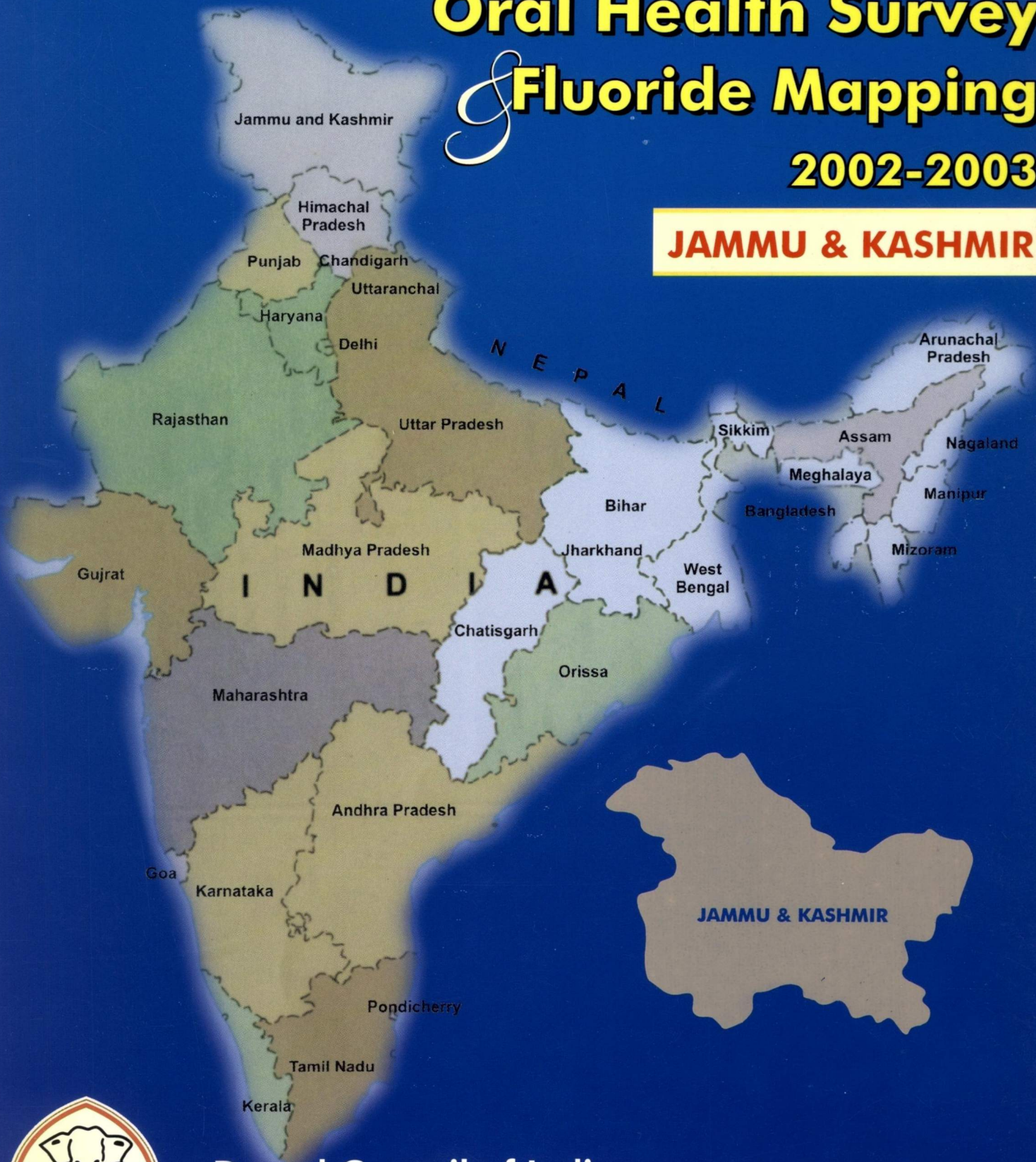


National Oral Health Survey & Fluoride Mapping 2002-2003

JAMMU & KASHMIR



Dental Council of India
New Delhi
2004

NATIONAL ORAL HEALTH SURVEY & FLUORIDE MAPPING

2002-2003

JAMMU & KASHMIR

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ABBREVIATIONS & ACRONYMS

NOHS & FM	National Oral Health Survey & Fluoride Mapping
DCI	Dental Council of India
NFHS	National Family Health Survey
NDP	Net Domestic Product
WHO	World Health Organisation
CEB	Census Enumeration Block
BDS	Bachelor of Dental Surgery
MDS	Master in Dental Surgery
M.P.H.	Master in Public Health
M.Sc	Master in Science
D.P.H.	Dental Public Health
deft	Decayed, indicated for extraction and filled primary (deciduous) teeth
Dmft	Decayed, missing and filled primary (deciduous) teeth
DMFT	Decayed, missing and filled permanent teeth
dt/DT	Decayed teeth (primary/ permanent)
mt/MT	Missing teeth (primary/ permanent)
ft/FT	Filled teeth (primary/ permanent)
SIC Index	Significant Caries Index
CPI	Community periodontal index
DAI	Dental Aesthetics Index
TMJ	Temporomandibular Joint
mnt/ MNT	Mean number of teeth (primary/ permanent)
ppm	Part per million (of fluoride)

FOREWORD

It gives me great pleasure to write a foreword to this report on the National Epidemiological Oral Health Survey & Fluoride Mapping of the Dental Council of India. This is a historic document as it is for the first time that a scientific survey on oral health problems at state and national levels has been undertaken in India. With this report in place, we are amongst those few countries in the world where data on oral health problems has been collected through a scientifically conducted sample survey. The report, I am sure, will prove to be an invaluable tool for effective planning and implementation of oral health programmes in the country.

This gigantic national survey, with the states as component units, would not have been possible without the commitment and the efforts of a large number of organizations and individuals. At the outset, I must acknowledge the role of the members of the Executive Committee of the Dental Council of India and its General Body, who supported me in this endeavour and gave all help as and when necessary. The survey work in the states was entrusted to Regional Coordinators who were selected from senior faculty members in Community Dentistry or allied fields from reputed dental colleges. I am pleased that a large number of dental colleges, through their managements and the Principals/ Deans responded to my request to collaborate in this national endeavour. A list of the participating dental colleges and individuals has been given elsewhere in this report.

I would particularly like to acknowledge the contribution of the members of the core technical team for all pre-survey planning and designing activities, who include Drs V.B. Mathur, P.P. Talwar, Shankar Aradhya, S.S. Hiremath, K.V.V. Prasad, M.B. Aswathnarayan, (Ms) Amrit Tiwari, and S.G. Damle.

A central team was established early in the course of the survey at the office of the Dental Council of India to help develop project protocols, coordinate and liaise with regional coordinators, manage logistics, compile, computerise and analyse data and develop tabulation plans and reports. This report, for which there was no precedence or example, is evidence of the hard work and professional competence of the team. As the leader of the team, it is with a sense of pride and satisfaction that I acknowledge the painstaking and dedicated work of the members, namely Dr. V.B. Mathur, Prof. P.P. Talwar and Mr. H.B. Chanana.

I gratefully acknowledge the cooperation and support of the Municipal Corporation of Delhi, particularly its Health Officer and Director, Health Services, Dr. K N Tiwari, who spared the services of Dr. V B Mathur for this national cause.

It would be impossible to conduct a large scale national survey of the present magnitude without sufficient resources. We are indebted to our esteemed partners, Colgate-Palmolive Co., U.S.A., and Colgate-Palmolive (India) Ltd., for supporting the project.

I am sure that results of this survey will pave the way for improving the oral health of the people of India. We recognise that this is only the first step in this direction, where oral health problems and related practices have been identified. The next crucial step will be to use the findings of this survey to plan and implement an appropriate and need-based oral health programme. Here, I hope the national and state governments will use the findings of the survey for planning and implementation of oral health programmes.

As President of the Dental Council of India, I would emphasise and recommend to all those concerned with dental education in the country to review the oral health needs of the people in the context of dental education and use the results of the survey to help strengthen the teaching/training curriculum of the dental colleges. The students should be taught to look at survey results critically and make decisions about dental care strategies based on age, geographical areas and disease levels in the communities they serve. The dental colleges should use its findings and lay the correct emphasis so that the oral health needs of the people are met with quality services.

This survey must not remain a solitary event. We must ensure that a MIS (Management Information System) is established so that future trends of oral disease and action taken to combat it are monitored regularly through continuing periodic surveys.

The challenge for all of us lies in ensuring a more equitable and need based distribution of resources for oral health, making sure that the benefits of the survey reach the communities in improving their oral health.

Dr R. K. Bali

President, Dental Council of India.

July 2004.

PREFACE

The National Oral Health Survey & Fluoride Mapping of the Dental Council of India is the first-ever national-level epidemiological survey in the country, the need for which was felt for a long time. This massive initiative could not have been carried out without the partnership, participation, cooperation, support and help from a number of institutions, organizations and individuals, all of whom have directly and indirectly assisted the Dental Council of India in this magnanimous task.

We are indebted to the Ministry of Health & Family Welfare for providing the necessary permissions and management support since inception. We gratefully acknowledge the valuable contribution made by the Chief Director, Dr. K.V.Rao, National Family Health Survey, at the stage of sampling design, sample selection and training. We also gratefully acknowledge the contribution of Professor Fauj Ram, of the International Institute for Population Sciences, Mumbai, who was instrumental in setting the sampling frame for the selection of rural and urban primary units from where households were selected for data collection.

In the planning phase, the proposed survey was discussed with international experts in the field of oral epidemiology, health promotion and community dentistry. Prominent among these were Professor Aubrey Sheiham, Head, Department of Community Dentistry, University College, London; Professor Robert Bagramian, Chairman, Department of Community Dentistry, University of Michigan, Ann Arbor, USA; Professor Martin Hobdell, Ireland; and Dr Michael Craft, UK. We remain most indebted for their valued inputs and time.

Dr. P E Petersen, Responsible Officer, Oral Health Program, World Health Organization (WHO), Geneva, found time and visited us at the Dental Council of India, New Delhi, in November 2002. He volunteered the full cooperation and support of the WHO for the project, including assistance in data analysis and reports. We gratefully acknowledge his valuable inputs and feel sure that the information collected will find its appropriate place in the oral global databank maintained by the WHO and in their other publications.

The active participation of dental colleges, their managements, Principals Deans and faculty was envisioned since the inception of the project planning. It was, however, most gratifying to note the extent of enthusiasm and support that was received from the managements and faculty members of some of the colleges. They took upon themselves to meet Herculean challenges that were in front of them in the face of limited resources. The role of some of the colleges strengthens our belief that our colleagues are alive to their professional responsibilities and are dedicated to selfless service in the interest of research and community benefits.

The chairperson, Dr. Ram Das Pai, and the management, faculty and staff of the Manipal Academy of Higher Education (MAHE), Manipal (Karnataka), deserve a special thanks for co-hosting the large-scale training and calibration meeting for all Regional Coordinators and Supervisors at the Manipal Dental College in March 2002. We would specially like to record our sincere appreciation of the Dean, Dr. Shobha Tandon, and her able team, including Dr. V Surendra Shetty, Dr. Soben Peter and others for the professional management of this meeting and the excellent hospitality extended by them.

We also extend a very special thanks to Dr. S.G. Damle, Dean, Nair Dental College & Hospital, Mumbai, who co-hosted the report-writing workshop in January 2004 in Mumbai, where issues relating to state reports were discussed.

The central survey team, from time to time, has received valuable suggestions and active feedback from some senior members of the profession, including Drs. Ganesh Shenoy, Shankar Aradhya, A Jaykumar, S S Hiremath, S G Damle, N C Rao, and Mahesh Verma, and we wish to place on record our appreciation and grateful thanks for their inputs. Drs Arundeeep Kaur, Pankaj Goel and C L Dileep assisted the central team in Delhi from time to time and deserve our sincere thanks for their inputs.

We are indebted to the members of the Executive Committee and the General Body of the Dental Council of India, New Delhi for their wholehearted support to this initiative of the Council President. We gratefully acknowledge the able leadership of Mr A L Miglani, Secretary (Retd.), the Secretary Incharge of the Dental Council of India, Mr S S Arora, and Mr C L Bhatia, Coordinator, who though working in the background put in every effort for the success of the survey. While every member of staff has made a valuable and selfless contribution to the survey, we wish to place on record the special contribution of Mr K V Abraham, Mr P K De, Mr. Shiv Kumar, Mr. Praveen Dewan, Mr. Puneet Bansal, and Mr. Anil Verma.

We acknowledge the valuable support, both technical and financial, provided by Colgate-Palmolive. While technical support was provided by Dr. Tony Volpe, Dr. Kedar Rustogi, Dr. Raj Kohli and Dr. Surendra Manek, valuable project management input was given by Mr. Mahendra Jauhari and Mr. Mahender Ashtekar.

Fluoride mapping of drinking water sources in the country to determine areas with optimal or high levels of fluoride was an integral part of the project. Dr. P M Dixit, his team and the management of M/s Medlar Labs, Mumbai, deserve our special thanks, as they were instrumental in completing the task of analysing more than 4,000 water samples that they received directly from the Regional Coordinators as per schedule despite various constraints.

We acknowledge the support of TNS MODE, New Delhi, a prominent marketing, advertising and research organization, who took responsibility of computerization and tabulation of the massive data sets and provided tables according to our tabulation plan. Later on, they also helped in the collection of water samples from the states which could not be covered so far under the survey.

We appreciate the efforts and patience of Mr Rajiv Mathur, an independent Consultant in Information Technology and data management, who has painstakingly worked in programming and reprogramming till we were satisfied with the final set of tables.

We wish to record our gratitude and thanks to all other organisations and individuals, whose names do not appear here but who have supported our work and contributed towards its success in one way or the other.

July 2004.

Dr. R. K. Bali

Dr. V. B. Mathur

Prof. P. P. Talwar

H.B. Chanana

ACKNOWLEDGEMENTS

The enormous National Oral Health Survey and Fluoride Mapping project by Dental Council of India in urban and rural areas of three districts of Jammu & Kashmir, could be made possible by the sincere, dedicated services of Dr. Ab. Wahid Malik, Supervisor, and his two teams. I wish to register sincere thanks to the C.M.O. Leh, Dr. Dawa, four Dental Surgeons and two Social Workers at Leh who joined our teams voluntarily and accompanied to far flung areas of the district giving proper guidance.

I have no words to express my gratitude to Dr. Muzaffar Ahmad, Director, Health Services, Kashmir & Dr. Jasbir Sing, Director, Health Services Jammu for their timely help during the Survey programme.

I sincerely acknowledge the invaluable support and guidance given by Dr. R.K. Bali, Padmashri, President, Dental Council of India, Dr. V.B. Mathur, Project Officer, Prof. P.P. Talwar and Mr. H.B. Chanana from New Delhi.

I wish to express my sincere thanks to Mr. Fayaz Ahmad, Private Secretary to Principal, Govt. Dental College, Srinagar, Mr. Ghulam Rasool, Jamadar, Mr. Ab. Rashid Bangroo & Mr. Mohd Shafi of Govt. Dental College, Srinagar office for their invaluable help.

Lastly, I wish to thank all the individuals who voluntarily came forward to help the two teams during the survey.

Dr. Tara Singh,
Regional Co-ordinator,
National Oral Health Survey &
Fluoride Mapping,
Srinagar
Jammu & Kashmir

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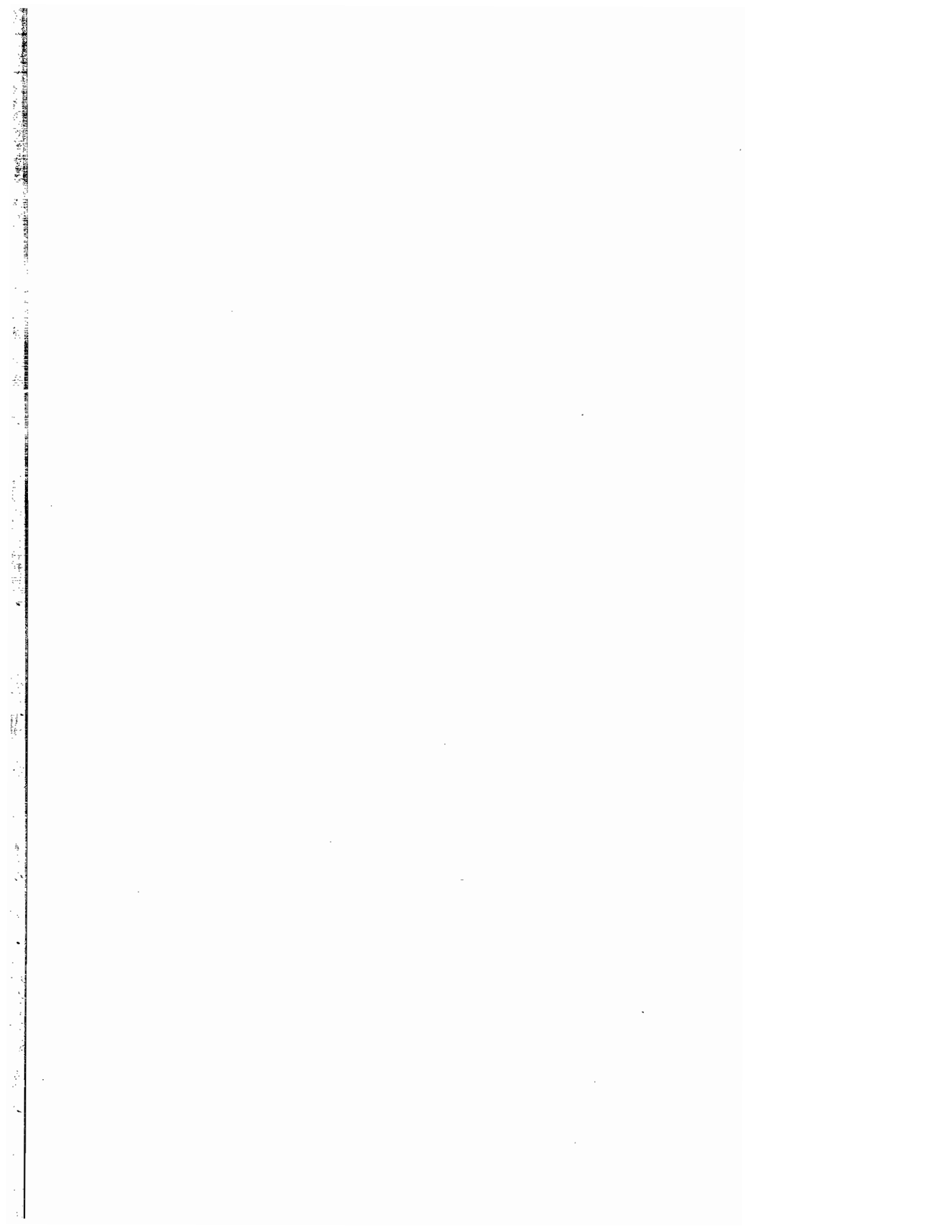
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CHAPTER 0

EXECUTIVE SUMMARY

1. GENESIS

Oral health is a very important component of general health. However, it is one component about which there is very little awareness and little clear understanding of the implications of the consequences of ill-health. The high prevalence of dental diseases, like dental caries, periodontal diseases, various stages of malocclusion, besides lack of access to the required services leads to significant absenteeism and economic loss, apart from the ill-effects on the health of the person afflicted. In view of the adverse effects of poor oral health, it is important to take preventive measures and create the required services. For this purpose, it is necessary to know the prevalence of oral health problems and understand the dental health practices that people follow. Such information is basic for formulation of oral health policies and implementation of appropriate programmes to improve the awareness and knowledge of general public about the preventive aspects of oral health, to create the required services and to train the necessary dental manpower to meet these needs.

The Dental Council of India has been greatly concerned about this gap in knowledge and the resultant lack of appropriate policies and programmes. There has been a long-felt need for an epidemiological study on oral health problems, which would also include a study of the related oral health practices besides mapping fluoride levels in drinking water from various sources in the country. Such a study may help bring about a balance between the oral health needs of the people and the services provided, and help plan and organise need-based services to improve the level of oral health of the people.

Keeping this in view, the Dental Council of India undertook a national-level epidemiological study, "National Oral Health Survey and Fluoride Mapping," to assess the oral health problems of the people and practices they adopt in this regard. The present study is a community-based survey with the objectives of assessment of (1) awareness and knowledge of people about oral health problems; (2) current status of oral health problems in the community; (3) practices people adopt for both prevention and treatment of their oral and dental problems; and (4) levels of fluoride in the drinking water of the people across the country. The survey, initiated in 2002, aimed at knowing the ground situation to help decision-makers formulate policies and programmes to improve the oral health of the people. Mapping of fluoride levels in drinking water was made a part of the survey since the fluoride level is directly associated with oral health problems, such as dental and skeletal fluorosis.

2. SCOPE OF THE SURVEY

The scope of the survey was to collect information covering the following dimensions of oral health:

1. Prevalence of oral health problems,
2. Fluoride levels in drinking water,
3. Eating habits affecting oral health,

4. Dental cleaning practices,
5. Awareness and knowledge of people on factors affecting oral health, and
6. Treatment-seeking behaviour of people for their oral health problems.

It may be noted that this survey delved into areas much beyond the usual ambits of oral health surveys, which generally focus on the levels and problems of oral health in the community. This survey, on the other hand, collected data on many more dimensions so as to enable an understanding of the practices that cause oral health problems and the steps people take to seek treatment.

3. DESIGN OF THE SURVEY

Recognising the fact that India is a vast country with great diversity in eating habits and behavioural practices, the survey was designed and conducted so that state-wise oral health problems and related practices could be determined. This is to help the formulation and implementation of state-wise policies and programmes.

3.1 Sample size

Three considerations were kept in mind while deciding upon the sample size: (1) The estimates should be valid at the state level; (2) Intra-state regional variations may be captured in oral health problems and practices; and (3) It should be possible to complete the survey of the proposed sample within the limited budget available. In view of these, the WHO recommendation, that the sample comprise 300-600 dental examinations of people aged 5, 12, 15, 35-44 and 65-74 years from a homogeneous region, was adopted. Accordingly, it was decided that 315 households, both in rural and urban areas, would be taken from each homogeneous region in a state, and oral examinations done on 315 subjects in each identified age group. Also, the sample size would increase in case all the 315 subjects in each of the five identified age groups (5, 12, 15, 35-44 and 65-74 years) were not available in the selected 315 households. Besides, it was also decided that the examinations in each age group would be equally distributed between males and females. Further, of the selected sample size of 315 households, 210 households were to be from rural areas and 105 from urban areas. Thus, 105 males and 105 females were examined in each of the five age groups from the rural areas, and 53 males and 53 females from each age group in the urban areas.

3.2 Sample selection

Each state was divided into a few homogeneous regions, comprising of a number of districts, on the basis of agro-climatic factors used by the Planning Commission and the physio-geographic factors used by the Office of the Census Commissioner and the Registrar General of India. The total sample of households from a state thus depended upon the number of such homogeneous regions.

A three-stage sampling design was adopted to select 210 rural households from each homogeneous region. The first stage was the random selection of a district from a region. The second was selection of 15 villages with probability proportional to size (pps) of the village, and, finally, selection of 14 households randomly from each selected village.

