cancer

6.1 What is the problem in Northern Ireland?

- 6.1.1 Oral cancers account for just over 1 % of all cancers in the United Kingdom. Throughout this century in the United Kingdom there was a decline in the mortality rate from oral cancer until the 1970s. Since then, the mortality rate has steadily increased'. The present annual figures for deaths from oral cancer for Northern Ireland are 3 per 100,000 males and 2 per 100,000 females.
- 6.1.2 98% of all cases are in people over 40 years of age, but there is evidence that the average age of onset is falling. There are approximately 60 new cases of oral cancer diagnosed in Northern Ireland each year. Early diagnosis is important. The five year survival rate for all oral cancers is 40% but increases to 80% with early diagnosis. The cost of treatment of oral cancer has been estimated at £60,000 for longer standing cases and £1,000 for those diagnosed early.

6.2 What action can be taken?

- 6.2.1 Once again, quantifiable targets are difficult to establish in this area. The following measures might be taken:

Early detection. Until the effectiveness of different forms of screening programmes for oral cancer can be established, regular attendance at a general dental practitioner is the most cost effective way of

Screenings. Boards should work with general dental practitioners to ensure that screening for oral cancer forms a part of general oral examinations.

Further research. The Department of Health and Social Services should consider inviting research proposals to evaluate the various methods of conducting screening and to assess their cost effectiveness.

Prevention. The dangers of alcohol misuse and smoking feature prominently in health promotion programmes in Northern Ireland. Health promotion programmes should also highlight smoking and alcohol as important risk factors in oral cancer and should encourage regular attendance at a general dental practitioner.

7 Orthodontic Care

7.1 What is the problem in Northern Ireland?

7.1.1 For some years Northern Ireland has shared with the rest of the United Kingdom problems in relation to the provision of NHS orthodontic services. These include the cost and difficulty involved in undergraduate and postgraduate orthodontic training, and a shortage of qualified orthodontists. Northern Ireland also has a higher percentage of children than Great Britain. A combination of all these factors has led to the creation of waiting lists.

7.2 What action can be taken?

7.2.1 The "Review of Orthodontic Services in Northern Ireland" conducted by the Chief Dental Officer in 1990 made a number of recommendations, which have now been implemented and have begun to address the problem of insufficient Health Service orthodontic services. For the future:

- Boards should collect data on the orthodontic treatment needs of Northern Ireland children.
- Boards should continue to ensure the provision of postgraduate orthodontic training for general dental practitioners.
- Boards and the Northern Ireland Council for Postgraduate Medical and Dental Education should ensure consultant services are available for the management of the more severe orthodontic conditions in particular children with cleft palates.

8 Dental Trauma

8.1 What is the problem in Northern Ireland?

8.1.1 Traumatic injuries to the teeth occur, mainly in children, as a result of accidents. Such accidents often occur during play or sporting activities.

8.2 What action can be taken?

8.2.1 Accident reduction is a key component of the Northern Ireland Regional Strategy for the Health and Personal Social Services, and responsibility for action in this area rests with a wide range of organisations in the statutory and voluntary sectors, covering accidents in the home, on the roads and in the workplace. The continuing success of their efforts will contribute to reductions in dental trauma.

8.2.2 The prevention of sports injuries to the teeth can be achieved by the wearing of properly constructed mouth guards when playing sport. The Northern Ireland Sports Council, local Councils, schools and sports governing bodies should continue to encourage the use of mouth guards.