In the case of the urban sample of 105 households from a homogeneous region, eight blocks/wards were randomly selected from the selected district. From these eight blocks, 15 wards or census enumeration blocks (CEBs) were randomly selected (each CEB has more or less same population size). In the next stage, 7 households were selected from each CEB. Again, 105 subjects from each age group (5, 12, 15, 35-44 and 65-74) were to be examined, with males making up half the number, and females the other half.

4. STUDY TOOLS

In order to encompass all the objectives of the study, two types of questionnaires/schedules were used in the survey. One was the WHO schedule on Oral Health Assessment and the second was an individual questionnaire (specially developed by the Dental Council of India) for collecting information on etiologic factors related to oral health awareness, knowledge and practices of individuals on factors affecting oral health, and their treatment-seeking behaviour **Annexures-7**

5. DATA COLLECTION

A small nucleus, Central Survey Unit, was set up in the office of the Dental Council of India in New Delhi. For the fieldwork, one dental state coordinator and his/her dental college were selected for each state. This coordinator was to oversee the fieldwork in the state in coordination with the Central Survey Unit. Each coordinator was to form field teams consisting of two dentists and one social worker. While the dentists were to examine the oral health of the subjects and record information on the Oral Health Assessment questionnaire, the social worker was to record information on the questionnaire related to etiological factors.

Great care was taken to ensure that the quality of the data collection met stringent standards. Besides a state coordinator, supervisors were appointed to move with the teams when they went for data collection. The coordinators, supervisors, of the dental colleges, were given total responsibility for the scrutiny and checking of the data. The data was scrutinised at three levels, in the field, in the state coordinator's office and at the central level, before processing.

Besides, water samples were taken from the selected households for testing fluoride levels, and all such tests on these samples were conducted in a laboratory in Mumbai.

6. CALIBRATION AND TRAINING WORKSHOPS

A three-day calibration and training workshop was organised where all the coordinators and supervisors were given training in field logistics, data collection, and standardisation of the assessment of oral health problems. The last is very important, and very thorough training was imparted for it, so that all field teams adopted uniform assessment methods in recording dental problems. A workshop on report writing was also organised in Mumbai to standardise the format & writing of each state report. This was necessary because some coordinators undertook responsibility of writing reports for their respective state. Of course some state reports were prepared by the Central Survey Unit.

7. AREA COVERAGE IN SURVEY

The National Oral Health Survey, was designed to cover all Agro-Climatic regions of the state. All the three Agro-Climatic regions into which is divided were covered during the survey.

8. FINDINGS (ORAL HEALTH KNOWLEDGE AND PRACTICES)

8.1 Characteristics of households surveyed

- (i) 44 percent & 12 percent of the respondents, irrespective of places of residence live in pucca & kuccha houses respectively. The rest, live in Semi pucca house in the state.
- (ii) About two third of the households had monthly expenditure of Rs 2501-5500 in the state. More were spending Rs 5501-10,000 per month in Srinagar than in other two regions.
- (iii) About 56 percent of households were of Muslims followed by 36 percent Hindus & 4 percent Sikh in the state. There were more households of Hindus in Jammu and in small percent in Ladakh & Srinagar regions.
- (iv) 86 percent of households were of other than SC, ST & OBC castes.
- (v) 50 percent were drinking water from piped/taps.
- (vi) About three fourth reported rice as their staple food & same percent were non vegetarian.

8.2 Profile of population across age groups

- (i) 7 & below percent of youngsters and 50 & more percent of elders more females irrespective of places of residence, were illiterate in the state.
- (ii) 95-97 percent more females, across places of residence and age groups were either not reading newspaper at all or reading sometimes.
- (iii) Nearly 50 percent of (15 & 35-44) year olds & 75 percent 65-74 year olds more males & more in urban reported listening to radio daily.
- (iv) More than 50 percent belonging to age groups (35-44) years & below and 43 percent aged (65-74) years, across both sexes & places of residence were watching TV daily.
About 25 percent of respondents irrespective of their age, more in rural, were not watching TV at all.
- (v) 96-97 percent irrespective of age, sexes & places of residence, did not watch cinema at all.

8.3 Abnormal habits across age groups

The occurrence of each of abnormal habit in respondents, irrespective of their age difference & sex, was very low. Only 2-3 percent of respondents from each age/age group, reported one or other abnormal habits.

8.4 Sweet/Sugar-taking habits across age Groups

There were more elders than younger did not take sugar in last one day. But more young than the olds lower had taken sugar one & more times in last one day.

8.5 Oral hygiene practices across age groups

- (i) About 50 percent, of 5 & 35-44 year olds, 76 percent of 12 & 15 year olds & only 10 percent of 65-74 year olds, more males & more in rural reported the use of tooth brush to clean teeth.
- (ii) 65-68 percent more males & more in urban, across ages, had changed tooth brushes once in 1-3 months.
- (iii) About 90 percent, across ages, more in rural had cleaned teeth once a day.
- (iv) Nearly 80 percent irrespective of age differences had used non-fluoridated tooth paste/powder.
- (v) More olders than youngers reported rinsing mouth always.

8.6 Dental problems and treatment practices across age groups

- (i) The percent of respondents reported suffered from oral health problems in last one year increased from 6 to 34 percent with the increase in the age of respondents.
- (ii) About 90 percent irrespective of their age & more in urban, had problem of dental decay.
- (iii) Two third & more respondents from each age/age group consulted trained dentists.
- (iv) One third of respondents from each age/age group, more in rural, had knowledge of Govt./Pvt. Dental care facilities in their areas.
- (v) Approximately 40 percent of respondents more in urban & another about 42 percent, more females & more in rural, from each group reported less than half hour & half to one hour respectively to reach the facility places.

8.7 Awareness of dental problems across age groups

- (i) Approximately one third of respondents more females & more in urban, from each age/age group had no knowledge of oral health problems.
- (ii) Two third of those aware of problems from each age/age group reported dental decay. Another a quarter of them told gum disease.
- (iii) About 40 percent of those aware of causative factors from each age/age group reported eating sweets/ice cream etc. Another about 50 percent, from each age/age group told factors such as not brushing regularly & not rinsing always after meal.
- (iv) Nearly half of those aware of preventive measures, from each age group reported regular cleaning of teeth. Another one quarter from each age group told avoid sweet items & not consuming tobacco.

8.8 Tobacco smoking and chewing habits across age groups

- (i) About 40 percent, more males form each age group reported the habit of smoking tobacco.

- (ii) About 70 percent, more males & more in rural from each age group, were smoking Hookah. While 14 percent more males & more in rural from each age group had the habit of smoking Bidis. They were smoking less than ten times in a day.
- (iii) There were very small percent of respondents from each age group, chewing pan or pan masala with tobacco.
- (iv) About 4 percent more males & more in rural from each age group, reported consuming alcohol and most of them were taking occasionally.

9. FINDINGS (ORAL HEALTH ASSESSMENT)

The oral health status of subjects was clinically assessed in the field conditions by teams of dental surgeons who were previously trained and calibrated. The WHO Clinical Assessment Form (1997) was used to record the clinical conditions. The clinical findings are presented in this report in Chapter VI under the following broad heads:

1. Dental Caries status & Treatment Need
2. Periodontal Disease status
3. Malocclusion status
4. Oral Cancers and other oral mucosal lesions
5. Dental Fluorosis status
6. Other conditions:

Extra Oral Lesions; TMJ Assessment; Enamel Opacities and Hypoplasia; Prosthetic Status & Need; and Community need for immediate Care and Referrals.

9.1 Dental caries

- Overall, the mean numbers of teeth present in individuals decreased as higher age groups were examined. In the age group of 65-74 years, the mean number of teeth present was 16.9 indicating a loss of about one half of the normally present 32 teeth. In the same age group, about 19.1 per cent subjects examined across both sexes, but slightly more in rural (19.7 per cent) than in urban (17.8 per cent) were edentulous (without natural teeth).
- The prevalence of dental caries increased with the increase in the age of subjects examined: it was 50.6 per cent in 5 year olds (primary teeth); 47.5 per cent in 12 year olds; 62.7 per cent in 15 year olds; 87.2 per cent in 35-44 year age-group and 97.4 per cent in 65-74 year age-group (Permanent teeth in ages 12 years and above).
- The mean dmft value in 5 year old subjects was 1.8, contributed in whole by the decayed teeth (dt) component. The mean DMFT at 12 years was 1.1 which rose to 1.9 in 15 year old subjects. The mean DMFT was highest for the age group of 65-74 years (18.4).

- The decayed teeth (DT) component contributed most to the DMFT in the age groups of 12 years, 15 years and 35-44 years. In the 65-74 years age group, the missing teeth component (MT) contributed the most. The pattern of distribution of the components of DMFT was similar in rural and urban areas and there were no gender related differentials.
- The SiC Index was highest for the highest age group of 65-74 years (31.3) in the state. It was lowest (3.1) in 12 year olds. Generally speaking, SiC Index was about two or three times higher than mean DMFT values in the state.
- Root caries was recorded for the two age groups of 35-44 and 65-74 years. The proportion of subjects with root caries was 0.5 and 0.8 per cent in the age groups of 35-44 and 65-74 years respectively. There were no subjects with root fillings in the state.

The high mean number of teeth decayed and missing, together with negligible numbers of filled teeth indicate that either there was little priority for treatment of decayed teeth or it is not affordable for most people. Another possibility is the inaccessibility (difficult to reach facilities) or non-availability of dental services in the area where the subjects live.

9.2 Treatment Need

- The subjects were clinically assessed for their need for both preventive and treatment care, based on their caries experience and dentition status. The treatment need in this section, refers to the need for treatment arising from caries or its consequences. It included the need for preventive care; one or more surface fillings; extractions of teeth; pulp care, and crowns or veneers.
- Forty six per cent children aged 5 years required treatment. This percentage was highest (95.9 per cent) in the 65-74 year age-group. The mean number of teeth with treatment need was highest in the highest age group of 65-74 years (16.9) and was less than 2 teeth in 5, 12 and 15 year olds. It was 5.2 in adults aged 35-44 years. The picture was similar for both rural and urban areas and between regions. There were no major gender related differentials.
- Except in the age group of 65-74 years, the most prevalent need was for one or more surface fillings followed by extractions and pulp care. There was a high, unspecified need for treatment across age groups. In 65-74 year age group, almost 47.5 per cent subjects needed extractions followed by 38.6 per cent who needed one or more surface fillings.
- There were no marked rural and urban or gender related differentials. The pattern of need was similar in between regions.

9.3 Periodontal status

- The periodontal status was assessed using the Community Periodontal Index (CPI) with its three indicators of gingival bleeding, calculus and periodontal pockets. In addition, the loss of epithelial attachment was also measured to provide an indication of the status of periodontal health.
- The prevalence of periodontal disease in the state ranged from about 14.5 per cent in 12 year olds to 98.4 per cent in 65-74 year old subjects.
- Invariably, across age groups, bleeding emerged as the most prevalent condition followed by calculus except in the age group of 65-74 years. Here, calculus was the most prevalent condition (61.9 per cent). The prevalence of shallow and deep pockets was high amongst adults aged 35-44 or 65-74 years.

- The mean number of sextants with periodontal disease, i.e., sextants with bleeding, calculus and/ or pockets was highest in 35-44 year old subjects (4.6). The mean number of teeth with calculus was generally higher than with pockets and bleeding.
- The pattern was similar for rural and urban areas and there were no gender related or regional differentials.

9.4 Loss of attachment

- Overall, the prevalence of Loss of Attachment in one or more sextants was highest in 65-74 years in the state. The least severe form of loss of attachment (4-5 mm), followed by the more severe form of 6-8 mm, was the most prevalent across age groups and place of residence.

9.4 Malocclusion status

- The Dental Aesthetic Index (DAI), recommended by the WHO, was used to analyze the severity of malocclusion in the surveyed population.
- Malocclusion was present in 10.2 per cent of 12 year old subjects; 11.8 per cent of 15 year olds and 7.4 per cent of 35-44 year olds. Malocclusion was marginally higher in rural residents and in males. Generally, definite malocclusion was more prevalent than severe and very severe forms of malocclusion.

9.5 Oral cancer & oral mucosal lesions

Oral cancer was reportedly present in one 5 year olds and 15 year olds subjects from the urban and rural areas respectively. The lesions were located in the mouth on the commissures. Occasional cases of ulceration and candidiasis were reported in various age groups. However, the overall prevalence of oral mucosal conditions was very low.

9.6 Dental fluorosis status

- Dental fluorosis did not emerge as a major oral health problem in the state. Less than one per cent population in any one age group had fluorosis. It ranged from about 0.2 per cent in 5 year olds to a maximum of about 0.7 per cent in 35-44 year olds. Almost all fluorosis reported was 'questionable', 'very mild' and 'mild'. Fluorosis was present in about 0.4 per cent 15 year olds, 0.6 per cent 35-44 year olds and 0.3 per cent 65-74 year olds.
- Almost all fluorosis was reported from rural areas and from two of the three regions surveyed. Region 3 had no fluorosis.

9.7 Other lesions

9.7.1 Extra oral lesions

- The extra oral lesions were prevalent in all age groups and ranged from 2.0 per cent in 65-74 year age-group to 16.9 per cent in 12 year old subjects. Enlarged lymph nodes of head and neck were most prevalent.
- Generally, extra oral lesions were more prevalent in urban rather than rural areas. There were no marked gender related differentials.

9.7.2 T M joint symptoms and signs

- Overall, TM Joint symptoms and signs did not appear to be a major public health problem in the state as the prevalence and distribution was extremely low.
- Symptoms and signs were reported only in age groups of 65-74 years in the state. The prevalence was 0.4 per cent.
- The signs present were tenderness and clicking in 65-74 year old subjects 0.4 per cent and only tenderness in 35-44 year old subjects.
- It appeared that these were detected only in rural residents in the state. The signs and symptoms appeared in only two out of the three regions studied.

9.7.3 Enamel defects (opacities, hypoplasia)

- Structural enamel defects in teeth were recorded in terms of opacities and hypoplasias, types of opacities and combinations of both. The lower age group of 5 years was excluded from examination.
- Prevalence of enamel defects ranged from 0.9 per cent in 65-74 year old subjects to about 4.1 per cent in 12 and 15 year old subjects. Demarcated opacity was most prevalent followed by enamel hypoplasia. The mean number of teeth affected was only 0.1 at the state level and did not exceed one tooth in the regions.
- There were no major rural and urban or gender related differentials in the pattern of distribution of enamel defects by type of defects.

9.7.4 Prosthetic status

- The prosthetic status was recorded for subjects aged 15 years and above. The information was collected to assess the extent to which subjects were wearing dental prostheses including bridge, partial dentures and full dentures. The data was recorded separately for upper arch (maxillary teeth) and the lower arch (mandibular teeth).
- Only nine per cent subjects in the age group 65-74 years had any prostheses present (upper or lower jaw) in their mouth. The percentage was much lower (2.4 per cent) for 35-44 year old subjects. The full denture prosthesis was the most prevalent, followed by partial dentures.
- More males than females were wearing prostheses in 35-44 years age group while this situation was reversed in the 65-74 years age group. Generally, more urban residents, compared to their rural counterparts, were wearing prostheses and this may be related to better access and availability of facilities in urban areas.

9.7.5 Prosthetic need

- The prosthetic need refers to the unmet need for replacement of lost or missing teeth. Prostheses may include partial or full removable dentures and fixed prostheses including bridges. The data on prosthetic needs (upper and lower arches) should be correlated with the section on Prosthetic Status.

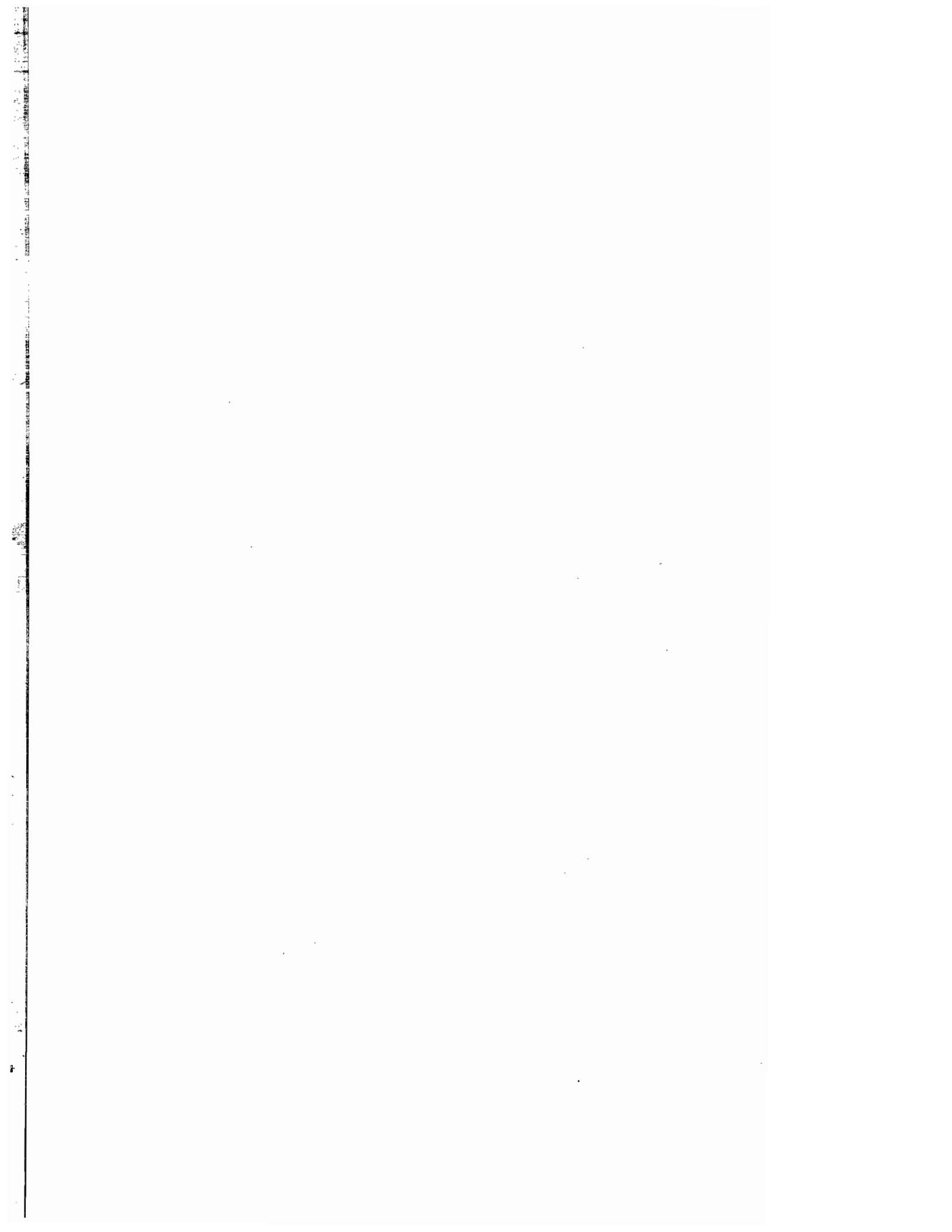
- It appeared that the need for prostheses was high in the state for both upper and lower dental arches, with a slightly higher need for prostheses in the lower jaw in the subjects aged 35-44 years. Almost 30 per cent subjects (29.6%) needed full mouth removable dentures in the state. This was followed by the need for multi-unit and one unit prostheses for both upper and lower dental arches.
- More females than males required prostheses. There were no major differentials between rural and urban areas.

9.7.5 Community need for immediate care and referrals

Overall, life threatening conditions were absent and painful or infective conditions were extremely rare (0.2 per cent in 35-44 year age-group) in the state. Other conditions (unspecified) were reported in 0.2 to 0.4 per cent subjects in various age groups. Referrals were made for almost all of the conditions recorded.

Summary of findings of important oral health conditions and practices by age in Jammu & Kashmir

	Findings	Age in years				
		5	12	15	35-44	65-74
1.	Oral disease conditions					
1.1	Dental Caries					
	% Prevalence	50.6	47.5	62.7	87.2	97.4
	Mean DMFT	1.8	1.1	1.9	5.7	18.4
	SiC Index	5.2	3.1	4.9	12.7	31.3
1.2	Periodontal disease					
	Bleeding, calculus or pockets					
	% Prevalence	1.2	14.5	85.0	97.7	98.4
	Mean no of Sextants affected	-	0.2	2.9	4.6	2.6
1.3	Loss of attachment					
	% Prevalence	NA	NA	0.5	7.7	31.7
	Mean no of Sextants affected	NA	NA	0.0	0.2	0.5
1.4	Malocclusion (%)	0.0	10.2	11.8	7.4	NA
1.5	Dental Fluorosis (%)	0.2	0.3	0.6	0.7	0.3
1.6	Oral mucosal conditions (Nos.)	3	0	4	7	9
1.7	Oral Cancer (Nos.)	1	0	1	0	0
1.8	Edentulousness (%)	NA	NA	NA	0.4	29.6
2	Oral Health Practices					
2.1	Sugar Intake in last 24 hours					
	Once	22.0	25.0	25.3	3.9	1.9
	Two & more times	64.2	55.0	34.1	2.6	1.0
2.2	Clean teeth with					
	Tooth Brush	44.9	75.9	77.1	48.2	9.9
	Fingers	14.5	2.9	2.4	2.4	4.3
2.3	Rinsing mouth					
	Always	13.6	52.1	66.7	82.4	84.0
	Sometimes	51.5	40.2	29.9	14.9	13.6
2.4	Tobacco smoking	NA	NA	NA	24.3	36.0
2.5	Frequency of tobacco smoking					
	Less than 10 times	NA	NA	NA	93.9	89.2
	10 or more times	NA	NA	NA	6.1	10.9



CHAPTER I

INTRODUCTION

1.1 BACKGROUND OF THE STATE

1.1.1 Geographical location

Jammu and Kashmir, which was ruled over the years by Hindus, Mughals, Afghans, Sikhs, and Dogras, became a part of India on 26 October 1947 when Maharajah Hari Singh, the last Dogra ruler, signed the Instrument of Accession and acceded the State to the Union of India. Located in the extreme north of India, the State occupies a position of strategic importance with its borders touching China in the northeast, Afghanistan in the northwest, and Pakistan in the west. To the south lie two other states of India, Punjab and Himachal Pradesh. Jammu and Kashmir has a total land of 222,236 square kilometers (Director of Census Operations, Jammu and Kashmir, 2001a) and comprises of 14 districts in three divisions, namely Jammu, Kashmir and Ladakh. The Kashmir division comprises the districts of Anantnaga, Pulwama, Badgam, Srinagar, Baramulla, and Kupwara. The Jammu division comprises the districts of Jammu, Kathua, Udhampur, Rajouri, Poonch, and Doda. The Ladakh division consists of Kargil and Leh districts. Every region had distinct social, economic, linguistic and cultural characteristics. Srinagar is the summer capital and Jammu is the winter capital of the state.

1.1.2 Population and demographic profile

According to the 2001 Census, (Director of Census Operations, Jammu and Kashmir, 2001 a) Jammu and Kashmir had a population of 10 million, accounting roughly for 1 percent of the total population of the country. The 1991-2001 intercensal increase in population (29 percent) was substantially higher than the decadal growth rate for the country as a whole (21 percent). Population density (persons per square kilometer) in Jammu and Kashmir has increased from 59 in 1981 to 99 in 2001. Although population density has nearly doubled in Jammu and Kashmir since 1981, it is still much lower than the density for the country as a whole (324). Half of the state population is concentrated in four districts, namely, Jammu, Srinagar, Anantnag, and Baramula. The sex ratio of the population (number of females per 1,000 males) in Jammu and Kashmir according to the 2001. Census is 900 much lower than for the country as a whole (933). The sex ratio in the state has increased from 878 in 1971 to 896 in 1991 and 900 in 2001. According to the 1981 Census, the proportion of the total population designated as scheduled caste is lower in Jammu and Kashmir (8 percent) than in all of India (16 percent).