- 9.1 The need for provision of a full range of care from general practitioners, Community Dental Services and Hospital Dental Services is fundamental to the maintenance of a service to improve the oral health and provide the quality of care needed for the population of Northern Ireland. Boards should ensure that specialist advice and treatment is available where appropriate.
- 9.2 As the number of elderly people within the population increases and as more people retain their natural teeth into old age, treatment requirements are changing. For example, dentists will increasingly face a greater incidence of caries affecting the root surfaces of teeth exposed by gum recession and also the need to replace failed, long standing restorations with more complicated forms of treatment. In addition, the need for screening for oral malignancy increases with age. Boards should take account of these pressures on the dental services and should ensure that domiciliary screening of elderly people for oral disease is available to meet special needs.
- 9.3 The Department has ongoing responsibility for assessing manpower and training requirements for dental consultants. Account will need to be taken of the recently published report by the Chief Dental Officer of England, entitled "UK Specialist Dental Training" .7
- 9.4 The recently published Nuffield Inquiry into dental auxiliary personnel¹⁸ makes a number of fundamental recommendations about the training and use of dental auxiliary personnel. The report concludes that changes in the present mix of skills within dentistry and a greater use of suitably qualified auxiliary staff would deliver oral health care more effectively and with better value for money. [The use of oral health educators and hygienists throughout Northern Ireland should be widely encouraged.](#)
- 9.5 These recommendations are currently being discussed by relevant groups within the profession. It is likely that both the training and the employment of dental auxiliary personnel in Northern Ireland will require modification over the forthcoming decade. Training agencies and employing authorities will need to respond flexibly to future changes.

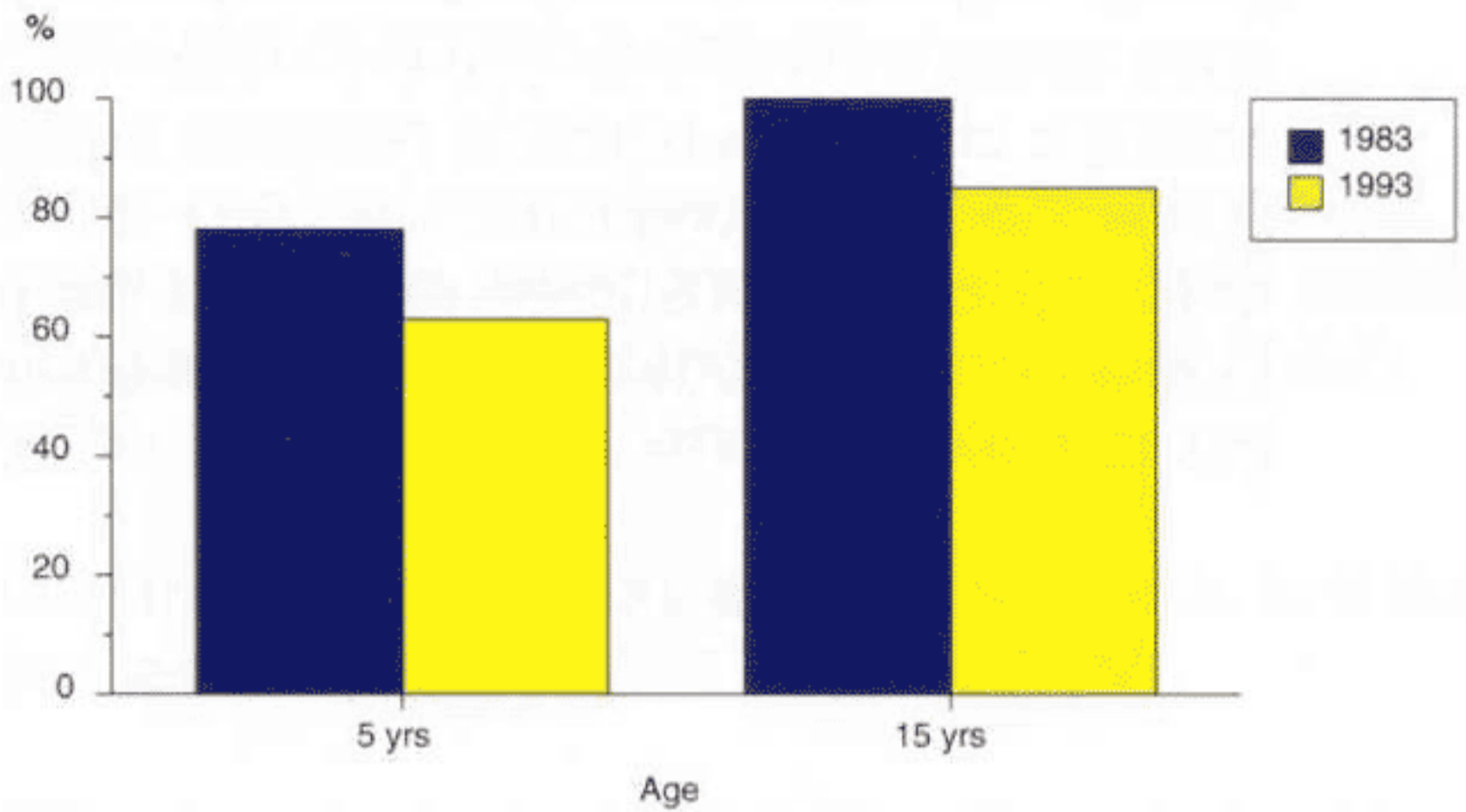
10 Conclusion

10.1 This strategy has highlighted the poor state of oral health in Northern Ireland and has set challenging targets for improvement over the medium to long term. It recognises that oral health is part of more general good health and seeks to place the promotion of oral health in the wider context of efforts to improve the health of the Northern Ireland population. It is clear from the specific actions suggested in the strategy that securing improvements in oral health will require the commitment and energy of a wide range of organisations and health professionals. Ultimately, however, the real power to improve oral health rests with the individual, and in particular with the parents of young children. By working together, it is hoped that the improving trends reported in the most recent surveys of adult and child dental health can be accelerated and that significant improvements in the oral health of the Northern Ireland population will be achieved over the next fifteen years.