1.1.3 Composition of population

According to the Sample Registration System (SRS), the crude birth rate in Jammu and Kashmir in 1998 was 19.9 per 1,000 population, which is much lower than the national average of 26.5 (Registrar General, 2000). The crude birth rate has only recently declined in Jammu and Kashmir, since the SRS estimates for earlier years show that the crude birth rate fluctuated in a narrow range between 29 and 34 for the entire period between 1971 and 1990 (Office of the Registrar General, 1999 and 1999b). The crude death rate and infant mortality rate in Jammu and Kashmir are both relatively low compared to the country as whole. According to the SRS for 1998, the crude death rate in the state was 5 per 1,000 population and the infant mortality rate was 45 per 1,000 live births. The corresponding rates for India were 9 and 72, respectively. The life expectancy in the

state in 1992 was 59.4 years for males and 64.2 years for females, which was higher than the corresponding all-Indian estimates (57.7 years for males and 58.1 years for females).

The couple protection rate (defined as the percentage of eligible couples effectively protected against pregnancy by various methods of contraception) in Jammu and Kashmir increased steadily, from 11 percent in 1981 to 23 percent in 1989, and then began to decline. The couple protection rate had fallen to 16 percent by 1998, a level achieved by the state more than a decade earlier (Ministry of Health and Family Welfare, 1999a).

Jammu and Kashmir has been undergoing slow but steady urbanization. Twenty-five percent of the total population lives in urban areas (Director of Census Operation, Jammu and Kashmir, 2001 b), up from 19 percent in 1971, 21 percent in 1981, and 24 percent in 1991. The share of the population age 0-14 years dropped from 43 percent in 1971 to 41 percent in 1981. The share of the population age 65 has been fairly stable at around 3 percent since 1971.

1.1.4 Socio-economic characteristics

Jammu and Kashmir is one of the most educationally backward states in India. According to the 2001 Census, the literacy rate among the population age 7 and above is 54 percent, compared with 65 percent for India as a whole. The literacy rates by sex have increased from 44 percent for males and 20 percent for females in 1981 to 66 percent for males and 42 percent for females in 2001. They are however, still lower than the rates for India as a whole (76 percent for males and 54 percent for females). In Jammu and Kashmir, 50 percent of males and 22 percent of females are economically active (Director of Census Operations, Jammu and Kashmir 2001c).

Jammu and Kashmir is predominantly an agricultural state with three-fourth of its population living in rural areas. The importance of various economic sectors in the economy has changed only slightly over time. The contribution of the agricultural sector to the state domestic product declined from 38 percent in 1980-81 to 35 percent in 1995-96. The contribution of the manufacturing sector has increased from 5 percent to 8 percent during the same period and the share of other sectors remained constant at 58 percent (EPW Research Foundation, 1998). Agriculture being the dominant sector provides livelihood for 60 percent of the labour force (Director of Economics and Statistics, 1991). Jammu and Kashmir grows *kharif* and *rabi* crops and the major agricultural products include wheat, rice, maize, and oil seeds. Cash crops like saffron and silk and dry fruits like almond and walnut are also grown. The state is famous for its fruits. Technological advancements have boosted the state's horticultural sector, leading to increased production and export of fresh produce. The state is also rich in forest resources with a variety of spruce, fir, pine, hazel, wild oak, maple, and beech.

Industrially, Jammu and Kashmir is one of the backward states in the country. The scope for large and heavy industry in the state is limited because of its topography, shortage of electricity, poor communications, and other factors. The state has a few medium-scale industries confined to the capital cities of Srinagar and Jammu that manufacture cement, wool, silk and furniture. However, Kashmir handicrafts are famous for their excellence and are good earners of foreign exchange. There are a large number of cottage and small-scale industrial units engaged in carpet, wood carving, shawl making, paper mashie, sports goods, and other handicrafts. The Kashmir Valley is also known for its natural beauty throughout the world and attracts a large number of tourists both from within the country and from the rest of the world. Thus the tourism industry plays a vital role in the state economy. The average annual per capita net domestic product of the state increased from Rs. 1,776 in

1980-81 to Rs. 1,926 in 1995-96 at constant 1980-81 prices or Rs. 6,181 at current prices (EPW Research Foundation, 1998). As per the estimates given by the Planning Commission for 1993-94, 30 percent of the rural population and 9 percent of the urban population are below the poverty line (Central Statistical Organisation, 1999).

1.2 NEED FOR ORAL HEALTH SURVEY

1.2.1 Oral health problems

Oral Health is a very important component of the general health of the people. The high prevalence and severity of oral diseases such as dental caries, periodontal disease, oral cancers and various stages of malocclusions and crippling nature of these diseases lead to significant absenteeism and economic loss. Dental illness, thus contributes to considerable reduction in national productivity and overall national development.

It is reported that almost 85 percent of children and 95-100 percent adult population suffer from periodontal disease at a point in time. About 35 percent of children suffer from misaligned teeth and jaws affecting their proper functioning. These children lose their school time, and suffer from pain of dental origin. This not only affects their routine life activities but also causes a good deal of discomfort to their parents in several ways. These dental problems are initially painless but become chronic and self-destructive later, thus leading to gradual tooth loss. The dental caries has a crippling effect on the functional components of oral cavity that leads to malnutrition because of incapacity to chew any coarse food available to them. Unfortunately, this is still not considered a public health problem and thus no action is taken to correct it. In other words, there is need to make people aware of preventive and curative aspects of oral health so that quality of life of people could be improved.

The oral diseases also have an adverse effect on the vital organs of the body. The pus oozing pockets in advanced periodontal disease in adults act as a focus of infection for other vital organs of body like kidney, heart, lungs, brain etc. Limited information available from the micro level studies suggests that 35-40 percent of body cancers are oral cancers. That is, incidence of simple oral morbidity becomes chronic and ultimately life-threatening. One needs not only to take preventive measures, but early curative steps as well. It is unfortunate that oral health has received much less attention perhaps because of its lower life threatening risk. Its role in quality of life, now, has been recognized and thus all efforts should be afoot to improve oral health of the people.

Several adverse effects of poor oral health necessitate preventive, curative and educational services/ activities. It requires an understanding of people's knowledge and awareness, attitudes towards oral health and their oral health practices besides the magnitude of the problems and corrective and treatment-seeking measures people adopt. This information is basic for the formulation of policy, developing strategic measures and meeting appropriate manpower needs, and creating programmes for improvement of oral health of people.

1.2.2 Lack of data for policies and manpower development

No authentic, reliable or consolidated data on the magnitude of oral health problems, behavioural practices of people for preventive and curative care, dental manpower, infrastructure and on the appropriateness and efficiency of the existing oral health care services including educational and

awareness-raising activities are available in the country. However, a wide spectrum of oral health services exists in many urban/rural areas in India. These services range from rudimentary & sporadic in rural areas to sophisticated and state-of-the-art in urban areas. It is unfortunate that there has neither been any systematic assessment of the need and form of educational activities and curative services, nor of the impact of the existing services on the oral health of the people. The vacuum of an effective monitoring and evaluation system is being felt; the dental professionals are very keen to fill this gap between the emerging needs and the existing services. A strong need exists to understand the oral health care practices and treatment-seeking behaviours of people and to assess the existing oral health care services. An appropriate and relevant oral health policy for the country should address the local problems in the broad context of the overall World Health Organization's (WHO) primary health care approach framework. Ultimately, data needs to be generated to help address and improve the overall oral health of the people in the country.

Since the quantity of intake of fluorides has an effect on dental caries prevention and control, it is also necessary to know the intake of fluoride through water, tooth paste or any other source. This will help to bring out area specific policies to meet fluoride needs of the people.

In summary, two types of studies are needed. One, on the incidence/ prevalence of oral health problems, and the knowledge and behavioural practices of people for prevention as well as treatment of oral health problems. Second, the existing facilities and infrastructure need to be assessed for their cost effectiveness and utilization patterns. Such studies and their analysis will ultimately help in bringing about a balance between the needs and the services to meet these needs.

1.3 INITIATIVE OF THE DENTAL COUNCIL OF INDIA

The Dental Council of India, as per its objective, has always been concerned with the oral health of people in the country. It has, on the one hand, been attempting to strengthen the quality of oral health activities by arranging workshops/seminars to inform and involve dentists in the oral health issues of the country, and, on the other, been raising its concern for the poor oral health situation in the country with the Government. The idea is to work at both the stakeholders for improving oral health in the country. It has been making recommendations and suggesting ways and means to bring about improvement in the overall oral health situation in the country.

1.4 NATIONAL ORAL HEALTH SURVEY

As indicated above, there is need to conduct two types of studies on oral health to bring about a balance between the oral health needs of the people and services to meet those needs. The first is a community survey to assess (i) knowledge of the people on appropriate dental health promoting behaviors including treatment seeking behaviors, and (ii) the oral health status of the population concerned. The second is the survey and assessment of available dental care services. The Dental Council of India undertook a community survey, National Oral Health Survey, to assess the dental problems and practices related to oral health in 2002. This report presents the result of this survey where a representative sample of community members in all the states have been contacted to assess their dental service needs and understand their knowledge and behavior in regard to practices affecting oral health. Priority and need for such a survey was recommended as early as 1991 in the National Workshop on "Exploring New Frontiers in Dental Public Health: Planning for the Future" organized by the Dental Council of India under the Presidentship of Dr R K Bali. This Workshop had highlighted the lack of data and a framework for planning the oral

health manpower and services in our country and recommended a nation-wide oral health survey to assess current status of oral health. As a follow up of this recommendation, the Dental Council of India, again under the Presidentship of Dr R K Bali, developed a proposal to conduct a National Oral Health Survey to assess oral health problems in the country and the behavioural practices affecting them. Mapping of the fluoride levels in the country was also made a part of this survey. It approached several individuals and agencies for technical and financial support for undertaking this national survey.

1.4.1 Support of Government of India

This proposal was submitted to Ministry of Health & Family Welfare, Govt. of India for (i) seeking their formal approval, and (ii) grant of financial assistance and necessary logistic support. After several meetings between the President of the Dental Council of India and officials of the Ministry of Health & Family Welfare, Govt. of India, the importance and need of the national survey was recognized but the Government, in view of its other, more pressing commitments, could not provide financial assistance. However, the Ministry of Health & Family Welfare agreed to support the Council's efforts to seek financial and technical support from other agencies.

1.4.2 Support from Colgate India/ International

The President of the Dental Council of India, Dr R K Bali, approached the Colgate India/ International for funding this Survey and after a series of meetings in Delhi, Mumbai and the USA, the management of the Company, recognizing the need for such a survey, agreed to grant a major financial assistance for this national survey.

1.4.3 Support of individuals and dental colleges in India

The Dental Council of India did not have the manpower to manage this large survey itself and thus decided to carry it out by collaborating with the dental colleges in India and the Indian Association of Public Health Dentistry (IAPHD). A bare minimum technical unit was set up for this purpose. It consisted of Dr. R.K. Bali as Chairman and Project Coordinator, Dr.V.B.Mathur as Project Officer and Mr. H.B. Chanana as Statistician. Professor P.P.Talwar, an eminent expert in statistics and demography, was appointed as the consultant in survey methodology. (**Annexure-1**) They formed the Central Survey Team for the National Oral Health Survey & Fluoride Mapping located in the office of the Dental Council of India in New Delhi. It was decided that the Central Survey Team will involve Principals/ Deans/ Heads of Dental Colleges at Regional/ State levels and a few members of the IAPHD for technical development of the survey, data collection in their states and then, later on, for its report writing. This model was thought to be the best for involvement of the dental colleges to ensure their sense of ownership of the survey and their commitment. The colleges participated enthusiastically and generated, shared and pooled local level resources to supplement the grant for the survey. The President of the Dental Council of India sent a copy of the proposal/ protocol of the National Oral Health Survey to these colleges; they were requested for their support and participation. As expected, almost all resource persons and Deans/ Principals of Dental Colleges readily agreed with his request and expressed willingness to participate in this national endeavor.

The Dental Council of India appointed a core technical committee consisting of experts in oral health and survey methodology (Statistics) to work out technical and field details for the National

Oral Health Survey. Joint expertise was felt necessary so that this oral health survey could provide scientific estimates of the prevalence of various oral health problems and knowledge and behavioural practices of people. The members of the committee are listed in the appropriate section in the annexure in this report. (Annexure-2)

1.5 SCOPE OF THE SURVEY

This survey recognized the fact that India is a vast country with great diversity in eating habits and behavioural practices which could affect the oral health of people. It was, therefore, decided to conduct the survey in such a way that state-wise oral health problems and practices can be determined. This would help in formulation and implementation of the state-wise policies and programmes on oral health activities and services to improve oral health of the people of each state.

As indicated earlier, it was also decided to collect water samples from representative areas to assess level of fluoride in water because of its implications on the oral health. Such data was ultimately to help in fluoride mapping at state level.

The scope of data collection was enlarged in the sense that it would collect data not only on incidence/ prevalence of oral health problems (WHO clinical form), but also on dental hygiene practices, food habits, knowledge of dental problems and behavioural practices related to dental health.

In this way, the scope of this survey was to have state-wise and national data and reports containing information on the following components of the oral health:

- Prevalence of important oral health problems
- Fluoride mapping
- Dental cleaning practices
- Awareness and knowledge of people on the factors affecting oral health, and their related dietary and dental cleaning practices
- Treatment seeking behaviour of people for their oral health problems.

It also explores association between oral health and its related practices.

1.6 OBJECTIVES

The long-term goal of the survey was to provide state-wise data for improvement of the overall oral health of people in India. It was done by collecting enough information for formulation of national oral health policy and for implementation of oral health programs in each state. All its dimensions of preventive, promotive and curative oral health care were to be addressed in the survey.

More specifically, the objectives of the National Oral Health Survey were:

1.6.1 To collect data on oral health status, particularly on,

- Dental Caries
- Periodontal disease
- Malocclusion
- Oral cancers
- Fluorosis
- Mucosal and Bony lesions

1.6.2 To understand eating and dental cleaning practices that affect oral health and determine the degree of association/ correlation between some of the known etiologic factors which affect oral health status; particularly included were

- Food habits (affecting oral health)
- Eating habits (affecting oral health)
- Dental cleaning practices, and
- Intake of fluoride

1.6.3 To assess awareness and knowledge of people on the factors affecting oral health, and

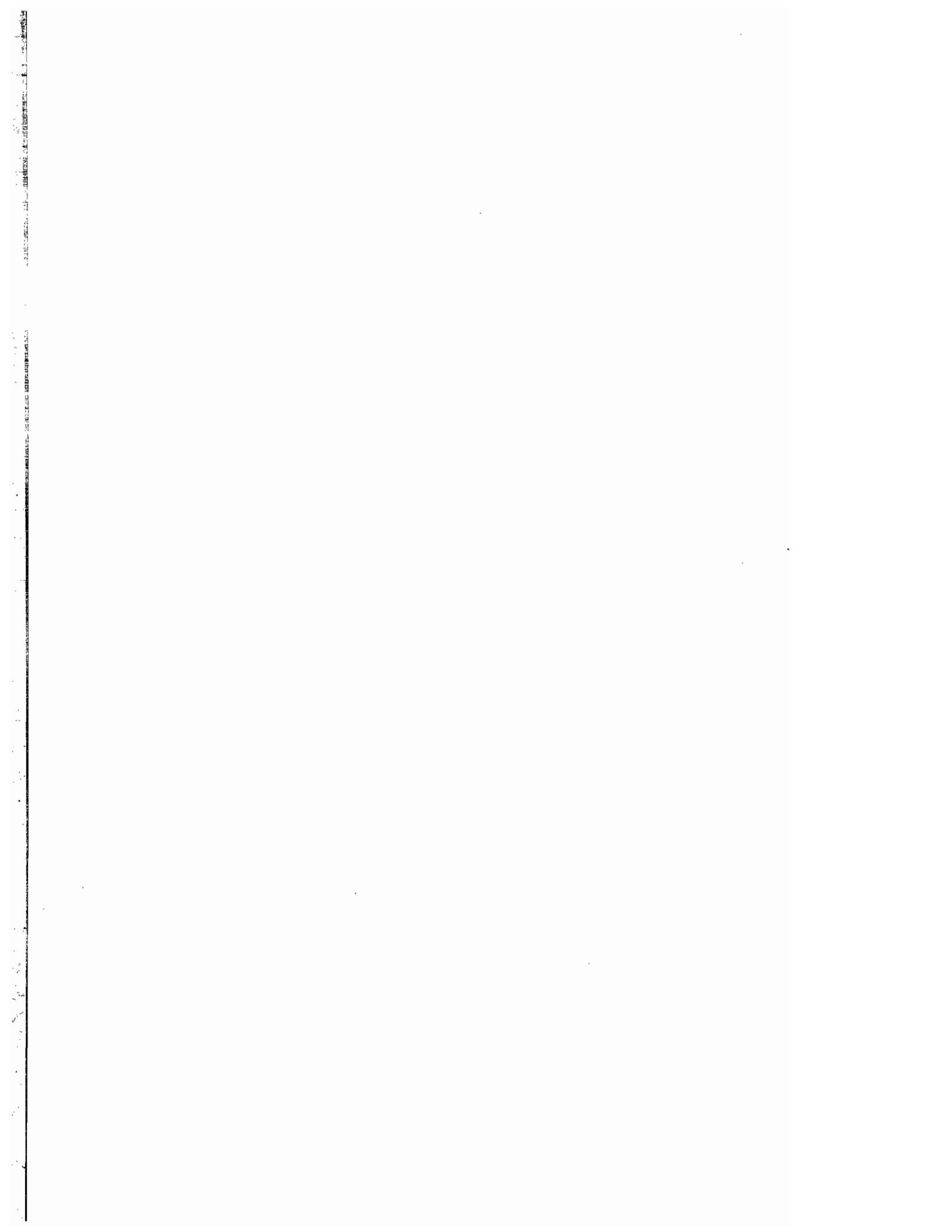
1.6.4 To determine treatment seeking behaviour of people for their oral health problems.

It was presumed that the data collected would lead to development of programs on preventive, promotive and curative dimensions of the oral health problems in each state. It was also to serve as a baseline data against which progress of the dental programs could be assessed in the future years.

1.7 CHAPTERIZATION PLAN

The report is comprised of the following main chapters:

- 0 Executive Summary
1. Introduction
2. Methodology & Data Collection
3. Background Characteristics of the Surveyed Population
4. Mapping of the Fluoride Levels
5. Oral Health Knowledge and Practices
6. Status of Oral Health



CHAPTER II

METHODOLOGY AND DATA COLLECTION

2.1 BASIC CONSIDERATIONS IN DESIGNING THE SURVEY

The following considerations were taken into account to design the survey:

1. The estimates of oral health problems and related practices need to be made at state level.
2. The study should be able to capture intra-state regional variations in oral health problems. That is, regional differentials (within a state) in oral health problems should be assessed to suggest region-specific programmes.
3. The scope of information should be so decided that the states should be able to formulate state-wise oral health policies and programmes. It means that information should be collected on
 - Levels of oral health problems
 - Etiological factors which affect oral health
 - Behavioural practices in regard to dental cleaning practices
 - Awareness of dental problems and practices followed to seek treatment, and
 - Fluoride mapping and issues related to fluoride in tooth paste/ powder
4. Available financial resources (limited) should be able to carry the survey in all the states of the country unless some other prohibitive factors operate in a state.

2.2 SAMPLE DESIGN

2.2.1 Sample size

The following considerations were made in working out the sample size:

- The estimates should be valid at state level, and
- Intra-state regional variations in the oral health problems and related practices may be captured.

The World Health Organisation (WHO) has recommended a sample of 300-600 dental examinations of people of ages 5, 12, 15, 35-44 and 65-74 from a homogeneous region of a state. Hence, this sample size was kept in mind while deciding on number of households to be selected from different homogeneous regions (within a state). It was decided that 315 households covering both rural and urban areas would be selected from each homogeneous region in the state. It was expected that this sample of households would give 315 respondents/examinees of each of the five ages 5, 12, 15, 35-44 and 65-74. In case this number of respondents (315 in each of the five ages) was not available from 315 households selected, then more households were covered to get these numbers of examinees/ respondents. It may be pointed out that though this is a lower limit of the sample size recommended by WHO, this study had to settle for this sample size because of the financial constraints under which this study was undertaken.

It may be restated that the sample size of 315 households or more was taken from each homogeneous region within a state. Therefore, there was much larger sample size at the state level; it depended on the number of homogeneous regions in which the state has been divided. For instance, if the state has five homogeneous regions, then the total sample size of the households for the state would be $5 \times 315 = 1575$ or more households to cover 1575 respondents/ examinees of each of the five ages. In all, 7875 oral examinations were to be done in the above example.

In order to give representation to urban population, which formed a small proportion of the total population in most of the regions in India/state, urban sample was over-sampled so as to get estimates with a reasonable margin of sampling error of the parameters under study. It was decided that two-thirds of the sample would come from rural areas and one-third from urban. Thus 210 households were selected from rural areas and 105 from the urban. Weights (for rural and urban proportions) were applied to these estimates to get parameter estimates at the stratum (region) level and then at the state level.

As indicated above, though it was expected that 315 households from each region would give a sample of 315 individuals from the ages 5, 12, 15, 35-44 and 65-74, yet instructions were given to the field teams that 315 respondents/ examinees from each age were to be covered from each region even if larger number of households needed to be visited and interviewed/ examined.

It was also decided to have equal number of males and females in the sample. Therefore, when the field teams were to visit the households they had to make sure that 315 respondents/ examinees were equally divided between males and females. In other words, the field teams had to start with a larger sample of households in order to cover 315 respondents/ examinees of each of the five ages with equal number of males and females.

2.2.2 Selection of sample

The Planning Commission of India, in an exercise to group districts in homogeneous regions within a state, had divided each of the major states and Union Territories into a few homogeneous agro-climatic regions on the basis of socio-economic indicators and agricultural parameters. In the case of remaining States/Union Territories, the homogeneous physio-geographic regions determined by the office of Registrar General of India, were used as strata/ homogeneous regions within a state. Each homogeneous region thus formed a stratum for collection of data from 315 respondents/ examinees of each age. This number of 315 was equally divided between males and females. The selected states, by homogenous regions and district selected from each region is enclosed in **(Annexure-3)**.

2.2.2.1 Rural sample

In order to get a sample of rural households in a stratum (region), three-stage sampling method was adopted. At the first stage, one district was selected from the group of districts in that particular region; the second stage was selection of 15 villages from the selected district and the third stage was selection of 14 households from the villages selected in the second stage. The selection of the district was done randomly. For the selection of villages, all the villages in the selected district were arranged in an array by size of the village to get cumulative total of village population. This cumulative total array was divided into three sections, each having equal population size. Five villages with probability proportional to the population size (pps) of the village were selected from each of three sections. Thus 15 villages were selected in the second

stage. The list of villages were taken from the sampling frame developed for the Rapid Household Survey, a district-wise survey conducted by the Government of India, and coordinated by the International Institute for Population Sciences, Mumbai; the list was based on the 1991 census. In the third stage, 14 or more households were selected randomly from a village (by dividing it into two equal parts with seven or more household from each part) to get a sample of 14 respondents/ examinees from each of the five ages – 5, 12, 15, 35-44 and 65-74, half of them were to be males. Thus a sample of 210 or more households from rural areas of the district/ region was selected to interview 14 members from each of the five ages 5,12,15,35-44 & 65-74. Half of them were to be males/females in each age.

2.2.2.2 Urban sample

As regards the urban sample, again, three stage sampling design was adopted to select urban households from the selected districts. In the first stage, eight blocks/ wards were selected randomly from the list of urban blocks/wards in the selected district. The second stage was selection of 15 Census Enumeration Blocks (CEBs) from the list of CEBs in the selected eight blocks/ wards (the population size in each CEB is approximately equal). The list of CEBs was obtained from the District Census Office and was for the year 1991. The third stage was a systematic sample of 7 or more households to get seven members of each of the five ages 5, 12, 15, 35-44 and 65-74. Half of them were to be males in each age. Thus a total of 105 or more households were randomly selected from the selected 15 CEBs.

On the basis of this sampling design, the number of households to be covered were 28, 665 or more to cover 28,665 respondents/ examinees in each of the five ages 5, 12, 15, 35-44 and 65-74. Half of them were to be males. The total number of examinations to be done were 1, 43, 325. The actual coverage comes to a minimum of 19845 households. That is, 92,225 examinations were done. Their state-wise, rural/urban distribution is shown in Table- 2.1

Table 2.1. State, number of regions and sample of rural/urban households.

Sl. No.	State	Coverage as per design			Actual coverage				
		No. of regions	No. of households		Total	No. of regions	No. of households		Total
			Rural	Urban			Rural	Urban	
1.	Andhra Pradesh	6	1260	630	1890	6	1260	630	1890
2.	Assam	3	630	315	945	2	420	210	630
3.	Bihar	3	630	315	945	Not covered			
4.	Jharkhand	2	420	210	630	Not covered			
5.	Gujarat	7	1470	735	2205	7	1470	735	2205
6.	Haryana	3	630	315	945	3	630	315	945
7.	Himachal Pradesh	2	420	210	630	2	420	210	630
8.	Karnataka	4	840	420	1260	4	840	420	1260
9.	Kerala	3	630	315	945	3	630	315	945
10.	Madhya Pradesh	8	1680	840	2520	4	840	420	1260
11.	Chattisgarh	3	630	315	945	Not covered			
12.	Maharashtra	6	1260	630	1890	5	1050	525	1575
13.	Orissa	5	1050	525	1575	5	1050	525	1575
14.	Punjab	3	630	315	945	3	630	315	945
15.	Rajasthan	5	1050	525	1575	3	630	315	945
16.	Tamil Nadu	7	1470	735	2205	7	1470	735	2205
17.	Uttar Pradesh,	6	1260	630	1890	2	420	210	630
18.	Uttanchal	2	420	210	630	Not covered			
19.	W. Bengal	6	1260	630	1890	Not covered			
20.	Jammu & Kashmir	3	630	315	945	3	630	315	945
21.	Chandigarh	1	105	210	315	1	105	210	315
22.	Delhi	1	105	210	315	1	105	210	315
23.	Goa	1	105	210	315	1	105	210	315
24.	Pondicherry	1	105	210	315	1	105	210	315
	Total	91	18690	9975	28665	63	12810	7035	19845

Note: Names of the regions and selected districts are shown in Annexure-3.

Table 2.1(a) : Presents regions/districts within region and sampled district in the state of Jammu & Kashmir

Table 2.1(a) Statement showing regions/districts within regions and sampled district in the state of Jammu & Kashmir

Code	Region	Districts	Sampled District	Coverage as per design No. of Households			Actual Coverage No. of Households		
				Rural	Urban	Total	Rural	Urban	Total
1	Ladakh	(i) Leh	Ladakh	210	105	315	210	105	315
		ii) Kargil							
2	Kashmir Valley	i) Kupwa							
		ii) Srinagar	Srinagar	210	105	315	210	105	315
		iii) Barmula							
		iv) Badgain							
		v) Pulwana							
		vi) Anantnag							
3	Jammu	i) Doda							
		ii) Udhampur							
		iii) Punch							
		iv) Rajuri							
		v) Jammu	Jammu	210	105	315	210	105	315
		vi) Kathua							
Total	3	14	3	630	315	945	630	315	945

It may be noted that sample size shown, both on the basis of design and actual coverage, is for minimum number of households. They were to give this number of respondents from each of the five age groups – 5, 12, 15, 35-44 and 65-74 years, equally divided between males and females.

2.3 STUDY TOOLS

In order to cover the total scope of the study, two types of questionnaire/ schedules were used for data collection: Oral Health Assessment Questionnaire (WHO, 1997) for recording the result of the examination of oral health of the individuals and Individual Questionnaire (Especially developed by DCI for this survey) for collecting information on etiologic factors related to oral health awareness, knowledge and practice of individuals on factors affecting oral health and their treatment seeking behaviour. These questionnaires were pre-tested and finalized by the Central Survey Unit in Delhi with the help of consultant. A copy each of the tools used is annexed in this report **Annexure-7**.

2.3.1 Oral health assessment form

This survey used the Oral Health Assessment form recommended by World Health Organization, Geneva. It followed all the instructions given in the WHO publication, "Oral Health Surveys: Basic Methods". By keeping the WHO form as it is, it was considered possible to collect data comparable to other sets of data in the Data Bank of WHO.

2.3.2 Questionnaire on oral health knowledge and practices

As indicated above, this survey did not limit itself to mere oral health assessment because the goal of this survey was to help formulate dental policies and programmes. Therefore, it was essential to collect information on all parameters like food habits, dental cleaning practices and treatment seeking practices that ultimately affect the oral health of people.

The core technical group working on this national survey developed a questionnaire wherein all the information related to factors that affect oral health was collected from respondents/ examinees that were examined for oral health problems. The idea was (1) to understand factors that affected their oral health status, and (2) determine relationship of different etiological factors with oral health status. The questionnaire had the following sections:

1. Socio-economic and demographic characteristics of population
2. Abnormal oral habits
3. Eating habits
4. Oral hygiene practices
5. Pattern of practices for dental treatment
6. Awareness and knowledge of dental problems, and
7. Tobacco smoking and chewing habits

2.4 DATA COLLECTION

Since the individuals of different ages and sex were to be examined/ interviewed (for oral health problems), it was necessary that dentists should be involved in the data collection teams. Therefore, it was decided that dental colleges, particularly Departments of Community Dentistry of the dental colleges should be involved in the data collection work. It was also hoped that their involvement will help reduce cost of the survey as not only their manpower but also their infrastructure and equipments could be deployed in the survey work. This was based on the

assumption that they were willing to cooperate with the task of national survey, the Dental Council of India had taken up, as well as their own professional interest in this long over-due activity for the dental profession. Keeping this in mind, the technical group formed for this survey identified dental colleges and individuals with such an interest in each state whose involvement could be helpful in quality data collection work. The President, Dental Council of India, wrote to these identified individuals and dental colleges to seek their interest in this national effort. The response was very positive and almost all the invitees were very enthusiastic about their involvement. A list of the participating dental colleges is annexed (**Annexure-4**).

The first stage in this data collection work was to set up a Central Survey Unit at the Dental Council Office in Delhi to coordinate all the activities related to this survey in each state. Because of the limited resources, a small nucleus was set up in the office of DCI. This nucleus consisted of an experienced and senior public health dental surgeon whose services were requisitioned on deputation from the Municipal Corporation of Delhi, a full-time statistician and a part-time Consultant in survey techniques.

This Central Survey Unit worked out the fieldwork logistics to get maximum output at the minimum cost. It was decided to send two field teams together in one vehicle to cover one village in a day. Based on the pre-test and the experience of WHO Assessment Form, it was found that two field teams, each of two dentists and one worker of social science background could complete the field work in one village where 14 or more households were to be covered to interview/examine 14 individuals of each of the five ages in one day. A team of two dentists were to examine mouth of the respondent and complete the WHO Assessment Form – one was to examine the mouth and the other was to record the observations. They were to interchange their roles in order to reduce the fatigue factor. The social science—background worker, the third member of the field team, was to complete the questionnaire related to awareness and practices of the respondents related to dental health.

The quality of data was given utmost consideration. It was decided that supervisors would continuously move with the field teams to guide the data collection work. They were to help the team not only to select the households (as per the study design) whose members were to be interviewed/ examined but will scrutinize the filled in forms before sending them to the state headquarter. Therefore, keeping in view the constraints of funds, it was decided that number of supervisors would be in the ratio of one supervisor for four field teams so that they can accompany the teams alternately (As stated earlier, two teams were to travel together to collect data).

After working out logistics of the fieldwork, it was necessary to identify a team involved in the survey in each state. Three types of persons were needed from each state, a Coordinator, a Supervisor and dentists to form field teams. The former was to coordinate all survey activities at state level and was to liaise with the Central Survey Unit. The latter was to supervise and guide the fieldwork activities of the state field teams (each consisting of two dentists and one with social science background), working under the overall direction of the state Coordinator. The Coordinators were all very senior, experienced persons with research bent of mind – the principals, deans or professors of the departments of Community Dentistry of the dental colleges. (**Annexure -5**). The Technical Committee of the survey identified them. These Coordinators were asked to identify senior dental surgeons from the dental colleges as their field team supervisors in the ratio of one supervisor for four teams.

These Coordinators and Supervisors were to identify field teams for the fieldwork. The number of field teams was to be equal to the number of homogeneous zones/ regions in the state so that field work in a district could be completed in two-month period by one team. Again, two dentists/ dental surgeon/ interns for each team were to be taken from the dental colleges in the state. This was not only to reduce cost of salaries of these dentists but was meant to give them field experience in examination of the mouth under the guidance of supervisors.

2.5 CALIBRATION AND TRAINING

Before start of the work at state level, it was necessary that standardization should be done in the examination and recording of the dental problems. The examiners should have common standards for identifying the dental problems. The Dental Council of India collaborated with the Manipal Academy of Higher Education (MAHE) to organize a three-day training cum calibration Workshop at Manipal, Karnataka during March 2002. All the State Coordinators and their identified Supervisors were invited to this workshop. They were explained the sampling design, various study tools and the field logistics of data collection. They were taken to the field to practice selection of the sample households and fill the questionnaire related to the practices that affect the oral health. They were also taken to the dental chairs of the dental college of Manipal to examine mouths of the patients to decide the dental problems patients had. A good deal of discussion was held along with the Coordinators and the Supervisors to ensure that every body had a common and uniform understanding of the dental problems to record in the form. This exercise was continued till it was felt that every body (Coordinators and Supervisors) had a uniform understanding on how to measure dental problems. This calibration workshop helped in standardization of measurement of the dental problems, which was necessary to ensure comparability of data from state to state. This training of the Coordinators and Supervisors was the first stage; they had to train their field teams who were, actually, to collect data in the field.

2.6 CLINICAL ASSESSMENT AND CONSIDERATIONS

The information on the questions on behavioural practices was asked directly to the respondents and their answers recorded on the prescribed proforma. In the case of clinical assessment of oral health status, there was need for common and uniform understanding of recording criteria amongst field teams. Therefore, special efforts were made to standardize methods of assessment and the field teams were trained and calibrated accordingly. The details on how the clinical assessment was made and some considerations in clinical assessment are described below.

The recording criteria used for various oral health conditions were as prescribed and as described for pathfinder survey methodology in "Oral Health Surveys: Basic Methods", 4th Edition, 1997, WHO Geneva. The WHO Oral Health Assessment Form 1997 was used in the National Oral Health survey. All columns for the clinical data (column no. 32 to column no.180) were filled up by the teams in the field while conducting the survey for each individual.

The main instruments and utilities which formed a part of the field kit bag carried by each of the teams during the course of clinical examinations were:

1. Mouth Mirrors, Tweezers, Curved double ended probes and WHO CPI ball ended probes.

2. Supplies of cotton rolls, masks and gloves, cold sterilizing solution, alcohol or spirit, instrument trays and chittle forceps. The cold sterilizing solution was used in field conditions for the instruments although the sets of instruments were previously boiled for 20-30 minutes.
3. Lightweight folding chair for clinical dental examination of subjects.
4. Torches and batteries.

A portable, lightweight field chair was used to seat the subjects in such a manner that the head was placed aligned with the back of chair and the lower jaw was horizontal (parallel to the floor). Examinations were carried out in natural light (daylight) and a simple two-cell torch was used to illuminate the oral and dental tissues in the mouth. The examiner stood behind and on side of the subject while examining the subject. The combination of natural and torchlight was used to provide consistency of lighting during examinations of different subjects and provide sufficient light for clear visibility in the mouth. The torch was held in place by an assistant from within the team or from the community where the examinations were being carried out. (As stated earlier, all trainers were trained in Manipal training workshop to adopt this method. The teams in all states were trained to use this method to ensure that the approach and results were uniform and widely comparable.)

Clinical oral examinations were carried out by previously trained and calibrated dental surgeons who worked in pairs in the field while surveying subjects. The dental surgeons working in the field were normally interns, junior residents or other dental surgeons drawn from regional dental colleges carefully chosen for the task by senior faculty members responsible for the survey in their area. Two dental surgeons formed one clinical examination team. One member was the examiner, who examined the selected subject and called out the scores for each item of examination clearly. The other member was the Recorder, who again called out or repeated the scores loudly and clearly for the examiner to hear and either confirm or correct, as necessary, and then enter it in the appropriate place in the paper proforma for each subject examined. In order to avoid monotony and fatigue, the roles of the examiner and recorder were interchanged from time to time; they did not exchange their role during the course of any one examination.

The teams used instruments and utilities as mentioned above for the detection of caries, periodontal disease and most other conditions. Sufficient numbers of instruments were carried everyday by field teams after proper sterilization so that work was not interrupted due to the need to re-sterilize instruments.

The data was collected by the field teams led by their supervisors and scrutinized by the State Coordinators who forwarded the filled up forms to the Central Project Cell in the office of the Dental Council of India in New Delhi. In Delhi, the clinical data forms were scrutinized again by the central project team before sending them for analysis and preparation of tables.

The clinical findings are presented in Chapter VI of this report under the following broad heads:

1. Summary of Findings
2. Dental Caries Status and Treatment Need
3. Periodontal Disease Status

4. Malocclusion Status
5. Oral Cancers and other Oral Mucosal Lesions
6. Status of Dental Fluorosis
7. Other conditions:

Extra Oral Lesions; TMJ Signs and Symptoms; Enamel Opacities and Hypoplasia; Prosthetic Status and Need; and Community Need for immediate Care and Referrals.

While the criteria used for recording caries is as described in the WHO manual, the data on caries status is presented in tables which also provide information on the distribution of subjects with mean values of dmft and DMFT. The following range is used :

Primary teeth (5 yr)	Permanent teeth (12 & 15 yr)	Permanent teeth (35-44 yr & 65-74 yr)
dmft = 0	DMFT = 0	DMFT = 0
dmft = 1 to 3	DMFT = 1 to 3	DMFT = 1 to 3
dmft = 4 to 5	DMFT = 4 to 7	DMFT = 4 to 8
dmft = 6 to 10	DMFT = 8 to 14	DMFT = 9 to 16
dmft = 11 to 15	DMFT = 15 to 21	DMFT = 17 to 24
dmft = 16 to 20.	DMFT = 22 to 28.	DMFT = 25 to 28.
		DMFT = 29 to 32.

A new approach to grouping of dmft/ DMFT by range according to the percentage of affected teeth in the mouth is introduced in this survey report. The first range is the dmft/ DMFT value of 1 to 3. This provides an estimate of subjects who had less than 4 teeth decayed, missing or filled. Further, the dentition has been divided into 4 equal parts (quarters) on the basis of the number of teeth (maximum being 20 for primary teeth and 28 or 32 for permanent teeth). Each quarter represents 25% of the teeth normally present. The ranges therefore reflect these four quarters in each case as explained above. The rationale for this distribution is to facilitate reporting in terms of the four quarters or percentage teeth that are decayed, missing or filled, out of the number of teeth normally present for the age group concerned.

The status of malocclusion has been presented based on the Dental Aesthetic Index (DAI) scores for the age groups 12 yr, 15 yr and 35-44 yr which were computed as per the WHO's instructions and are presented in the report.

The severity of malocclusion within a population is classified based on their Dental Aesthetic Index (DAI) Index scores. The regression equation (WHO 1997) used for calculating standard DAI scores is as follows:

$$\begin{aligned}
 & (\text{missing visible teeth} \times 6) + (\text{crowding}) + (\text{spacing}) + (\text{diastema} \times 3) + (\text{largest anterior} \\
 & \text{maxillary irregularity}) + (\text{largest anterior mandibular irregularity}) + (\text{anterior maxillary} \\
 & \text{overjet} \times 2) + (\text{anterior mandibular overjet} \times 4) + (\text{vertical anterior openbite} \times 4) + \\
 & (\text{antero-posterior molar relation} \times 3) + 13
 \end{aligned}$$

2.7 FLUORIDE ESTIMATION IN DRINKING WATER SAMPLES

As stated earlier, the analysis of the drinking water samples from various states were directly sent by the various Regional Coordinators and received by M/s Medlar Laboratories Pvt Ltd., (a Unit of M/s CIPLA), Mumbai. Dr. P M Dixit, Chief Chemist, has provided the following information on the analysis procedure.

Medlar Labs used sophisticated equipment and intricate chromatographic separation methodology to analyse the water samples with accuracy and precision.

The analysis procedure was based on the Ion Chromatographic separation in Anion Exchange mode and Suppressed Conductivity detection. The basic separation is performed by anion exchange mechanism of water samples on high efficiency Ionpac AG 11RC and IonPac AS 11RC connected in series and elution (process of extracting one material from another by washing with a solvent to remove adsorbed material from an adsorbent) with sodium hydroxide mobile phase.

Under this technique, a standard stock solution of Fluoride (100 ppm F anion) is prepared (0 – 5.0 ppm) in order to build a calibration graph prior to the start of the analysis.

The actual water samples were thoroughly mixed by vigorously shaking and filtered through a 0.45 u Nylon membrane. The effluent was collected into a clean dry conical glass tube. This was used for the fluoride estimation. The actual water sample was loaded into the mobile phase container in the equipment where the container is connected to a pump and made to run on the system. After about 20 minutes of stabilization period, the actual concentration of Fluoride ion in the water is analysed.

The following modules were used to assemble the fluoride analyser:

1. Isocratic pump-M/s Dionex Corp., USA, IP 20 Pump (I. No. -1)
2. AS300 Auto sampler- M/s Thermo Separation Products
3. Conductivity Detector-M/s Dionex Corp., USA, Model CD 20, (I. No. 4)
4. Anion Self Regenerating Suppressor- M/s Dionex Corp., USA, Model ASRS Ultra.
5. IonPac AG 11RC, as guard column, 4 x 50 mm- M/s Dionex Corp., USA
6. IonPac AS 11RC, as analytical column, 4 x 250 mm- M/s Dionex Corp., USA.
7. WinchromEx, data acquisition software in personal computer, PC 2.

In order to confirm the system stability and performance, one standard stock solution of fluoride (strength 1.0 ppm) was injected after every 10 samples.

2.8 FIELD WORK EXPERIENCES

2.8.1 Pre-fieldwork activity

Field teams were formed from the Resident Doctors/internees/Dental Surgeons of Govt. Dental College, Srinagar who had interest in the field and far flung areas. Co-ordinator for J&K Prof. Tara Sing, Principal, Govt. Dental College, Srinagar selected the most willing, efficient persons with interest. Two teams for survey in three districts of J&K State i.e. Srinagar, Jammu and Leh were formed by Co-ordinator, Prof. Tara Singh, Principal, Govt. Dental College, Srinagar. **Annexure - 6**

2.8.2 Identification and training the field teams

Three days training workshop started from 12th April, 2002 at Govt. Dental College, Srinagar. Co-ordinator & Supervisors used to train the teams in training camp held in Govt. Dental College, Srinagar. Due to overwork at new place of posting, Dr. S.C. Gupta could not continue after this. The two teams were given thorough training in theoretical/clinical and field aspects of the data collection work. After making sure that the teams have fully picked up, the teams were taken to field from 15th July, 2002 for actual data collection from sampled households in the Srinagar district. Proper base work was done in villages. The teams would leave Govt. Dental College, Srinagar premises at 8.00 a.m. in college ambulance provided by Principal, GDC/Co-ordinator from institution. Srinagar district was completed on 3rd October, 2002. Delay was because of Amar Nath Yatra rush and Assembly election process.

2.8.3 Efforts to seek cooperation of the respondents

Since we had informed the concerned authorities in advance, so everybody helped us. The village heads, Sarpanchs, School teachers, revenue authorities. Srinagar/Jammu Municipalities, Leh C.M.O were informed atleast one month earlier about the dates.

2.8.4 Mobility

Govt. Dental College, Srinagar provided vehicle for Srinagar district. Director, Health Services Jammu provided vehicle for Jammu district. C.M.O. Leh provided vehicle for Leh district. Thus making the traveling comfortable.

2.9 SCRUTINY OF DATA

As stated earlier, all efforts were made to ensure that quality of data was good. A senior level person was moving with the teams to guide them in case of any doubts. He/ she was also responsible for scrutiny of the filled in forms before the team returned from the area of data collection. It was his/her responsibility to scrutinize the forms if they could not be checked in the field. This scrutiny was necessary before they were submitted to the state Coordinator for onward transmission to the Central Survey Unit. The Coordinator was also responsible to scrutinize the forms, fully in the initial stages and then on sample basis before sending them to the Central Survey Unit in Delhi.

The Central Survey Unit at DCI was particularly careful in scrutiny of the forms from each state. First two batches of forms of each survey team from each state were thoroughly scrutinized to determine gaps in the form of blanks, wrong recording and inconsistencies. The Coordinators were immediately contacted by telephone to point out the data problems. The same concerns were reinforced by sending a Fax. After such reporting, the next batch received was also scrutinized carefully to ensure that deficiencies pointed out earlier have been taken care of in the next batch of forms filled. After initial total scrutiny, the data were scrutinized on a sample basis to ensure that there was no slackness in efforts later – the fatigue factor should not reduce quality of data.