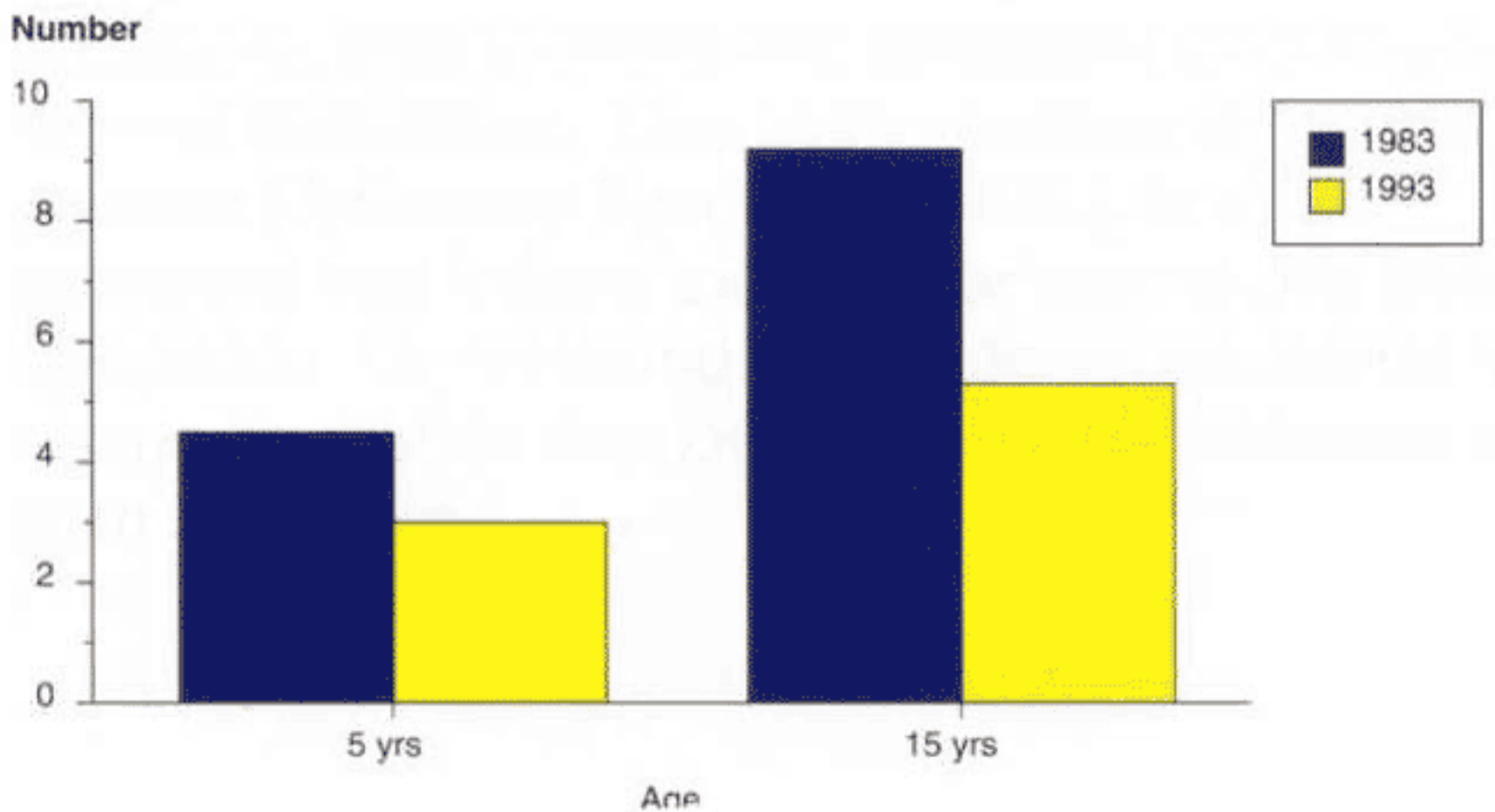
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