2.10 DATA ANALYSIS

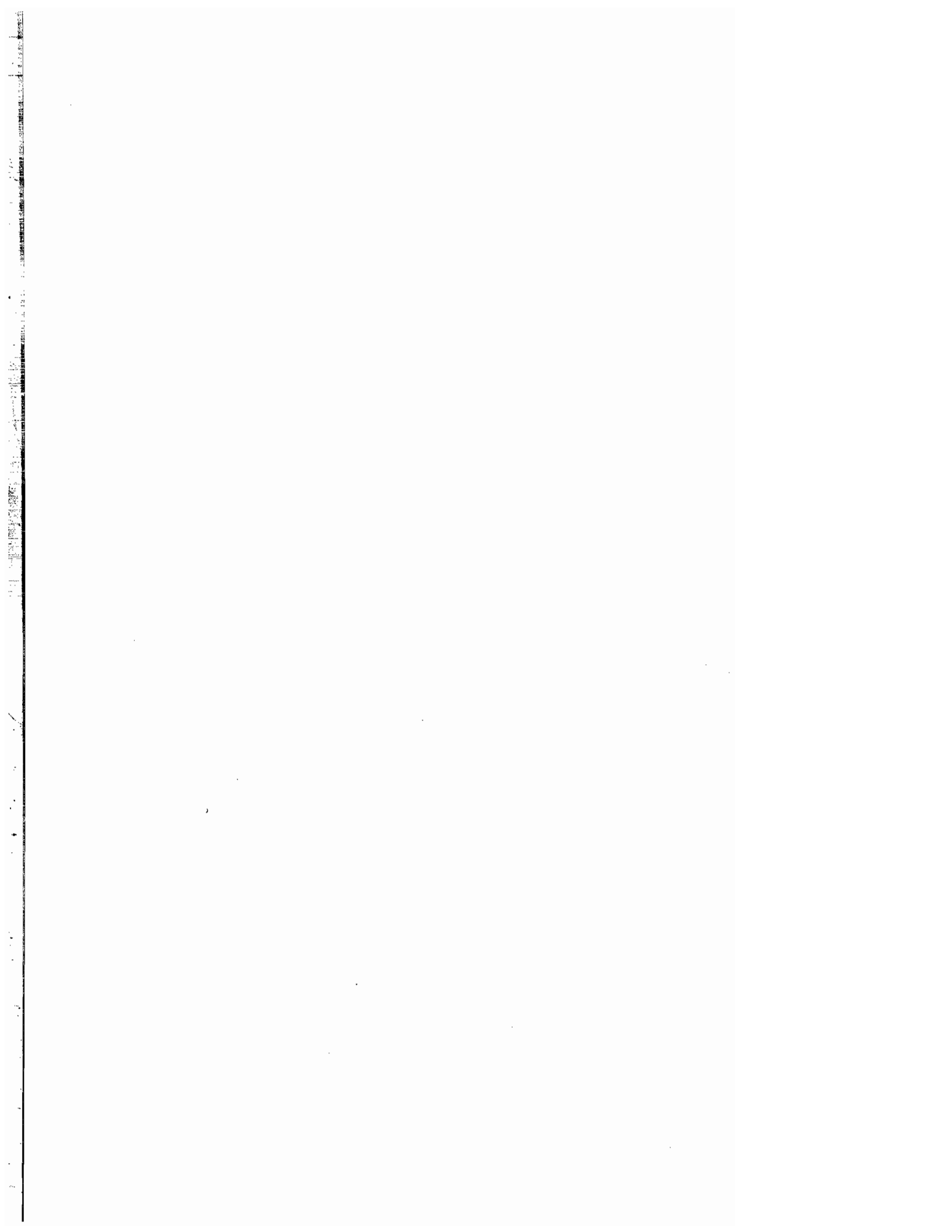
In the absence of any resources for data analysis at the Dental Council of India, the total job of data entry, validity checks and production of desired tables (as per analysis plan) was contracted out to TNS MODE, an organization with a good deal of research experience in studies related to health. All

efforts were made to monitor quality of this work at this stage. The Central Survey Unit had worked out the type of tables needed, the level (Zone or Region/ State/ Country) for which such analysis was needed. The necessary weights were also worked out to ensure that the estimates were valid for the level to which they relate. These blank tables were given to the agency (TNS MODE) to fill in the data in different cells. In order to ensure that the values given in each cell of the table were right, the software package developed by TNS MODE was tested in a limited number of schedules by manually checking the results.

2.11 REPORT WRITING

The Central Survey Unit, Delhi prepared two reports, for Delhi and Assam as model reports after detailed discussions on the report format and the format of tables. Once these reports were ready, an effort was made to identify Coordinators who could find time and resources to write reports for their own states, for which they had collected data. The idea was to conduct a Report Writing Workshop to orient them with the chapterization plan, data tables of their own states and share with them style of writing adopted in the model reports (Delhi and Assam). This was felt necessary to make sure that all state reports were written in uniform style/pattern. For other states, it was decided that the Central Survey Unit, Delhi would write reports and send them for their modifications, if any. The Central Survey Unit also prepared all the sections and sub-sections of chapters 1 (Introduction) and 2 (Methodology and Data Collection) which were to be common for all the reports. These chapters were also given to the states Coordinators who were involved in the Report Writing Workshop.

Dr. S. G. Damle, Dean, Nair Hospital Dental, Mumbai and Additional Director Health, Maharashtra co-hosted the Report Writing Workshop in Mumbai on January 10-11, 2004 where the staff of the Central Survey Unit discussed all the issues involved in writing the reports with the Coordinators of the States: Andhra Pradesh, Goa, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Pondicherry, Punjab and Tamil Nadu.. They were given two reports (model), a set of tables for their own state and even a CD containing raw data for their own state. They were told that their state report should adopt the format shown in the model reports; they can do more analysis if needed by using their own raw data. It was also decided and agreed that report should be ready in one month's time.



CHAPTER III

BACKGROUND CHARACTERISTICS OF SURVEYED POPULATION

The state of Jammu and Kashmir is divided into three regions – Ladakh, Kashmir Valley and Jammu. Samples of households were taken from all the three regions and results have been presented region-wise and have been highlighted only on parameters where the regions were found to be different.

3.1 Characteristics of households

(i) Type of households

The characteristics of households surveyed presented in Table – 3.1 reveal that about 44% of the respondents live in pucca houses, and equal percent (44.0%) in semi pucca houses. Only 12% had kuccha houses. Strangely, distribution of the households by pucca, semi-pucca and kuccha houses, was similar in rural and urban areas of the state.

The situation was dissimilar in the three regions. Comparatively more (74%) respondents live in pucca houses in Jammu region. While the percents living in pucca houses were 17 and 25 in the other two region, Ladakh and Srinagar, respectively. There were more living in semi-pucca households in Ladakh and Srinagar.

(ii) Monthly expenditure

Expenditure was used as proxy indicator of monthly income of the household. About two-thirds of the households in the state, irrespective of their places of living, reported expenditure of Rs 2501 – Rs. 5500 per month. More people (about one-fourth) reported expenditure of Rs. 5501 – Rs. 10,000 in urban than in rural (one-sixth).

High percentage of people in Srinagar reported expenditure of Rs. 5501-Rs. 10,000 than in other two regions. Ladakh was relatively the poorest and Srinagar, the richest region of the state.

(iii) Religion

About 56% of respondents were Muslims, followed by 36% Hindus, and 4% Sikh in the state. There were more Muslims (98%) in Srinagar followed 7% in Ladakh and 1.7 percent Jammu region. There were Hindus (87.4 percent) in Jammu and less than one percent in Ladakh and Srinagar regions.

(iv) Caste

86% of respondents in the state were from other than SC, ST and OBC castes, whereas Ladakh had mostly inhabited by Schedule Tribes (ST) population.

(v) Sources of drinking water

About 50% of respondents in the state reported drinking piped/ tap water. This facility was available to more urban than rural population in the state. More people in rural areas reported use of tube wells or hand pumps.

Table : 3.1 Percent distribution of the households by characteristics and geographical area.

STATE : Jammu & Kashmir

	Household Characteristics	n=	REGIONS			STATE		
			1	2	3	R	U	T
1	Type of household		397	433	384	787	427	1214
	Kuccha		25.8	13.5	8.4	11.2	13.2	11.8
	Semi Pucca		57.5	61.8	17.9	44.4	43.3	44.0
	Pucca		16.7	24.7	73.7	44.4	43.5	44.3
2	Monthly expenditure (in Rs.)							
	<= 2500		30.8	15.2	9.3	15.6	6.6	13.2
	2,501 - 5,500		61.7	59.5	81.0	67.9	68.9	68.4
	5,501 - 10,000		7.0	23.1	9.4	14.9	23.5	17.0
	10,000 +		0.5	2.2	0.4	1.6	1.0	1.4
3	Religion							
	Hindus		0.1	0.5	87.4	35.6	34.6	35.8
	Muslims		7.3	98.2	1.7	56.2	59.8	56.3
	Sikhs		0.0	0.2	9.9	4.5	2.9	4.2
	Christians		0.1	0.3	0.7	0.4	0.6	0.4
4	Caste							
	Scheduled Caste		0.4	2.1	12.3	7.9	1.4	6.4
	Scheduled Tribe		96.2	3.0	0.3	5.1	2.2	4.6
	Other Backward Classes		0.0	4.6	1.0	3.3	2.2	2.9
	Others		3.3	90.3	86.4	83.7	94.2	86.1
5	Sources of drinking water							
	Pipe/tap		11.6	75.7	18.2	43.4	72.5	50.1
	Tubewell/handpump		21.0	10.9	81.0	46.1	20.0	40.0
	Others		67.5	13.4	0.8	10.5	7.5	9.9
6	Staple food							
	Wheat		61.4	1.3	43.5	21.7	15.1	20.5
	Rice		20.0	96.7	55.3	77.3	83.7	78.4
7	Nature of food							
	Vegetarian		18.7	0.7	47.2	20.3	18.4	20.1
	Non-vegetarian		81.3	99.3	52.8	79.7	81.6	79.9

Piped/Tap water facility was available to more people in Srinagar than to people in other two regions; 81% of households in Jammu regions reported getting drinking water from tube wells/hand pumps. In Ladakh, water availability from pipe/tap/tube well/hand pumps was only to one-third population; others were depending on other sources like ponds etc.

(vi) Staple food

About three fourth of the households in the state irrespective of their places of residence reported rice as their staple food. A large percent of households in Ladakh and Jammu regions reported wheat also a part of their staple food.

(vii) Nature of Food

About three fourths of the households in the state irrespective of their places of residence, were non-vegetarian. These were more in Srinagar and Ladakh regions than in Jammu region.

CHARACTERISTIC OF HOUSEHOLDS SURVEYED (SUMMING UP)

- (i) 44 percent and 12 percent of the respondents, irrespective of places of residence live in pucca and kuccha houses respectively. The rest, live in Semi pucca house in the state.
- (ii) About two third of the households had monthly expenditure of Rs 2501-5500 in the state. More were spending Rs 5501-10,000 per month in Srinagar than in other two regions.
- (iii) About 56 percent of households were of Muslims followed by 36 percent Hindus and 4 percent Sikh in the state. There were more households of Hindus in Jammu and in small percent in Ladakh and Srinagar regions.
- (iv) 86 percent of households were of other than SC, ST and OBC castes.
- (v) 50 percent were drinking water from piped/tap.
- (vi) About three fourth reported rice as their staple food and same percent were non vegetarian.

3.2 PROFILE OF POPULATION

3.2.2 12 year olds

3.2.2.1 Educational levels

Only about 4% of this age group, mostly females, living in urban areas of the state, were illiterate. 94% had education up to middle standard. The rest were high school and above. These were comparatively more males irrespective of places of residence, in the state.

As regard to the literacy levels in the three regions, there were more illiterate females than males children in all the three regions. The illiteracy was higher in Srinagar, particularly among females. More than 95%, males as well as females had education up to middle and above in all three regions. **Table : 3.2.2**

Table : 3.2.2 Percent distribution of 12 year olds by educational level and media exposure, sex & geographical area.

AGE: 12 yrs

STATE : Jammu & Kashmir

Educational level & Media Exposure		MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Educational level	n=	158	167	154	323	156	479	159	147	156	302	160	462	941
Illiterate		0.0	1.3	0.8	1.4	0.0	0.9	1.4	8.0	2.2	3.6	9.8	5.8	3.4
Upto middle		99.7	97.1	98.5	97.7	97.7	97.7	97.8	90.9	97.0	96.0	88.1	93.1	95.4
High school & above		0.3	1.6	0.8	0.9	2.3	1.3	0.8	1.1	0.7	0.5	2.2	1.1	1.2
2 Newspaper reading habits							NOT ASKED							
3 Radio listening habits							NOT ASKED							
4 TV watching habits							NOT ASKED							
Daily														
Sometimes														
Not at all														
5 Cinema watching habits							NOT ASKED							
Once in 3 months														
Less often														
Not at all														

3.2.3 15 year olds

3.2.3.1 Educational level

7% of respondents in this age group, more females than males, and more in urban than in rural areas of the state, were illiterate. Another about 39%, evenly distributed by sex and place of living, had education up to middle standard and the remaining 54%, more males and more in urban areas, had education up to high school and above.

While analyzing the status of literacy in the three regions, illiteracy was more in Kashmir valley, particularly among females. **Table : 3.2.3**

Table : 3.2.3 Percent distribution of 15 year olds by educational level and media exposure, sex & geographical area.

AGE: 15 yrs

STATE : Jammu & Kashmir

Educational level & Media Exposure	n=	MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Educational level		154	163	154	314	157	471	162	152	155	310	159	469	940
Illiterate		0.3	5.7	1.5	4.3	2.3	3.6	1.1	17.7	2.8	9.7	13.3	11.0	7.3
Upto middle		80.7	32.0	46.3	39.3	39.2	39.3	69.2	29.1	48.3	39.4	36.4	38.4	38.9
High school & above		19.0	62.3	52.2	56.4	58.6	57.1	29.7	53.2	48.9	50.8	50.2	50.6	53.9
2 Newspaper reading habits														
Daily		3.3	7.9	4.5	6.8	4.9	6.2	1.9	4.0	5.8	4.8	4.5	4.7	5.5
Sometimes		7.9	45.5	31.8	39.6	36.3	38.5	6.4	36.0	21.4	30.2	24.5	28.2	33.4
Not at all		88.8	46.5	63.8	53.6	58.8	55.4	91.7	60.0	72.8	65.0	71.0	67.1	61.3
3 Radio listening habits														
Daily		78.0	55.5	41.2	48.5	54.8	50.6	79.1	57.9	51.4	54.1	60.1	56.2	53.4
Sometimes		16.3	39.9	34.3	36.1	39.6	37.3	17.8	34.3	27.2	31.5	28.3	30.4	33.9
Not at all		5.7	4.5	24.5	15.3	5.6	12.1	3.1	7.7	21.4	14.3	11.5	13.4	12.8
4 TV watching habits														
Daily		38.1	53.9	80.0	65.6	60.6	64.0	39.8	46.0	79.9	62.3	56.2	60.2	62.1
Sometimes		9.5	28.3	8.1	16.9	26.8	20.2	12.8	28.1	6.4	16.4	23.0	18.7	19.5
Not at all		52.5	17.9	11.9	17.5	12.6	15.8	47.4	26.0	13.7	21.3	20.8	21.1	18.5
5 Cinema watching habits														
Once in 3 months		4.2	0.0	0.4	0.1	0.9	0.4	0.6	2.2	0.9	1.6	1.6	1.6	1.0
Less often		1.3	0.0	4.9	1.3	4.7	2.4	1.4	0.0	4.0	1.4	3.1	1.9	2.2
Not at all		94.5	100.0	94.6	98.6	94.5	97.3	98.0	97.8	95.1	97.1	95.4	96.5	96.9

3.2.3.2 Exposure to media

About 61%, more females than males and more in urban than in rural areas, reported not reading newspapers at all. Only 6% of respondents, more males and more in rural reported reading newspapers daily. The remaining 33%, more males and more in rural were reading newspaper sometimes in the state.

While analyzing newspaper-reading habits in regions, more than 50 % in each region did not read newspaper at all. It may be noted that percentages reported reading daily though quite low but was comparatively more in Srinagar. There were also more had the habit of reading newspaper "sometimes" in Srinagar.

To assess the exposure of audio-visual media such as listening to radio, watching of TV and Cinema, the respondents were asked about their habits of listening to radio, watching TV and seeing Cinema. Only 53% of respondents, slightly more females than males and more in urban than in rural areas of the state, were listening to radio daily. About 13%, across both sexes and more in rural than in urban areas were not listening to radio at all.

As regards the habit of listening radio daily in regions, more in Ladakh (79%) followed by Srinagar (59%) and Jammu region (47%) reported habit of daily listening to radio. Daily listeners of radio were more or less equally divided by sex in each region.

About 62% of respondents, slightly more males than females and more in rural than in urban areas reported the habit of watching TV daily. Another about 19% of respondents, did not watch TV at all. Though the percent watching TV was slightly higher than percent listening to radio but both these media seem to be equally popular in the state.

As regard the habit of watching TV in the three regions, 80% of respondents in Jammu region the highest amongst the three regions, reported watching TV daily. A very large percentage in Ladakh, almost 50 percent, did not watch TV at all.

96-97% of respondents of this age group in the state as well as in the three regions did not watch cinema at all.

3.2.4 35-44 year olds

3.2.4.1 Educational level

About 56% of respondents, more females than males irrespective of places of residence were illiterate in the state. Another 21% and 23% had education up to middle and high school and above respectively. These were more males than females and more in urban areas.

While analyzing the status of literacy in the three regions. There were more illiterate females than males in each of the three regions. Srinagar region had the highest and Jammu region the lowest percent of illiterates. **Table : 3.2.4**

3.2.4.2 Exposure to media

About 81%, more females than males, irrespective of their places of living, did not read news paper at all. Only 5% of respondents, more males than females, reported reading newspapers daily.

70-90% of respondents in each region did not read news papers at all. There were more reading news paper daily in Jammu, followed by Srinagar region and least in Ladakh region.

Only 15%, more females than males reported not listening radio at all in the state. About 47%, more males than females and more in urban than in the rural, were listening to radio daily. Rest of them listened to radio "sometimes".

The situation in regard to listening to radio in the three regions was good. More than 80% of respondents in each region reported listening to radio daily or sometimes. More people in Ladakh reported listening to radio daily.

About 53%, more or less equally distributed by place of residence and sex, were watching TV daily. But there were another 25%, slightly more females than males, did not watch TV at all in the state. Others reported watching TV "sometimes".

A large percent (51%) of people in Ladakh and a low percent (15%) in Jammu region did not watch TV at all.

Exposure to cinema was limited. Approximately 97%, across both sexes and places of living, did not watch cinema at all. The situation in this respect was similar in each region of the state.

Table : 3.2.4 Percent distribution of 35-44 year olds by educational level and media exposure, sex & geographical area.

AGE: 35-44 yrs

STATE : Jammu & Kashmir

Educational level & Media Exposure		MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Educational level	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
	Illiterate	45.6	63.2	19.7	44.5	41.6	43.5	81.0	92.8	33.5	68.1	70.9	69.0	56.3
	Upto middle	24.2	16.0	34.5	24.4	24.2	24.3	8.2	3.7	40.0	19.7	13.9	17.9	21.1
	High school & above	30.1	20.7	45.8	31.2	34.2	32.2	10.8	3.5	26.6	12.2	15.2	13.2	22.7
2 Newspaper reading habits														
	Daily	0.8	7.6	9.4	8.8	6.5	8.0	4.6	1.8	2.8	2.3	2.4	2.3	5.2
	Sometimes	11.4	16.2	25.2	20.0	20.0	20.0	2.3	1.8	17.2	7.6	9.3	8.1	14.1
	Not at all	87.8	76.2	65.4	71.2	73.5	72.0	93.1	96.3	80.0	90.1	88.4	89.5	80.8
3 Radio listening habits														
	Daily	78.5	56.4	55.3	55.3	59.8	56.9	74.7	38.0	35.4	36.0	44.3	38.6	47.8
	Sometimes	17.6	38.1	31.1	36.2	29.7	33.9	17.9	44.1	40.0	42.3	40.2	41.6	37.8
	Not at all	3.9	5.5	13.6	8.5	10.5	9.2	7.4	17.9	24.5	21.7	15.5	19.8	14.5
4 TV watching habits														
	Daily	38.4	43.9	73.5	57.1	55.4	56.5	35.9	32.7	74.5	49.2	50.7	49.7	53.1
	Sometimes	9.0	29.4	11.1	19.8	23.8	21.2	14.7	32.6	10.0	21.7	27.8	23.6	22.4
	Not at all	52.6	26.7	15.4	23.1	20.8	22.3	49.4	34.7	15.5	29.1	21.5	26.7	24.5
5 Cinema watching habits														
	Once in 3 months	3.1	1.5	0.4	1.1	0.9	1.0	1.9	0.6	0.4	0.5	0.8	0.6	0.8
	Less often	3.8	0.0	5.7	1.9	4.5	2.8	0.3	0.0	3.2	0.8	3.1	1.5	2.2
	Not at all	93.1	98.5	93.9	97.0	94.6	96.2	97.8	99.4	96.3	98.7	96.1	97.9	97.1

3.2.5 65-74 year olds

3.2.5.1 Educational level

About 87%, more females than males, irrespective of place of living, were illiterate in this age group. Literacy in this age group of respondents in the three regions was similar to that in the state. More than three fourths of the respondents in each region were illiterate. Table 3.2.5.

3.2.5.2 Exposure to media

As expected, only 3%, more males than female and more in urban than in rural, reported reading newspapers daily in the state. The situation in this regard in each region was as poor as in the state.

Like respondents in other age groups, about 75% of respondents in this age group, more males than females, irrespective of place of living, were listening to radio daily or "sometimes". There was significantly high percent of listeners of radio daily in Ladakh region compared to in other two regions.

About 43% of respondents, across both sexes and places of living, reported watching TV daily. There was another 33%, more males and more in rural, did not watch TV at all in the state. The others had watched TV "sometimes".

More respondents reported watching TV daily in Jammu region than in other two regions. More than 50% of respondents in Ladakh region, the highest among all regions, did not watch TV at all.

The habit of watching cinema was very low in the state as well as in each region. There was only one percent of respondents had watched Cinema once in three months in the state as well as in each region.

Table : 3.2.5 Percent distribution of 65-74 year olds by educational level and media exposure, sex & geographical area.

AGE: 65-74 yrs

STATE : Jammu & Kashmir

Educational level & Media Exposure		MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Educational level	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
	Illiterate	87.8	78.0	76.5	77.7	77.7	77.7	97.5	98.1	95.3	97.6	94.6	96.6	87.2
	Upto middle	9.1	14.7	14.2	15.4	11.0	14.0	1.4	1.9	4.7	2.4	5.4	3.4	8.7
	High school & above	3.1	7.2	9.3	6.9	11.3	8.3	1.1	0.0	0.0	0.0	0.0	0.0	4.2
2 Newspaper reading habits														
	Daily	3.4	6.0	4.5	4.5	8.2	5.7	0.3	0.8	2.7	1.9	0.8	1.5	3.6
	Sometimes	2.3	6.1	10.3	8.1	6.1	7.5	1.4	2.1	2.4	2.0	2.7	2.2	4.9
	Not at all	94.3	87.9	85.2	87.4	85.7	86.8	98.3	97.2	95.0	96.1	96.5	96.2	91.5
3 Radio listening habits														
	Daily	73.4	45.7	41.7	43.5	49.1	45.3	76.1	38.3	36.2	38.2	39.4	38.6	42.0
	Sometimes	13.1	35.6	32.3	33.7	33.9	33.7	18.4	40.0	26.7	33.3	33.7	33.4	33.6
	Not at all	13.6	18.8	26.0	22.8	17.0	21.0	5.4	21.7	37.1	28.6	26.9	28.0	24.5
4 TV watching habits														
	Daily	34.4	32.0	59.7	41.0	49.8	43.8	32.5	31.1	56.9	43.6	40.4	42.5	43.2
	Sometimes	8.1	31.0	17.6	24.5	27.2	25.4	11.7	27.3	15.1	17.7	31.9	22.6	24.0
	Not at all	57.5	36.9	22.7	34.5	23.1	30.9	55.8	41.6	28.0	38.7	27.7	34.9	32.9
5 Cinema watching habits														
	Once in 3 months	1.9	1.2	0.9	1.0	1.5	1.1	2.2	0.0	0.0	0.1	0.1	0.1	0.6
	Less often	0.0	0.0	0.8	0.4	0.0	0.3	0.0	0.0	0.9	0.0	1.5	0.5	0.4
	Not at all	98.1	98.8	98.4	98.6	98.5	98.6	97.8	100.0	99.1	99.9	98.4	99.4	99.0

PROFILE OF POPULATION ACROSS AGE GROUPS (SUMMING UP)

- (i) 7 and below percent of youngsters and 50 and more percent of olders more females irrespective of places of residence, were illiterate in the state.
- (ii) 95-97 percent more females, across places of residence and age groups were either not reading newspaper at all or reading sometimes.
- (iii) Nearly 50 percent of 15 and 35-44 year olds and 75 percent 65-74 year olds more males and more in urban reported listening to radio daily.
- (iv) More than 50 percent belonging to age groups 35-44 years and below and 43 percent aged 65-74 years, across both sexes and places of residence were watching TV daily.
About 25 percent of respondents irrespective of their age, more in rural, were not watching TV at all.
- (v) 96-97 percent irrespective of age, sexes and places of residence, did not watch cinema at all.

CHAPTER IV

MAPPING OF FLUORIDE LEVELS

4.1 INTRODUCTION

As stated in the section on objectives (chapter 2), one of the objectives of the National Oral Health Survey was to map the fluoride levels in different parts of the country. For this purpose, the field teams were expected to collect water samples from the households they visited for collection of information related to oral health practices and the current situation of the oral health. This chapter presents results of the analysis of the fluoride levels from those water samples.

4.2 COLLECTION OF WATER SAMPLES

The field teams were given the following instructions about collection of water samples from the households they visited:

1. Each team will carry along with them a set of sterilized plastic bottles supplied to them when they go to the field. These bottles were ordered from a manufacturer in Hyderabad especially for this purpose and had the following characteristics:
 - (1) Its capacity was 500 ml as per recommendations of the Medlab, Mumbai, India where the water samples were to be analyzed for fluoride levels. (This lab, now has agreed that a sample of even 200 ml would have been enough). This quantity of water was decided to take account of the possible spillage of water during transportation.
 - (2) The quality of plastic for bottles was so decided that they could stand the pressure of transportation from Hyderabad to each state where survey was conducted, travel with the field teams and then dispatched to Mumbai for analysis.
 - (3) It was sterilized to ensure that collected water did not get contaminated from any source, and
 - (4) The bottles had two corks to make sure that spillage of water was minimum and the Medlab got quantity of water sufficient to analyze its fluoride levels.
2. Every field team was instructed to collect water samples from the first household they visited every day. Water sample was collected from the next household only if the source of drinking water of the household was different from the previous household from where water sample was collected. In other words, water samples were collected from all the sampled households that had different sources of drinking water in the area of coverage. If the source of drinking water in the household was the same as collected previously then water sample was not collected. It means that water samples were collected from a representative sample of households of the villages/urban blocks and one knew number of household in the sampled area who were using water of the specific ppm level. Since the villages and urban areas were, themselves, representative of the other areas of zones/states, the water samples collected were representative of all the area units of the zones/states and the results give distribution of household with different levels of ppm.
3. All water sample bottles had identification particulars of the household including its state, zone and serial number of the household, which were numbered within each zone.

4. Since a specified number of households were covered from each zone, the field teams were instructed to number the households in each zone serially, starting from 1 to the last number in a zone. Thus, every household covered had a unique serial number within a zone. The water sample bottles had this number recorded; thus, each water sample was uniquely matched with the household so that the water sample could be linked to the household from where other information on oral health was collected.
5. The collected water samples were transported to Medlab, Mumbai, India for analysis. This collection of water sample and its linking with the household was done for two purposes. The first was that the collected household drinking water samples represent the situation of rural and urban households of the zone and ultimately of the state (by giving proper weights to the rural and urban areas of the zone/state). This analysis would help to map the fluoride levels in different areas of the state and the country as the sampled areas and households were a representative sample of the total areas. The other purpose was to try to relate the fluoride levels of drinking water, oral health related dental practices and the actual status of the oral health of the households and individuals.

4.3 ANALYSIS OF WATER SAMPLES

Since analysis of water samples for its fluoride levels requires special equipment, the President, Dental Council of India, Dr. R.K. Bali contacted the Colgate-India for help in the analysis. They have been supportive to the total effort of the Dental Council of India in the conduct of the National Oral Health Survey including the funding they provided. They agreed to the request of the Dental Council of India for the analysis of the water samples for fluoride levels and identified Medlab, Mumbai for such analysis.

The methodology they adopted in analysis of the fluoride levels has been described in section 2.3.3 of the chapter on Methodology and Data Collection.

4.4 FINDINGS

The levels of fluoride in Regions, rural, urban areas and total Jammu & Kashmir are shown in Table 4.1.

Table 4.1 Percent distribution of water samples by levels of fluoride in rural, urban and total Jammu & Kashmir

Levels of ppm	Regions			State		
	I	II	III	Rural	Urban	Total
0.0-0.5	92.3	0.0	27.1	39.7	2.5	23.7
0.51-1.00	1.3	0.0	34.9	41.0	4.0	24.8
1.01-1.50	0.3	0.0	32.6	15.6	32.1	21.7
1.51-2.00	3.9	51.9	5.3	3.7	33.7	17.3
2.01-4.00	2.2	48.2	0.0	0.0	27.7	12.6
4.01-8.00	0.0	0.0	0.0	0.0	0.0	0.0
8.01 +	0.0	0.0	0.0	0.0	0.0	0.0

Note: Jammu & Kashmir has been divided into three regions namely (i) Ladakh, (ii) Kashmir Valley and (iii) Jammu. Their boundaries and districts within them may be seen in the State map

The fluoride levels in drinking water of J & K are generally high –higher in urban areas than rural. Almost 60 percent of households in urban areas use drinking water with ppm levels higher than 1.5. This is mostly because of higher levels of fluoride in region II.

Fig. 4.1 Drinking water levels of fluoride in Jammu & Kashmir

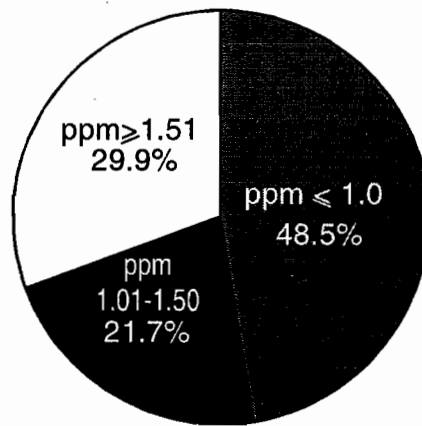
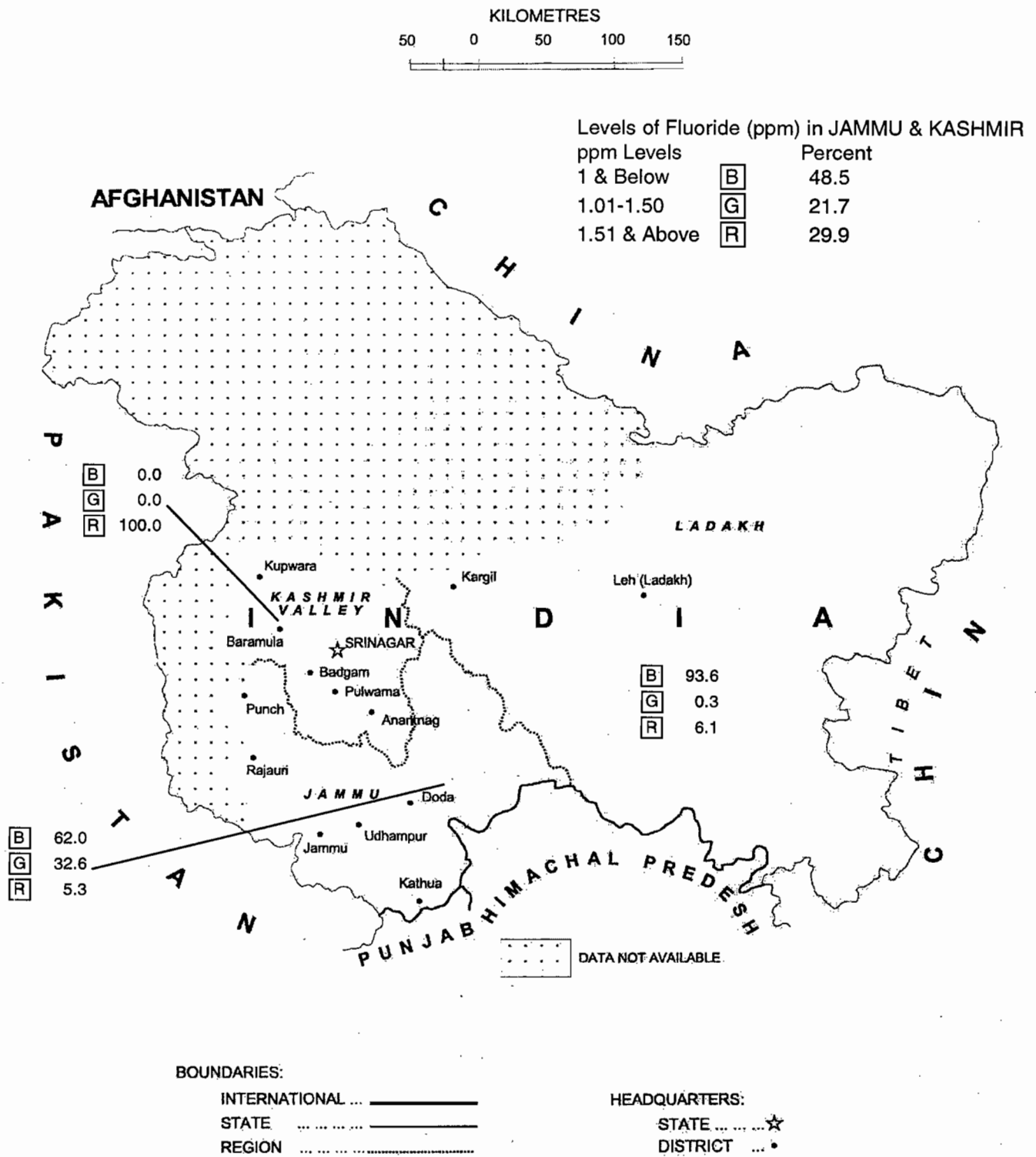


Fig. 4.2 Drinking water levels of Fluoride (ppm) in JAMMU & KASHMIR, INDIA



CHAPTER V

ORAL HEALTH KNOWLEDGE AND PRACTICE

A series of questions were asked on food habits and other habits/practices from respondents of different ages/age groups, sex, in rural and urban areas of the state and regions, the analysis of responses to each of these questions is likely to bring out oral risk practices and may help in planning appropriate educational activities to bring improvement in oral health conditions of the people.

5.1 ABNORMAL ORAL HEALTH HABIT

Five questions on abnormal habits such as “breathing from mouth”, “habit of sucking or biting fingers or thumbs”, “thrusting tongue on teeth”, biting nails, lips or object like pencil” and “habit of grinding/gritting teeth” were asked from each respondent (in case of 5 years old, these questions were asked from his/her care taker on his/her behalf). The responses as obtained from 5, 12, 15, 35-44 and 65-74 years old respondents by their sex and place of residence, are presented in Table 5.1 have been discussed below:

5.1.1 5 year olds

A small percent of respondents in this age group, across both sexes and comparatively more in rural than in urban areas, reported each of the abnormal habit such as “breathing from mouth”, “sucking of fingers/thumbs”, “thrusting tongue on teeth”, “biting nails/lips/object like pencils” and “grinding/gritting teeth”. The percent of respondents having one or other abnormal habits varied from 2 to 7% in the state. There were more having each of abnormal habit in Srinagar region than in other two regions.

5.1.2 12 year olds

A small percent of respondents in this age group, across both sexes, more in rural than in urban areas, reported each of the abnormal habit such as “breathing from mouth”, “sucking fingers/thumbs”, thrusting tongue on teeth”, “biting nails/lips/ object like pencils” and “grinding/gritting teeth”. The percent having one or other abnormal habits varied from 2 to 3% in the state. More respondents had the habit of “biting nails/lips or object like pencil” and “grinding/gritting teeth” than reported other three habits.

There were more having each of abnormal habit in Srinagar region than in other two namely Ladakh and Jammu regions.

5.1.3 15 year olds

The analysis of abnormal habits reveal that except for the habit of “breathing from mouth” in about 3% of respondents, each of other abnormal habits such as “sucking or biting fingers/thumbs”, “thrusting tongue on teeth”, “biting nails/lips or object like pencils” and “grinding/gritting of teeth” were reported by about 2% of respondents in the state.

The prevalence of each of these habits comparatively was more in Srinagar region than in other two regions.

Table : 5.1 Percent respondents by habits affecting oral health age, sex & geographical area.

AGE: 5 yrs

STATE : Jammu & Kashmir

Habits affecting Oral Health	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	161	164	152	321	156	477	157	152	158	305	162	467	944
1 Breathing from mouth		3.9	4.5	0.9	3.1	2.6	2.9	3.2	5.9	1.6	4.8	1.4	3.6	3.3
2 Sucking or biting fingers/thumb		1.5	3.8	1.2	2.9	1.9	2.6	0.0	1.3	3.1	1.9	2.5	2.1	2.4
3 Thrusting tongue on teeth		0.8	2.7	0.0	2.0	0.0	1.3	0.0	3.5	0.0	2.1	1.1	1.7	1.5
4 Biting nails/lips/objects like pencil		0.8	11.0	1.2	7.8	3.0	6.2	3.5	12.0	1.5	8.9	2.2	6.5	6.4
5 Grinding / gritting teeth		3.4	7.2	2.1	5.5	3.4	4.8	0.8	10.1	4.8	9.5	1.8	6.8	5.8

AGE: 12 yrs

STATE : Jammu & Kashmir

Habits affecting Oral Health	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	158	167	154	323	156	479	159	147	156	302	160	462	941
1 Breathing from mouth		5.6	3.9	1.2	3.5	0.8	2.6	3.4	5.9	0.4	3.9	1.8	3.2	2.9
2 Sucking or biting fingers/thumb		0.8	2.6	1.5	2.8	0.0	1.9	0.0	2.3	1.5	2.5	0.0	1.6	1.8
3 Thrusting tongue on teeth		1.6	3.7	0.0	2.5	1.1	2.0	0.0	4.3	0.0	2.7	1.1	2.1	2.1
4 Biting nails/lips/objects like pencil		4.0	3.9	0.0	3.0	0.0	2.0	1.6	6.6	1.5	5.3	1.1	3.8	2.9
5 Grinding / gritting teeth		4.0	6.4	1.5	5.3	1.1	3.9	3.1	5.9	1.6	4.4	2.5	3.7	3.8

AGE: 15 yrs

STATE : Jammu & Kashmir

Habits affecting Oral Health	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	154	163	154	314	157	471	162	152	155	310	159	469	940
1 Breathing from mouth		5.7	5.0	0.4	3.2	3.0	3.1	4.2	3.6	1.5	3.6	0.0	2.4	2.8
2 Sucking or biting fingers/thumb		0.0	4.0	1.6	3.4	1.5	2.8	0.0	1.5	0.0	1.0	0.0	0.7	1.8
3 Thrusting tongue on teeth		0.0	4.0	0.0	3.0	0.0	2.0	0.0	1.5	0.0	1.0	0.0	0.7	1.4
4 Biting nails/lips/objects like pencil		0.0	3.7	0.0	2.0	2.2	2.1	0.8	2.2	0.0	1.6	0.0	1.0	1.6
5 Grinding / gritting teeth		1.6	2.3	0.4	1.0	3.0	1.7	0.3	4.2	0.0	2.6	1.1	2.1	1.9

AGE: 35-44 yrs

STATE : Jammu & Kashmir

Habits affecting Oral Health	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
1 Breathing from mouth		5.0	3.6	0.0	2.8	0.0	1.8	4.0	2.5	0.0	2.0	0.0	1.3	1.6
2 Sucking or biting fingers/thumb		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.5	0.0	0.3	0.2
3 Thrusting tongue on teeth		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.5	0.0	0.3	0.2
4 Biting nails/lips/objects like pencil		0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.0	0.5	0.0	0.3	0.2
5 Grinding / gritting teeth		0.0	0.7	0.4	0.5	0.7	0.6	0.8	0.6	0.0	0.5	0.0	0.3	0.5

AGE: 65-74 yrs

STATE : Jammu & Kashmir

Habits affecting Oral Health	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
1 Breathing from mouth		4.7	3.0	0.0	2.5	0.0	1.7	3.4	1.5	0.0	1.2	0.0	0.8	1.3
2 Sucking or biting fingers/thumb		0.0	0.6	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3 Thrusting tongue on teeth		0.0	0.6	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
4 Biting nails/lips/objects like pencil		0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
5 Grinding / gritting teeth		0.8	1.2	1.2	1.3	0.7	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.6

5.1.4 35-44 year olds

Except for habit of “breathing from mouth” in about 2% of respondents the prevalence of other abnormal habits in this age group of respondents were very low and that only reported in females.

As regards the prevalence of abnormal habits in the three regions, none of the respondent in Jammu region reported either of abnormal habits. But 5% in Ladakh region and 3% in Srinagar region reported the habit of “breathing from mouth”.

5.1.5 65-74 year olds

Except for habit of “breathing from mouth” in about 1% of respondents, the prevalence of other abnormal habits in this age group was almost negligible in the state.

As regard prevalence of abnormal habits in the three regions, none of the respondent in Jammu region reported either of abnormal habits. But 4% in Ladakh region and about 2% in Srinagar region had habit of “breathing from mouth”.

ABNORMAL ORAL HEALTH HABITS ACROSS AGE GROUPS (SUMMING UP)

The occurrence of each of abnormal habit in respondents, irrespective of their age difference and sex, was very low. Only 2-3 percent of respondents from each age/age group, reported one or other abnormal habits.

5.2 SWEET/SUGAR-TAKING HABITS

Since sweets-taking habits affect oral health, the respondents belonging to ages/age groups 5, 12, 15, 35-44 and 65-74 year olds both sexes by places of residence, were asked on their pattern of sugar in-take in last one day. The responses obtained from each group of respondents, are presented in Table 5.2 and Fig. 5.1 & discussed below:

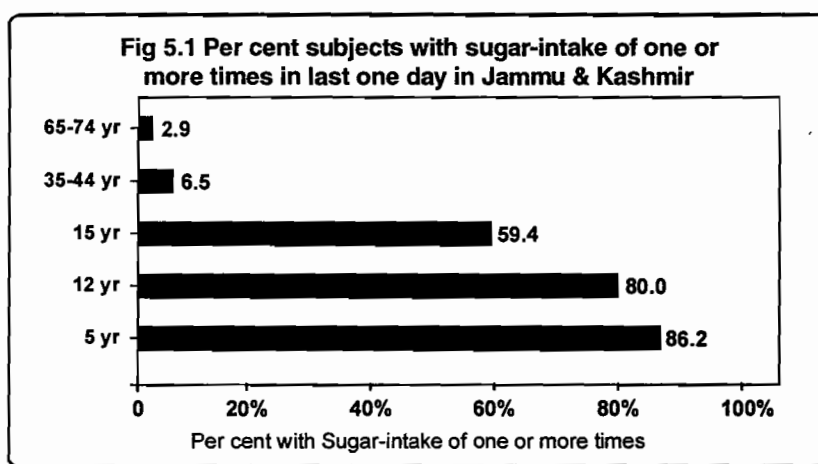


Table : 5.2 Percent respondents by pattern of sugar intake, age, sex & geographical area.

AGE: 5 yrs

STATE : Jammu & Kashmir

Pattern of sugar intake in last one day	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	161	164	152	321	156	477	157	152	158	305	162	467	944
1 Not taken		12.8	18.5	6.7	12.7	16.1	13.8	15.5	18.3	8.0	13.0	15.6	13.9	13.9
2 Taken one time		32.8	18.7	27.3	27.6	7.3	20.9	30.2	18.6	31.8	30.2	9.7	23.0	22.0
3 Taken two times		31.6	20.1	37.7	28.6	25.0	27.4	29.7	20.7	34.6	25.3	32.5	27.8	27.6
4 Taken 2+ times		22.8	42.7	28.3	31.2	51.6	37.9	24.6	42.4	25.5	31.6	42.2	35.3	36.6

AGE: 12 yrs

STATE : Jammu & Kashmir

Pattern of sugar intake in last one day	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	158	167	154	323	156	479	159	147	156	302	160	462	941
1 Not taken		16.7	28.0	11.8	21.2	20.4	20.9	24.7	26.0	9.8	16.8	24.0	19.3	20.1
2 Taken one time		31.0	20.5	36.3	31.4	14.1	25.9	29.3	18.1	34.2	30.6	12.2	24.0	25.0
3 Taken two times		35.4	22.4	37.9	29.3	28.7	29.1	33.4	29.8	44.0	38.1	31.3	35.7	32.4
4 Taken 2+ times		16.9	29.1	14.0	18.1	36.9	24.1	12.7	26.0	12.0	14.5	32.5	21.0	22.6

AGE: 15 yrs

STATE : Jammu & Kashmir

Pattern of sugar intake in last one day	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	154	163	154	314	157	471	162	152	155	310	159	469	940
1 Not taken		36.1	45.5	39.7	42.3	44.3	43.0	36.5	42.7	32.0	36.4	42.1	38.3	40.7
2 Taken one time		31.4	21.5	29.6	28.2	15.7	24.1	27.3	19.8	38.2	32.9	14.2	26.5	25.3
3 Taken two times		23.1	19.8	22.5	19.4	26.2	21.6	28.0	23.9	21.9	21.4	28.3	23.7	22.7
4 Taken 2+ times		9.3	13.2	8.3	10.1	13.8	11.3	8.2	13.6	7.9	9.4	15.4	11.5	11.4

AGE: 35-44 yrs

STATE : Jammu & Kashmir

Pattern of sugar intake in last one day	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
1 Not taken		82.9	89.5	96.4	91.3	95.4	92.7	78.7	92.2	97.3	92.7	97.7	94.3	93.5
2 Taken one time		11.3	5.6	3.6	5.4	3.5	4.7	12.9	4.3	1.2	4.0	1.0	3.0	3.9
3 Taken two times		4.2	0.5	0.0	0.1	1.1	0.5	7.3	1.2	1.5	1.9	0.1	1.3	0.9
4 Taken 2+ times		1.6	4.4	0.0	3.2	0.0	2.1	1.1	2.3	0.0	1.4	1.2	1.3	1.7

AGE: 65-74 yrs

STATE : Jammu & Kashmir

Pattern of sugar intake in last one day	MALE						FEMALE						STATE	
	REGIONS			STATE			REGIONS			STATE			TOTAL	
	1	2	3	R	U	T	1	2	3	R	U	T		
	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
1 Not taken		88.2	95.7	97.7	95.3	99.9	96.7	89.8	96.6	99.3	97.7	97.4	97.6	97.2
2 Taken one time		5.8	3.0	2.3	3.6	0.0	2.5	7.3	1.3	0.7	1.2	1.4	1.2	1.9
3 Taken two times		2.6	0.0	0.0	0.1	0.0	0.1	2.9	0.0	0.0	0.1	0.1	0.1	0.1
4 Taken 2+ times		3.4	1.2	0.0	1.0	0.0	0.7	0.0	2.1	0.0	1.1	1.1	1.1	0.9

5.2.1. 5 year olds

About 14% of respondents in this age group did not take sugar in last one day. While the remaining 86% had taken sugar once or more times during last one day. No difference was noticed between sexes and places of residence. The situation was similar in all the three regions.