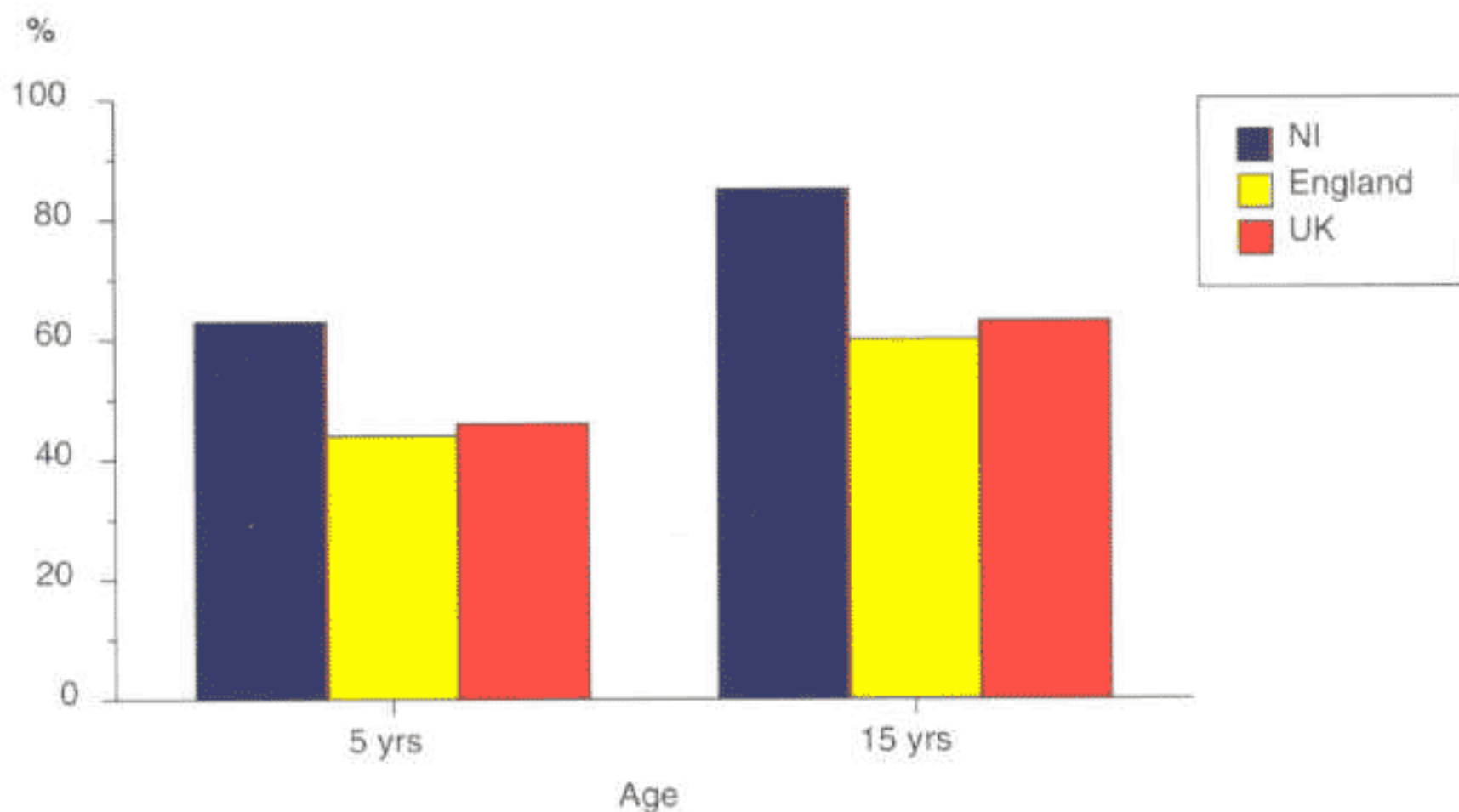
Experience of tooth decay



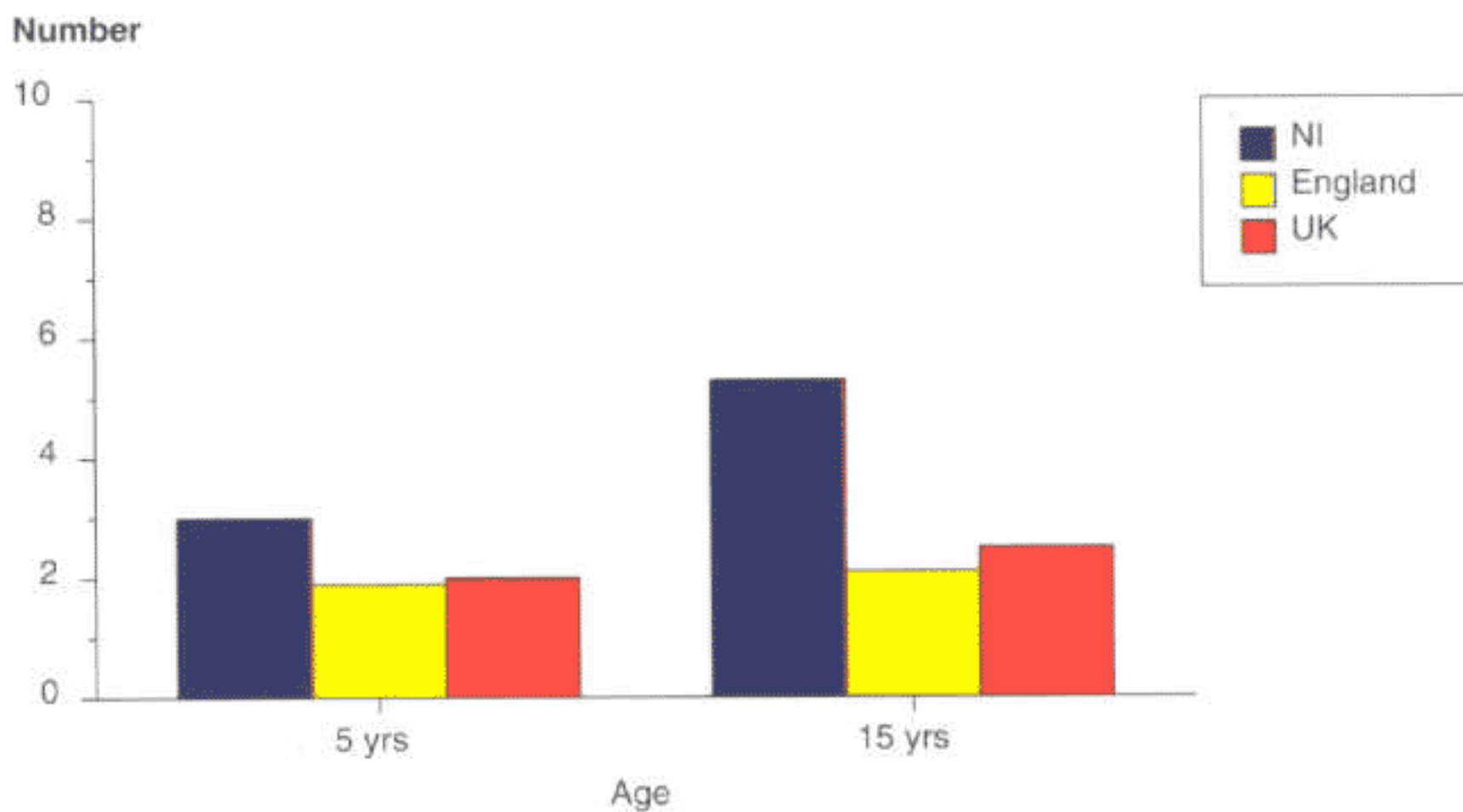
Average number of teeth having any experience of decay