5.2.2 12 year olds

There were about 20% respondents, across both sexes, more in urban than rural areas did not take sugar in last one day. The remaining 80%, across both sexes and places of residence had taken sugar one or more times in last one day.

More people in Srinagar (27%) did not take sugar in last one day. But minimum percent in Jammu did not take sugar. That is, more people had taken sugar in Jammu and least in Srinagar region.

5.2.3 15 year olds

About 40% of respondents, more males than females and more in urban than rural areas, did not take sugar in last one day. But about 11% of them had taken sugar more than twice in last one day.,

About 44% of respondent in Srinagar region, highest amongst the three regions, did not take sugar in last one day. The percentage of such in Ladakh and Jammu was about 36.

5.2.4 35-44 year olds

About 93% of respondents, across both sexes and slightly more in urban areas, did not take sugar in last one day. About 80 to 95% of respondents in each of the three regions did not take sugar in last one day. These were more in Jammu region, followed by Srinagar and Ladakh regions.

5.2.5 65-74 year old

About 97% of respondents, across both sexes and places of residence, did not take sugar in last one day. The situation in the three regions was similar to that in the state.

SWEET/SUGAR-TAKING HABITS ACROSS AGE GROUPS (SUMMING UP)

There were more older than younger people who did not take sugar in last one day. More youngsters than the elders however, had taken sugar one and more times in last one day.

5.3 ORAL HYGIENE PRACTICES

A series of questions were asked about oral hygiene practices covering aspects like how the teeth are cleaned, what material is used to clean, whether it is fluoridated, how often teeth's are cleaned and whether and how often mouth is rinsed after eating. The responses in this regard from respondents belonging to ages/age groups 5, 12, 15, 35-44 and 65-74 years, both sexes and places of residence, are presented in Tables 5.3.1 to 5.3.:5 **Fig. 5.2** and are discussed below :

5.3.1 5 year olds

About 45 percent of the subjects reported the use of tooth brush for cleaning their teeth. About 68 percent among them, more in urban than rural areas and slightly more males than females, changed toothbrushes once in 1-3 months. While other, (a quarter of them), changed once in three to six months and the rest had changed once after six months of use.

About 81% of respondents reported cleaning teeth, at least once a day and about 90% of these were using tooth paste; only about 5 percent reported the use of tooth powder. Most of them (75%) used non-flouridated tooth pastes/ powders and about 15 percent reported use of flouridated one. Others were not sure of the nature of paste used. **Table : 5.3.1**

Table : 5.3.1 Percent 5 year olds by oral hygiene practices, sex & geographical area.

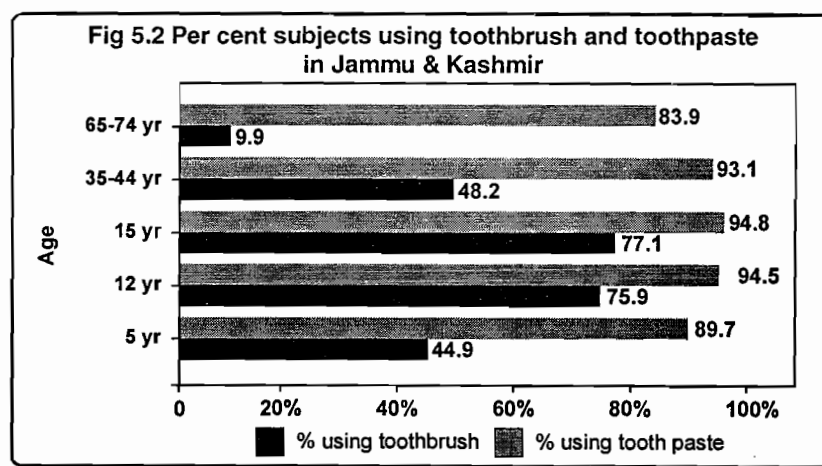
AGE: 5 yrs

STATE : Jammu & Kashmir

Oral Hygiene Practices	n=	MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Clean teeth with		161	164	152	321	156	477	157	152	158	305	162	467	944
finger		4.8	31.1	3.5	21.5	10.9	18.0	1.4	20.6	2.0	14.1	5.4	11.0	14.5
brush		43.4	25.9	77.1	51.1	36.4	46.3	55.7	21.2	72.2	49.0	33.1	43.4	44.9
datun		0.0	2.5	5.6	3.6	4.2	3.8	0.8	5.7	6.3	5.9	5.4	5.7	4.8
others		51.8	40.5	13.8	23.8	48.5	31.9	42.1	52.6	19.5	31.0	56.1	39.8	35.9
2 Frequency of cleaning teeth		83	89	122	206	88	294	95	59	118	185	87	272	566
Once a day		81.4	80.4	84.3	79.5	95.7	83.5	83.2	64.2	88.9	76.7	90.2	80.1	81.8
Twice a day		0.0	3.5	1.9	3.2	0.0	2.4	1.1	8.8	0.0	4.1	0.2	3.2	2.8
After every meal		0.0	1.2	0.0	0.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3 Material used for cleaning teeth														
Tooth paste		100	85.9	94.1	89.0	96.8	90.9	98.0	82.5	90.1	84.6	99.9	88.4	89.7
Tooth powder		0.0	2.3	5.9	4.2	3.2	4.0	2.0	1.8	9.9	7.9	0.1	6.0	5.0
4 Type of toothpaste/ powder		83	79	122	196	88	284	95	50	118	176	87	263	547
Flouridated		19.5	11.6	14.2	13.6	11.0	13.0	20.1	27.0	13.4	19.8	12.3	17.8	15.4
Non flouridated		77.3	69.8	83.9	74.9	89.0	78.5	79.4	52.2	82.7	68.2	87.6	73.4	76.0
5 Change of toothbrush once in		75	40	117	157	75	232	92	30	114	157	79	236	468
1-3 months		24.1	84.5	65.8	69.4	74.8	70.8	24.0	86.2	57.4	60.5	75.4	64.5	67.7
4-6 months		40.7	15.5	27.9	26.4	16.2	23.7	36.8	10.4	31.8	27.8	22.1	26.3	25.0
6 + months		35.2	0.0	6.3	4.2	9.1	5.5	39.2	3.5	10.8	11.7	2.5	9.2	7.4
6 Rinse mouth after eating		161	164	152	321	156	477	157	152	158	305	162	467	944
Sometimes		43.9	53.6	43.5	51.5	42.0	48.4	47.6	58.5	52.7	58.7	46.9	54.5	51.5
Always		2.9	9.5	26.3	16.5	15.6	16.2	3.5	4.3	18.7	10.1	12.4	10.9	13.6

When asked about rinsing habits, about 14 percent of subjects reported rinsing always. Another 52 percents had rinsed sometimes. Others did not rinse at all.

The practice of cleaning teeth was different in three regions – more people in Jammu and least in Srinagar cleaned teeth with brush. The practice of changing tooth brush also differed – in Ladakh, more people changed their tooth brush once in four to six months. In Srinagar, though relatively a few used tooth brush but more of them changed once in 1-3 month. Rinsing habits was better (more people rinsed always) in Jammu region compared to in other two regions.



5.3.2 12 year olds

About 76 percent (compared to 45 % in respect of age 5 years) reported the use of tooth brush. 72% of them changed tooth brush once in 1-3 months. They were more in urban than in rural. About 22 percent changed tooth brush once in 4-6 months and remaining changed after six months of use. **Table : 5.3.2**

About 89% of this age group cleaned teeth, at least once a day. Most of them used toothpaste while about 5 percent reported the use of tooth powder. About 85% used non-fluoridated tooth paste/powder while 13 percent had used fluoridated paste/powder.

When asked about rinsing practices, about 52 percent reported rinsing after every meal, Another 40 percent had rinsed sometimes. In case of others there was no information.

Most of the oral hygiene practices were similar in three regions except the following:

- 1) Use of tooth brush was relatively less in Srinagar (63%) compared to 76 percent for the state.
- 2) Those who used brush tended to change it more often in Srinagar compared to other two regions.
- 3) Rinsing after every meal was more in Jammu (65%), followed by Srinagar and least in Ladakh (9%).

Table : 5.3.2 Percent 12 year olds by oral hygiene practices, sex & geographical area.

AGE: 12 yrs

STATE : Jammu & Kashmir

Oral Hygiene Practices	n=	MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1	Clean teeth with	158	167	154	323	156	479	159	147	156	302	160	462	941
	finger	0.8	3.3	0.9	2.4	1.5	2.1	2.5	3.4	3.6	3.1	4.5	3.6	2.9
	brush	88.1	69.5	89.7	80.4	71.9	77.6	83.5	67.5	84.1	79.2	65.2	74.2	75.9
	datun	0.8	23.2	8.5	14.9	21.6	17.1	0.8	27.6	11.9	16.2	29.5	21.0	19.1
	others	10.3	4.0	0.9	2.3	4.9	3.1	13.2	1.5	0.4	1.6	0.8	1.3	2.2
2	Frequency of cleaning teeth	144	121	137	273	129	402	140	102	137	251	128	379	781
	Once a day	80.7	89.0	92.4	89.6	93.1	90.6	84.9	76.7	96.1	86.7	86.3	86.6	88.6
	Twice a day	0.3	5.4	1.8	4.0	2.1	3.4	1.3	9.3	2.6	7.0	1.6	5.2	4.3
	After every meal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Material used for cleaning teeth													
	Tooth paste	95.2	98.2	91.7	93.8	99.9	95.6	98.2	91.4	93.5	90.8	98.9	93.4	94.5
	Tooth powder	4.8	1.8	8.3	6.2	0.1	4.4	1.8	6.4	6.5	7.9	1.1	5.7	5.1
4	Type of toothpaste/ powder	144	121	137	273	129	402	140	100	137	249	128	377	779
	Flouridated	16.0	13.9	13.2	15.0	8.8	13.2	15.0	13.6	12.0	13.4	11.2	12.7	13.0
	Non flouridated	84.0	86.1	85.1	84.0	91.2	86.1	84.1	83.1	86.3	83.5	88.8	85.2	85.7
5	Change of toothbrush once in	143	116	135	267	127	394	135	97	131	243	120	363	757
	1-3 months	38.6	84.5	56.9	67.8	78.3	70.9	39.5	82.3	66.8	69.7	84.7	74.4	72.7
	4-6 months	32.5	9.2	33.9	23.5	14.5	20.9	35.5	15.4	28.2	25.0	14.0	21.6	21.3
	6 + months	28.9	6.3	9.2	8.7	7.2	8.2	25.0	2.2	5.0	5.2	1.3	4.0	6.1
6	Rinse mouth after eating	158	167	154	323	156	479	159	147	156	302	160	462	941
	Sometimes	78.5	53.1	23.5	43.1	36.7	41.0	71.7	51.6	22.4	38.2	41.3	39.3	40.2
	Always	6.9	40.5	64.9	46.8	59.0	50.7	10.3	44.5	66.9	54.0	52.3	53.4	52.1

5.3.3 15 year olds

The practices of this age group were similar to that of age group 12 years with slight differences in the percentage figures. **Table : 5.3.3**

Table : 5.3.3 Percent 15 year olds by oral hygiene practices, sex & geographical area.

		AGE: 15 yrs						STATE : Jammu & Kashmir						STATE TOTAL	
Oral Hygiene Practices		MALE						FEMALE							
		REGIONS			STATE			REGIONS			STATE				
		1	2	3	R	U	T	1	2	3	R	U	T		
1	Clean teeth with	n=	154	163	154	314	157	471	162	152	155	310	159	469	940
	finger		2.6	3.2	1.6	2.5	2.7	2.5	2.2	2.2	2.1	2.1	2.3	2.2	2.4
	brush		89.2	69.6	87.6	79.7	71.6	77.0	88.5	70.7	87.0	81.7	68.4	77.2	77.1
	datun		0.8	26.0	10.8	17.1	24.6	19.6	1.6	26.4	10.5	15.4	28.5	19.9	19.8
	others		7.4	1.2	0.0	0.7	1.1	0.9	7.8	0.7	0.4	0.8	0.7	0.8	0.9
2	Frequency of cleaning teeth	n=	144	118	136	267	131	398	150	109	137	266	130	396	794
	Once a day		83.1	90.8	96.1	93.2	92.8	93.0	86.2	77.6	97.0	86.7	89.4	87.5	90.3
	Twice a day		0.7	4.6	1.3	3.5	1.1	2.8	0.3	11.0	2.2	7.9	1.1	5.8	4.3
	After every meal		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Material used for cleaning teeth														
	Tooth paste		97.0	96.3	91.4	92.9	97.9	94.4	96.6	95.3	94.1	93.7	98.4	95.1	94.8
	Tooth powder		3.0	1.9	8.6	5.9	2.1	4.7	3.4	2.7	5.9	5.1	1.6	4.0	4.4
4	Type of toothpaste/ powder	n=	144	116	136	265	131	396	150	107	137	264	130	394	790
	Flouridated		10.2	14.3	12.6	14.3	10.3	13.1	16.1	14.3	14.0	15.7	9.0	13.6	13.4
	Non flouridated		87.3	84.8	84.8	83.4	89.6	85.4	83.9	85.7	86.0	84.3	91.0	86.4	85.9
5	Change of toothbrush once in	n=	139	113	133	260	125	385	146	106	133	260	125	385	770
	1-3 months		42.6	85.1	64.9	70.5	87.3	75.7	36.6	75.5	61.2	63.2	81.3	68.7	72.2
	4-6 months		33.9	11.3	28.5	23.2	9.9	19.1	33.4	18.3	32.5	29.1	14.0	24.5	21.8
	6 + months		23.4	3.6	6.5	6.4	2.8	5.3	30.1	6.2	6.3	7.7	4.7	6.8	6.05
6	Rinse mouth after eating	n=	154	163	154	314	157	471	162	152	155	310	159	469	940
	Sometimes		72.6	41.4	12.2	30.3	28.9	29.9	72.7	40.1	16.1	32.1	25.8	29.9	29.9
	Always		12.3	57.2	82.1	65.2	70.3	66.9	18.5	59.1	77.0	64.0	71.1	66.4	66.7

5.3.4 35-44 year olds

About 48 percent of the respondents reported use of tooth brush. 66% more males irrespective of places of living changed tooth brush once in 1-3 months. Other about 25 percent, more females and more in rural, changed once in 4-6 months. **Table : 5.3.4**

About 88 percent reported cleaning teeth at least once a day. About 3 percent reported cleaning teeth two times a day. Most of them (92%) used non-fluoridated tooth paste/powder while eight percent reported use of fluoride paste/powder.

When asked about rinsing practices, about 82 percent reported rinsing always and 16 percent "sometimes". The remaining small percentage did not rinse at all.

Most of the oral hygiene practices followed were similar in three regions except the following:

- 1) Practices of cleaning teeth, particularly with toothbrush were lower in Srinagar than in other two regions.
- 2) Those who used brush, had a tendency, to change tooth brush more often in Srinagar.
- 3) Practices of rinsing always were lower in Ladakh and highest in Jammu. While practice of rinsing sometimes was more in Ladakh than in other two regions.

Table : 5.3.4 Percent 35-44 year olds by oral hygiene practices, sex & geographical area.

AGE: 35-44 yrs

STATE : Jammu & Kashmir

	Oral Hygiene Practices	n=	MALE						FEMALE						STATE TOTAL
			REGIONS			STATE			REGIONS			STATE			
			1	2	3	R	U	T	1	2	3	R	U	T	
1	Clean teeth with		159	153	155	307	160	467	158	177	155	334	156	490	957
	finger		1.9	2.9	1.8	2.2	3.0	2.4	1.4	3.1	1.9	3.1	0.8	2.4	2.4
	brush		78.6	33.6	68.2	52.3	43.5	49.2	66.3	33.4	70.0	53.6	33.1	47.1	48.2
	datun		1.6	58.3	29.6	42.3	49.5	44.8	1.6	59.1	28.1	40.1	62.5	47.1	46.0
	others		17.9	5.2	0.4	3.3	4.0	3.5	30.7	4.4	0.0	3.2	3.6	3.3	3.4
2	Frequency of cleaning teeth		133	55	108	193	103	296	113	60	112	199	86	285	581
	Once a day		81.1	79.2	97.9	88.8	94.9	90.7	73.7	73.4	94.2	83.6	93.5	85.7	88.2
	Twice a day		1.0	6.0	2.1	4.6	0.0	3.1	2.1	6.8	1.6	4.0	2.5	3.6	3.4
	After every meal		0.0	2.0	0.0	1.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.4
3	Material used for cleaning teeth														
	Tooth paste		99.0	94.0	89.3	88.9	####	92.4	94.2	94.9	92.1	92.5	97.8	93.7	93.1
	Tooth powder		1.0	6.0	10.7	11.1	0.0	7.6	4.7	3.4	7.9	6.6	2.2	5.7	6.7
4	Type of toothpaste/ powder		133	55	108	193	103	296	112	59	112	197	86	283	579
	Flouridated		14.0	9.9	14.1	12.8	11.5	12.4	14.3	15.5	15.5	16.0	12.6	15.3	13.9
	Non flouridated		86.0	86.1	83.8	83.6	88.5	85.2	84.5	79.4	83.5	80.8	87.4	82.2	83.7
5	Change of toothbrush once in		130	51	104	187	98	285	110	55	109	191	83	274	559
	1-3 months		41.1	74.7	64.9	64.1	78.4	68.5	39.9	72.3	59.2	63.4	65.1	63.8	66.2
	4-6 months		31.8	16.7	27.7	26.3	15.9	23.0	32.1	22.2	32.5	28.7	27.0	28.3	25.7
	6 + months		27.1	8.6	7.4	9.6	5.7	8.4	28.1	3.7	8.3	7.0	7.9	7.2	7.8
6	Rinse mouth after eating		159	153	155	307	160	467	158	177	155	334	156	490	957
	Sometimes		60.6	21.2	6.9	19.7	5.8	14.8	62.3	21.2	5.5	18.8	6.4	14.9	14.9
	Always		26.6	75.2	90.4	75.9	93.4	82.1	22.0	76.9	91.8	78.2	92.8	82.7	82.4

5.3.5 65-74 year olds

Almost all reported cleaning teeth. Very few of them were using finger or toothbrush to clean their teeth datun was mainly used to clean teeth. Those who were using fingers or brush had similar practices as found in the case of age group 35-44 years.

The practice of "always rinsing" was quite high - almost 84 percent reported rinsing always. The regional differences were also similar to those found in the age group 35-44 years. **Table : 5.3.5**

Table : 5.3.5 Percent 65-74 year olds by oral hygiene practices, sex & geographical area.
AGE: 65-74 yrs **STATE : Jammu & Kashmir**

	Oral Hygiene Practices	n=	MALE						FEMALE						STATE TOTAL
			REGIONS			STATE			REGIONS			STATE			
			1	2	3	R	U	T	1	2	3	R	U	T	
1	Clean teeth with		160	179	154	335	158	493	161	146	156	306	157	463	956
	finger		0.0	4.9	0.8	4.1	0.0	2.8	4.1	12.2	0.0	8.6	0.2	5.7	4.3
	brush		29.5	11.2	12.6	13.1	9.4	11.9	20.9	3.8	11.2	6.9	9.7	7.9	9.9
	datun		5.0	71.3	32.4	52.3	60.4	54.8	1.7	69.3	38.8	51.9	58.4	54.2	54.5
	others		65.5	12.6	54.3	30.5	30.2	30.4	73.3	14.7	50.0	32.6	31.7	32.3	31.4
2	Frequency of cleaning teeth		58	27	21	63	43	106	45	21	20	53	33	86	192
	Once a day		80.6	58.4	83.0	63.1	97.6	70.1	93.3	42.9	100.0	58.6	98.9	68.8	69.5
	Twice a day		0.0	15.1	0.0	10.7	0.0	8.5	0.0	4.8	0.0	3.4	0.0	2.6	5.6
	After every meal		0.0	3.8	0.0	2.7	0.0	2.1	0.0	9.5	0.0	6.9	0.0	5.1	3.6
3	Material used for cleaning teeth														
	Tooth paste		100.0	92.4	94.3	92.4	100.0	93.9	90.7	52.4	100.0	65.1	100	73.9	83.9
	Tooth powder		0.0	0.0	5.7	2.3	0.0	1.8	6.2	9.5	0.0	7.2	0.0	5.4	3.6
4	Type of toothpaste/ powder		58	25	21	61	43	104	44	13	20	44	33	77	181
	Flouridated		18.4	16.4	20.3	19.3	9.9	17.3	16.6	15.4	14.5	14.6	16.5	15.2	16.3
	Non flouridated		81.6	55.0	74.1	58.6	90.1	65.3	77.7	23.1	85.5	47.2	82.8	58.5	61.9
5	Change of toothbrush once in		58	19	20	54	43	97	36	5	20	34	27	61	158
	1-3 months		43.3	72.9	70.1	64.5	94.4	72.0	24.4	40.0	88.3	69.9	72.2	70.9	71.5
	4-6 months		26.7	16.3	24.0	23.7	3.2	18.6	25.1	20.0	11.7	9.4	26.3	16.6	17.6
	6 + months		30.0	10.8	6.0	11.7	2.4	9.4	46.8	40.0	0.0	20.2	1.6	12.3	10.9
6	Rinse mouth after eating		160	179	154	335	158	493	161	146	156	306	157	463	956
	Sometimes		58.1	20.6	4.7	18.8	3.6	14.0	59.8	16.5	8.4	17.2	5.2	13.1	13.6
	Always		23.5	77.6	90.4	76.9	95.5	82.8	23.6	81.2	90.8	80.2	94.5	85.1	84.0

ORAL HYGIENE PRACTICES ACROSS AGE GROUPS (SUMMING UP)

- (i) About 50 percent, of 5 and 35-44 year olds, 76 percent of 12 and 15 year olds and only 10 percent of 65-74 year olds, more males and more in rural reported the use of tooth brush to clean teeth.
- (ii) 65-68 percent more males and more in urban, across ages, had changed toothbrushes once in 1-3 months.
- (iii) About 90 percent across ages, more in rural had cleaned teeth once a day.
- (iv) Nearly 80 percent, irrespective of age differences had used non-flouridated tooth paste/powder.
- (v) More elders than youngsters reported rinsing mouth always.

5.4 DENTAL PROBLEMS AND TREATMENT PRACTICES

The respondents were asked whether they had any dental problem in the last one year, if so, whom consulted for treatment. Further they were asked on the availability of dental care facility and time required to reach such facility places. They were also asked whether they ever suffered from hypertension, diabetes, epilepsy, Jaundice or asthma. Responses on all these aspects as obtained from respondents belonging to age/age group 5, 12, 15, 35-44 and 65-74 years are presented in Tables 5.4.1 to 5.4.5 and are discussed below:

5.4.1 5 year olds

(In case of this group of respondents, desired information was collected from their caretakers).

6% of respondents, more males, irrespective of their places of residence, suffered from oral health problems in last one year. (Table 5.4.1). As regard to nature of problems 93% of them in the state and more or less same percent in each region had dental decay. Other about 20% more females reported suffered from gum disease in the state and alone in Srinagar region.

5.4.2 12 year olds

About 12% of respondents, across both sexes and places of residence, suffered from oral health in last one year. (Table 5.4.2). As regard the nature of problems, about 88% more males irrespective of places of residence, had dental decay. Other 17%, across both sexes and more in rural, had gum disease in the state.