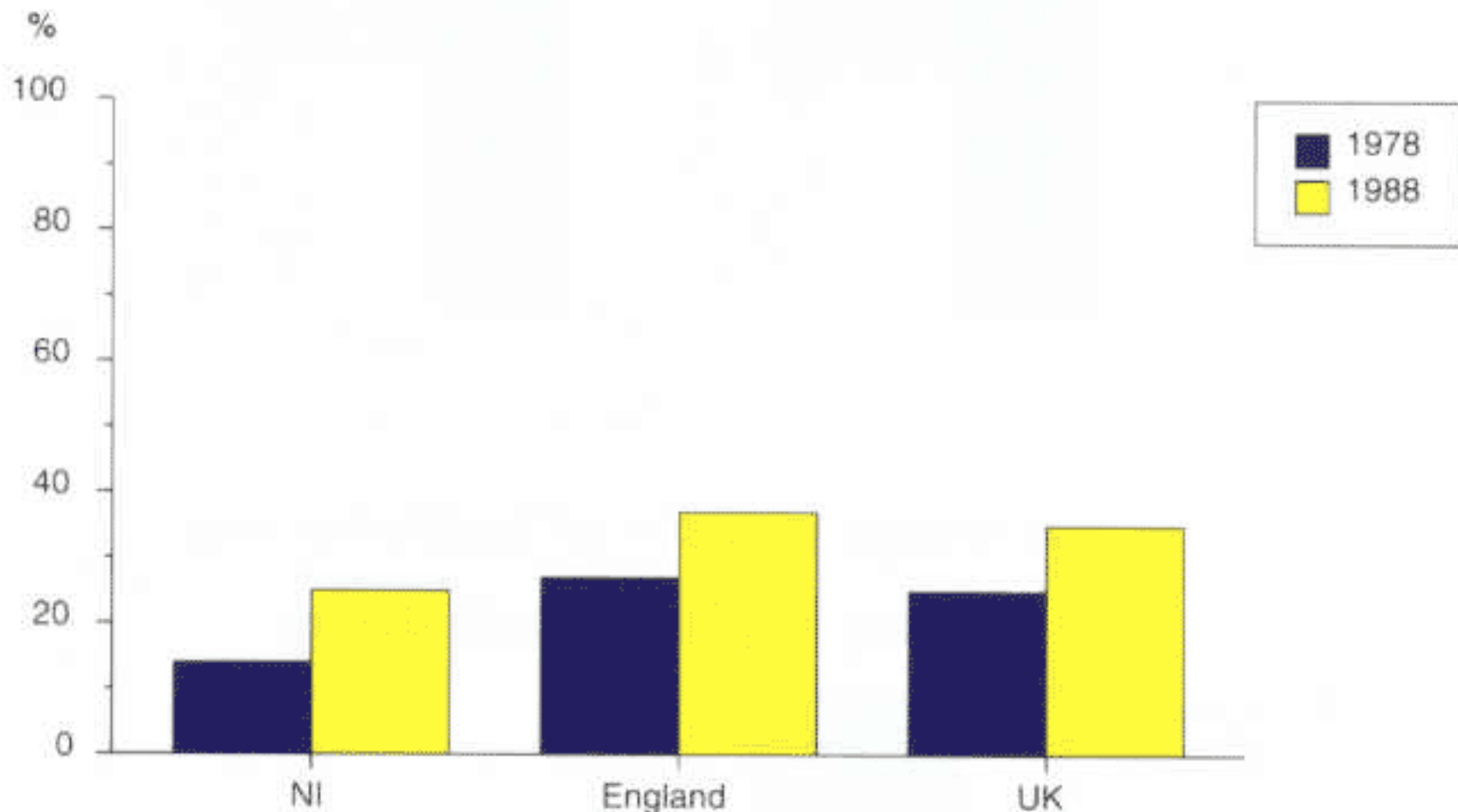
Experience of tooth decay



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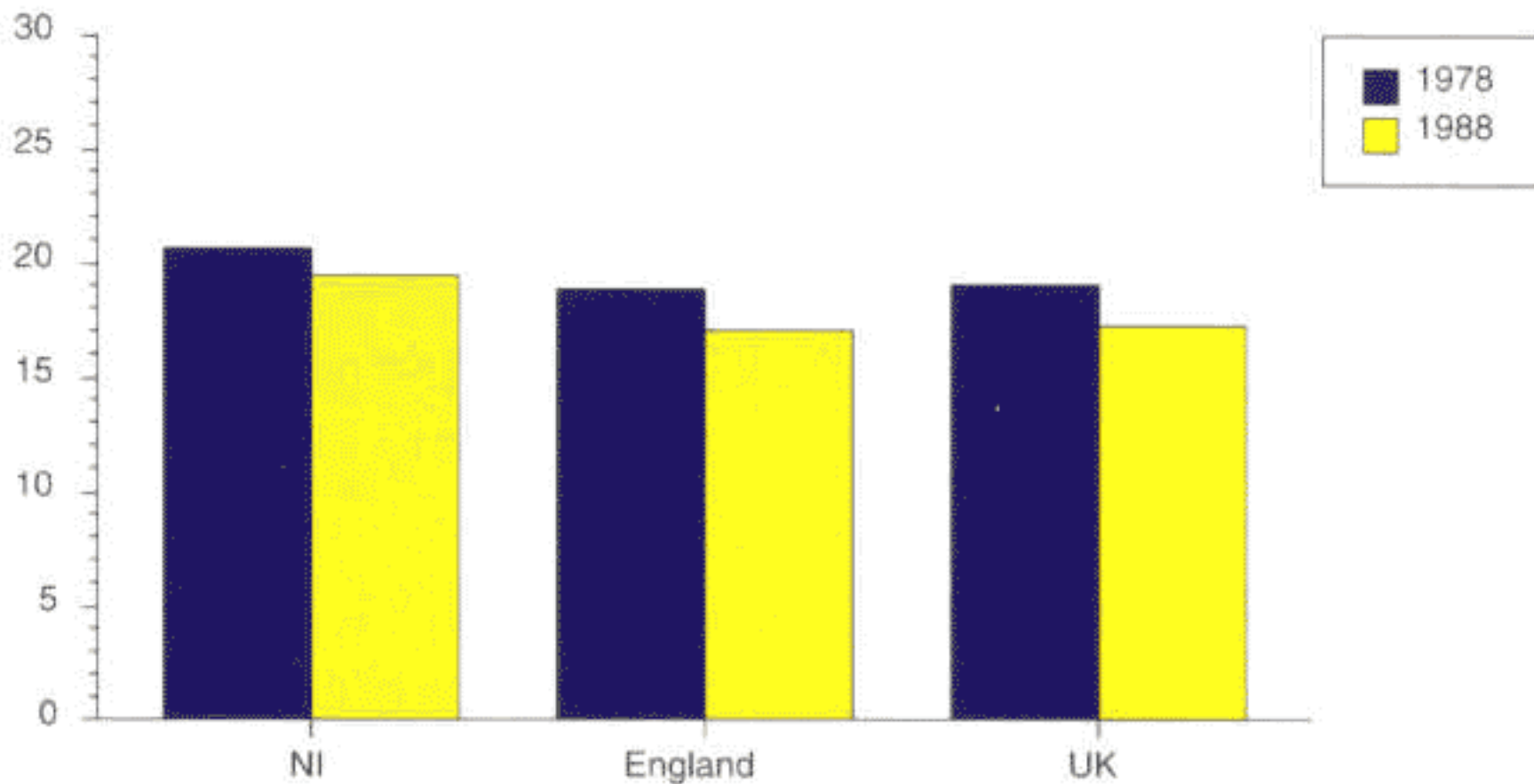
% of adults with 18* or more untreated teeth



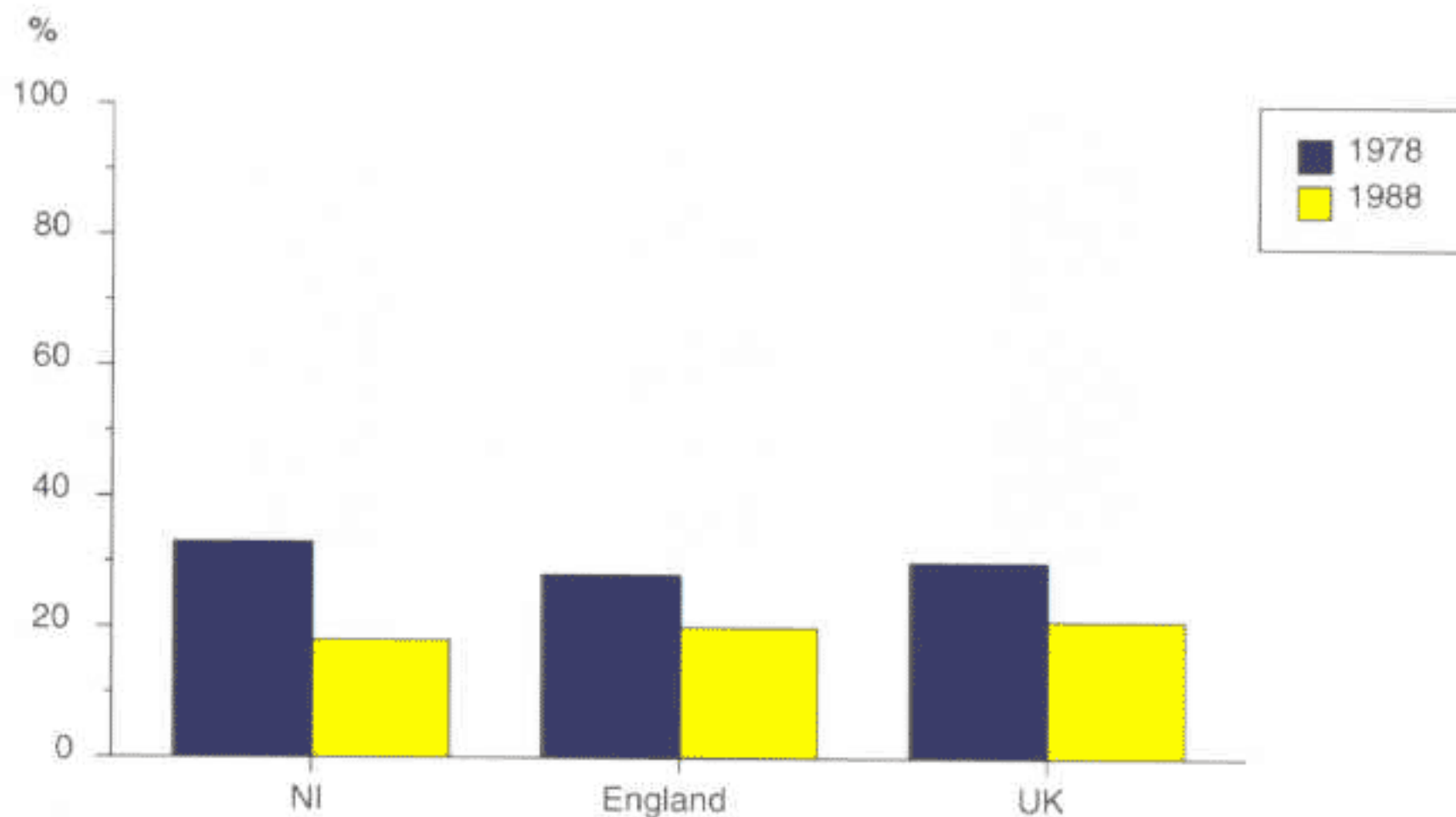
*This number of teeth is selected because it is a commonly used measure for comparison purposes.

Average number of decayed teeth in adults

Number



% of adults with no remaining teeth



These figures take no account of the reason for tooth loss, nor of the number or quality of remaining teeth in those adults who are termed dentate.