The percent of respondents suffered, from some dental problems though varied between the three regions but were more or less similar to that in the state.

66%, more in rural area, consulted trained dentists in the state. There were more in Srinagar region and less in Jammu region consulted trained dentists.

While 32.4% of all respondents, more in rural reported the availability of Govt. dental care facility in the state. There were more in Srinagar region and less in Jammu region had knowledge of availability of Govt. dental care facility in their respective areas.

Approximately 39%, more in urban than in rural reported less than half-hour to reach the facility. While other 41 percent, more females and more in urban told half to one hour to reach the facility places. The remaining, more in rural reported more than an hour to reach the facility places.

There were more in Ladakh region and less in the remaining two regions reported less than half hour to reach the facility places while more in Jammu region and less in Ladakh region told half hour to more than one hour to reach the facility places.

Table 5. 4. 1 Percent 5 year olds by reported nature of dental problems and treatment related aspects, sex & geographical area.

AGE: 5 yrs

STATE : Jammu & Kashmir

	Nature of Dental Problems and Treatment related aspects	n=	MALE						FEMALE						STATE TOTAL
			REGIONS			STATE			REGIONS			STATE			
			1	2	3	R	U	T	1	2	3	R	U	T	
1	Suffered from oral health problems in last one year		161	164	152	321	156	477	157	152	158	305	162	467	944
			12.0	9.1	4.7	7.4	7.5	7.4	16.1	5.5	1.9	4.5	3.1	4.0	5.7
2	Type of oral health problems		21	15	7	27	16	43	25	8	3	25	11	36	79
	Dental decay		100.0	92.7	100.0	93.3	100.0	95.5	100.0	90.3	100.0	100.0	66.1	90.7	93.1
	Gum disease		0.0	22.0	0.0	20.1	0.0	13.4	0.0	36.6	0.0	23.1	33.9	26.1	19.8
	Foul breath		0.0	7.3	0.0	6.7	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	2.3
	Bleeding gums		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Consulted (out of those suffered)														
	None		6.5	7.3	16.2	12.8	0.0	8.5	0.0	9.7	38.7	9.8	33.9	16.4	12.5
	Trained dentist		49.8	85.3	67.6	72.6	99.0	81.3	45.3	76.9	0.0	61.7	43.1	56.6	69.0
4	Availability of dental facility		161	164	152	321	156	477	157	152	158	305	162	467	944
	None		76.7	44.8	94.6	63.3	75.8	67.4	77.4	39.6	93.8	60.2	77.6	66.4	66.9
	Govt. facility		22.2	55.2	5.4	36.6	24.1	32.5	21.2	58.9	6.2	38.7	22.3	32.9	32.7
	Pvt. facility		0.0	0.7	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Do not know		1.1	0.0	0.0	0.0	0.0	0.0	1.4	1.5	0.0	1.1	0.1	0.7	0.4
5	Time taken to reach the facility		36	86	12	97	37	134	35	84	13	94	38	132	266
	Less than 1/2 hr.		93.0	38.9	50.0	38.0	53.3	41.7	96.2	31.2	65.3	30.9	55.1	36.7	39.2
	1/2 - 1 hr.		7.0	37.2	50.0	36.5	42.1	37.8	3.8	46.4	34.7	44.7	44.9	44.8	41.3
	> 1 hr.		0.0	23.9	0.0	25.6	4.6	20.5	0.0	22.4	0.0	24.4	0.0	18.5	19.5
	Cannot say		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Ever suffered from		161	164	152	321	156	477	157	152	158	305	162	467	944
	Hypertension		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.5	0.0	0.3	0.2
	Diabetes		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Epilepsy		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Jaundice		0.0	1.3	0.0	1.0	0.0	0.7	0.0	0.7	0.0	0.5	0.0	0.3	0.5
	Asthma		0.0	1.3	0.0	1.0	0.0	0.7	0.0	1.5	0.0	1.0	0.0	0.7	0.7

Table 5. 4. 2 Percent 12 year olds by reported nature of dental problems and treatment related aspects, sex & geographical area.

AGE: 12 yrs

STATE : Jammu & Kashmir

	Nature of Dental Problems and Treatment related aspects	n=	MALE						FEMALE						STATE TOTAL
			REGIONS			STATE			REGIONS			STATE			
			1	2	3	R	U	T	1	2	3	R	U	T	
1	Suffered from oral health problems in last one year		158	167	154	323	156	479	159	147	156	302	160	462	941
			19.6	16.3	6.7	13.5	8.8	12.0	21.0	16.1	4.9	9.6	15.6	11.7	11.9
2	Type of oral health problems		32	26	11	48	21	69	34	24	9	39	28	67	136
	Dental decay		91.9	92.0	100.0	92.5	100.0	94.3	100.0	85.1	75.7	89.6	74.6	82.5	88.4
	Gum disease		4.1	24.1	0.0	21.5	0.0	16.4	0.0	14.9	24.3	10.4	25.4	17.5	17.0
	Foul breath		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Bleeding gums		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Others		0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	5.6	0.0	2.9	1.5
3	Consulted (out of those suffered)														
	None		5.6	13.9	6.6	7.3	34.8	13.8	0.0	14.1	51.3	21.6	18.7	20.3	17.1
	Trained dentist		50.7	74.1	35.5	68.0	47.0	63.1	34.2	77.8	30.7	67.7	64.1	65.9	64.5
4	Availability of dental facility		158	167	154	323	156	479	159	147	156	302	160	462	941
	None		75.6	44.3	89.0	59.5	77.1	65.1	76.6	47.1	91.0	64.1	77.7	69.0	67.1
	Govt. facility		22.8	55.2	10.6	40.5	21.0	34.2	20.5	52.9	8.5	35.8	21.5	30.7	32.5
	Pvt. facility		0.0	0.5	0.0	0.0	1.1	0.4	0.0	1.5	0.4	1.1	0.7	1.0	0.7
	Do not know		1.6	0.0	0.4	0.1	0.8	0.3	3.0	0.0	0.0	0.1	0.1	0.1	0.2
5	Time taken to reach the facility		36	88	19	108	35	143	34	73	17	87	37	124	267
	Less than 1/2 hr.		89.5	34.2	32.2	30.9	58.7	36.6	96.2	36.4	37.5	34.6	51.1	38.8	37.7
	1/2 - 1 hr.		10.5	45.8	67.8	48.9	41.3	47.4	3.8	34.9	62.5	35.3	48.9	38.8	43.1
	> 1 hr.		0.0	20.0	0.0	20.2	0.0	16.0	0.0	28.7	0.0	30.1	0.0	22.4	19.2
	Cannot say		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Ever suffered from		158	167	154	323	156	479	159	147	156	302	160	462	941
	Hypertension		0.0	0.7	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Diabetes		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Epilepsy		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Jaundice		0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	1.1	0.4	0.2
	Asthma		0.8	0.5	0.0	0.0	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2

5.4.3 15 year olds

About 11% of respondents, irrespective of their sex and places of residence had oral health problems in last one year (Table 5.4.3). As regard nature of problems suffered, nearly 92%, more in urban, suffered from dental decay. Other 10.8% more males and more in rural, had gum disease.

The percent that reported one or other dental problem in each region were similar and equal to that in the state.

82%, more in urban consulted trained dentists. There were 88% in Srinagar and about 40% in each of the remaining two regions, consulted trained dentists.

One third of respondents, more in rural reported the availability of Govt. dental care facility. There were more aware of Govt. dental care facility in Srinagar region and least in Jammu region.

As regard time required to reach the dental care facility, 37.2%, (of those aware of facility) more males and more in urban, reported less than half an hour. Another 45%, more females told, half to one hour. The remaining more males and more in rural, reported more than an hour to reach the facility places in the state.

There were about 93% in Ladakh region and about one third in each of the remaining two regions reported less than half-hour to reach facility places.

A small percent (less than one percent) reported ever suffered from each of disease such as hypertension, diabetes, epilepsy and asthma and they mostly belonged to Srinagar region.

5.4.4 35-44 year olds

About 26% of respondents, more females and more in urban had oral health problems in last one year (Table 5.4.4). As regard to nature of problems, 94% more females and more in urban areas had dental decay. Another about 21% more males and more in the rural, had gum diseases including bleeding gums in the state.

The percent suffered from dental decay in last one year in each region were more or less similar and equal that in the state. But there were more persons with gum disease in Srinagar region than in the remaining two regions.

Nearly 88% of those suffered consulted trained dentists in the state. 56% in Ladakh region, 76% in Jammu and 93% in Srinagar consulted trained dentist.

Only one third of all respondents, more in rural, were aware of Govt. and Pvt. dental care facility in the state. There were more aware of Govt. and Pvt. Dental care facility in Srinagar region and least in Jammu region.

As regard time required to reach the dental care facility, about 80%, (of those aware of facility) more in urban reported one hour and below. Other 19.5%, more in rural told more than an hour to reach facility places.

More in Ladakh region and Jammu region reported less than half to one hour and more in Srinagar region told more than an hour to reach dental care facility places.

Except 7.2% ever had hypertension a very small percent (even less than one percent) reported ever suffered from each of other diseases.

Table 5. 4. 3 Percent 15 year olds by reported nature of dental problems and treatment related aspects, sex & geographical area.

AGE: 15 yrs

STATE : Jammu & Kashmir

	Nature of Dental Problems and Treatment related aspects	n=	MALE						FEMALE						STATE TOTAL
			REGIONS			STATE			REGIONS			STATE			
			1	2	3	R	U	T	1	2	3	R	U	T	
1	Suffered from oral health problems in last one year		154	163	154	314	157	471	162	152	155	310	159	469	940
			16.1	16.7	2.0	10.7	9.9	10.4	22.6	16.4	5.8	11.7	12.5	12.0	11.2
2	Type of oral health problems		24	27	3	38	16	54	34	25	9	48	20	68	122
	Dental decay		100.0	91.9	100.0	90.8	100.0	93.7	100.0	91.1	92.4	91.1	94.0	92.2	93.0
	Gum disease		0.0	15.0	0.0	13.9	11.2	13.0	0.0	13.3	0.0	13.3	0.0	8.5	10.8
	Foul breath		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Bleeding gums		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	6.0	2.1	1.1
	Others		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Consulted (out of those suffered)														
	None		0.0	11.0	0.0	9.2	11.2	9.9	4.8	8.9	0.0	9.1	0.3	6.0	8.0
	Trained dentist		45.4	85.0	38.7	79.6	80.4	79.9	37.0	91.1	53.8	75.8	92.2	81.7	80.8
4	Availability of dental facility		154	163	154	314	157	471	162	152	155	310	159	469	940
	None		75.1	44.9	90.9	61.1	77.1	66.4	77.5	46.1	89.1	61.9	77.6	67.3	66.9
	Govt. facility		23.3	53.9	8.6	38.3	21.0	32.6	21.7	54.7	10.5	38.6	21.7	32.8	32.7
	Pvt. facility		0.0	1.8	0.4	1.0	1.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.7
	Do not know		1.6	0.0	0.0	0.1	0.0	0.0	0.8	0.0	0.4	0.0	0.7	0.3	0.2
5	Time taken to reach the facility		37	85	17	101	38	139	36	77	19	96	36	132	271
	Less than 1/2 hr.		90.2	36.8	37.5	34.4	55.7	39.2	96.4	31.6	36.4	28.8	57.1	35.3	37.3
	1/2 - 1 hr.		9.8	37.5	62.5	38.8	44.3	40.1	3.6	48.2	63.6	50.7	42.9	48.9	44.5
	> 1 hr.		0.0	25.7	0.0	26.7	0.0	20.7	0.0	20.3	0.0	20.5	0.0	15.8	18.3
	Cannot say		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Ever suffered from		154	163	154	314	157	471	162	152	155	310	159	469	940
	Hypertension		0.0	0.7	0.0	0.5	0.0	0.3	0.0	1.5	0.0	1.0	0.0	0.7	0.5
	Diabetes		0.0	0.7	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Epilepsy		0.0	1.3	0.0	1.0	0.0	0.7	0.0	0.5	0.7	0.4	1.1	0.7	0.7
	Jaundice		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Asthma		0.8	0.5	0.0	0.0	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2

Table 5. 4. 4 Percent 35-44 year olds by reported nature of dental problems and treatment related aspects, sex & geographical area.

AGE: 35-44 yrs

STATE : Jammu & Kashmir

	Nature of Dental Problems and Treatment related aspects		MALE						FEMALE						STATE TOTAL
			REGIONS			STATE			REGIONS			STATE			
			1	2	3	R	U	T	1	2	3	R	U	T	
1	Suffered from oral health	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
	problems in last one year		17.6	30.7	14.5	22.6	25.1	23.5	36.0	34.9	17.6	27.1	30.8	28.3	25.9
2	Type of oral health problems	n=	26	47	23	64	32	96	54	63	26	100	43	143	239
	Dental decay		89.3	90.5	84.4	84.5	99.9	90.3	96.9	98.2	91.5	95.4	99.9	96.9	93.6
	Gum disease		4.5	32.4	5.2	32.3	4.3	21.8	0.0	12.4	4.3	13.2	0.0	8.7	15.3
	Foul breath		0.0	2.4	0.0	2.3	0.0	1.5	0.0	5.3	0.0	5.1	0.0	3.3	2.4
	Bleeding gums		0.0	9.5	0.0	9.3	0.0	5.8	0.0	8.8	0.0	8.4	0.0	5.6	5.7
	Others		0.0	0.0	10.4	3.9	0.0	2.5	0.0	0.0	4.3	1.4	0.0	0.9	1.7
3	Consulted (out of those suffered)														
	None		1.7	2.4	5.2	4.3	0.1	2.7	2.2	1.3	11.0	3.0	6.1	4.0	3.4
	Trained dentist		59.0	92.9	84.4	86.1	99.6	91.1	52.6	93.1	67.7	86.4	82.5	85.1	88.1
4	Availability of dental facility	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
	None		77.5	44.0	91.7	62.4	75.7	67.0	76.2	42.9	89.1	58.2	76.2	63.8	65.4
	Govt. facility		21.7	56.0	8.3	37.6	24.3	32.9	23.0	56.6	10.5	41.8	21.9	35.6	34.3
	Pvt. facility		0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	1.4	1.1	1.3	0.7
	Do not know		0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.8	0.3	0.2
5	Time taken to reach the facility	n=	35	81	16	94	38	132	37	96	19	115	37	152	284
	Less than 1/2 hr.		92.8	28.6	68.1	30.1	50.9	35.5	93.1	38.1	79.1	41.8	54.4	44.3	39.9
	1/2 - 1 hr.		7.2	46.8	31.9	43.4	49.1	44.9	6.9	38.4	20.9	35.2	40.8	36.3	40.6
	> 1 hr.		0.0	24.6	0.0	26.5	0.0	19.6	0.0	23.4	0.0	23.0	4.9	19.4	19.5
	Cannot say		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Ever suffered from	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
	Hypertension		9.4	8.1	1.2	5.5	4.2	5.0	7.4	13.8	1.9	9.3	7.5	8.7	6.9
	Diabetes		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.5	0.0	0.3	0.2
	Epilepsy		0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Jaundice		0.0	0.7	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Asthma		0.8	2.7	0.0	1.6	1.1	1.4	0.0	2.3	0.0	1.4	1.1	1.3	1.4

5.4.5 65-74 year olds

About 34% of respondents, more females and more in urban areas suffered from oral health problems in last one year (Table 5.4.5). As regard to nature of problems, 93%, more in urban areas had dental decay. Another 20%, more in rural, suffered from gum diseases. A few, all in rural, had problem of foul breath in the state.

The percent suffered from dental decay in last one year in each region were more or less similar and equal to that in the state. But there were more with gum diseases in Srinagar region than in the remaining two regions.

About 88%, of those suffered from dental problems, more in urban, consulted trained dentist. There were comparatively more in Srinagar region consulted trained dentist.

Nearly one third of respondents more in rural areas were aware of Govt. and Pvt. dental care facility in the state. There were more aware of the availability of dental care facility in Srinagar region and least in Jammu regions.

As regard time required to reach the facility, 38%, more males and more in urban areas reported less than half-hour. Another 43% more females and more in rural told half to one hour to reach facility. The remaining, more in rural reported more than one hour to reach the facility.

There were more in Ladakh and Jammu regions and comparatively less in Srinagar region reported less than half-hour to reach facility places.

39% and another about 12%, more females reported ever suffered from hypertension and asthma respectively. A small percent (nearly one percent) reported ever suffered from each of the remaining diseases in the state.

There were comparatively more in Srinagar region and less in other two regions ever suffered from hypertension and asthma.

DENTAL PROBLEMS AND TREATMENT PRACTICES ACROSS AGE GROUPS (SUMMING UP)

- (i) The percent of respondents reported suffered from oral health problems in last one year increased from 6 to 34 percent with the increase in the age of respondents.
- (ii) About 90 percent irrespective of their age and more in urban, had problem of dental decay.
- (iii) Two third and more respondents from each age/age group consulted trained dentists.
- (iv) One third of respondents from each age/age group, more in rural, had knowledge of Govt./Pvt. Dental care facilities in their areas.
- (v) Approximately 40 percent of respondents more in urban and another about 42 percent, more females and more in rural, from each group reported less than half hour and half to one hour respectively to reach the facility places.

Table 5. 4. 5 Percent 65-74 year olds by reported nature of dental problems and treatment related aspects, sex & geographical area.

AGE: 65-74 yrs

STATE : Jammu & Kashmir

Nature of Dental Problems and Treatment related aspects		MALE						FEMALE						STATE TOTAL	
		REGIONS			STATE			REGIONS			STATE				
		1	2	3	R	U	T	1	2	3	R	U	T		
1	Suffered from oral health problems in last one year	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
			10.4	37.7	23.1	29.2	37.8	31.9	13.5	48.9	24.1	35.8	39.4	37.0	34.5
2	Type of oral health problems	n=	17	68	38	77	46	123	21	71	39	85	46	131	254
	Dental decay		92.5	91.9	93.5	89.4	100.0	93.4	100.0	91.1	92.0	90.1	95.2	91.9	92.7
	Gum disease		15.0	23.8	3.3	23.5	2.9	15.8	0.0	18.6	8.0	20.3	1.9	13.6	14.7
	Foul breath		0.0	6.5	0.0	6.3	0.0	3.9	0.0	4.7	0.0	4.5	0.0	2.8	3.4
	Bleeding gums		0.0	6.5	0.0	6.3	0.0	3.9	0.0	10.0	0.0	7.4	5.7	6.8	5.4
	Others		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Consulted (out of those suffered)														
	None		0.0	2.8	3.3	2.9	2.9	2.9	2.2	1.6	11.1	5.3	2.0	4.1	3.5
	Trained dentist		68.8	92.4	79.8	86.8	92.9	89.1	52.9	92.7	74.8	84.7	93.0	87.7	88.4
4	Availability of dental facility	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
	None		76.9	43.4	91.0	59.3	75.6	64.5	75.2	41.5	90.6	60.3	77.2	66.1	65.3
	Govt. facility		22.4	56.6	7.4	39.8	24.4	34.9	24.0	57.9	9.4	39.6	21.7	33.4	34.2
	Pvt. facility		0.0	1.2	1.5	1.7	0.0	1.2	0.0	0.8	0.0	0.5	0.0	0.3	0.8
	Do not know		0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.0	0.0	1.1	0.4	0.2
5	Time taken to reach the facility	n=	36	97	16	112	37	149	40	79	18	99	38	137	286
	Less than 1/2 hr.		86.0	35.3	75.3	37.6	53.2	41.0	92.3	25.7	76.8	28.9	56.4	35.0	38.0
	1/2 - 1 hr.		14.0	42.4	24.7	39.8	42.3	40.4	6.5	49.7	23.2	47.0	38.2	45.1	42.8
	> 1 hr.		0.0	21.5	0.0	22.6	0.0	17.7	1.3	23.6	0.0	24.1	0.2	18.8	18.3
	Cannot say		0.0	0.8	0.0	0.0	4.5	1.0	0.0	0.9	0.0	0.0	5.2	1.2	1.1
6	Ever suffered from	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
	Hypertension		33.5	46.2	21.0	38.0	29.0	35.1	37.5	61.2	21.6	40.9	47.9	43.3	39.2
	Diabetes		0.3	3.7	0.4	2.8	0.8	2.1	1.6	2.3	2.7	3.0	0.8	2.2	2.2
	Epilepsy		0.0	0.0	0.8	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Jaundice		0.0	0.6	0.8	0.8	0.0	0.6	0.0	0.6	0.0	0.0	1.1	0.4	0.5
	Asthma		2.3	16.9	0.4	10.2	9.5	10.0	1.1	23.1	4.5	13.9	14.6	14.1	12.1

5.5 AWARENESS OF DENTAL PROBLEM

Three questions were asked on awareness of oral health problems. The first about common dental problems, second about major factors responsible for the problems and the third on how to prevent these problems. The responses in this regard as obtained from respondents belonging to different ages/age groups, sex and places of residence, are presented in Tables 5.5.2 to 5.5:5 and discussed as below:

5.5.2 12 years old

About 37% of respondents, across both sexes and places of residence, had no knowledge of oral health problems in the state. Those reported having knowledge. 61% and another about 21% of them reported dental decay and gum disease/bad smell/strained teeth, respectively major sources of oral health problems. The respondents aware of problems were more males than females and more in urban than in rural areas of the state.

More respondents, equally divided by sex, were aware of oral health problems in Jammu region than in other two regions. There was more knowing about oral health problems such as tooth decay and gum disease in Srinagar region than in other two regions.

About 42% of respondents across both sexes and more in urban, had no knowledge of factors that cause oral health problems. Of those who could tell of the causative factors, about 45%, 35% and 17% of them reported eating sweets/ice creams, not brushing regularly and not rinsing/consuming tobacco, respectively, factors that cause oral health problems.

There were more knowing causative factors in Srinagar region than in other two regions.

As regard to awareness of preventive measures, 42% of respondents, across both sexes and more in urban, were unaware in the state. Of those aware, about 47% and 34% of them reported regular cleaning of teeth and avoid of sweet items and not consuming of tobacco, the measures to prevent oral health problems, respectively.

Regular cleaning of teeth a measure to prevent oral health problems was reported by many in Srinagar compared to in Ladakh and Jammu regions.

Table: 5.5.2 Percent 12 year olds by reported awareness of oral health problems, their causes & preventive measures, sex & geographical area.

AGE: 12 yrs

STATE : Jammu & Kashmir

Awareness of Oral Health Problems, Causes and Preventive Measures		MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Awareness of Oral Health Problems	n=	158	167	154	323	156	479	159	147	156	302	160	462	941
No knowledge		46.6	18.7	60.3	34.8	42.7	37.3	44.0	19.3	56.4	38.0	33.2	36.3	36.8
Tooth decay		52.3	78.0	37.0	61.6	56.5	59.9	52.6	80.7	41.6	61.0	66.1	62.8	61.4
Gum disease		0.8	29.4	2.3	21.4	4.5	16.0	1.6	26.1	0.0	16.2	6.5	12.7	14.4
Bad smell		0.0	13.1	0.0	9.6	0.0	6.5	0.0	8.1	0.7	5.8	1.1	4.1	5.3
Stained teeth		1.1	2.0	0.0	1.5	0.0	1.0	2.4	2.3	1.2	2.2	0.7	1.7	1.4
Others		0.0	0.7	0.0	0.5	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.2
2 Factors that cause Oral Health Problems														
Eating sweets/ice cream		23.8	63.2	23.5	50.6	30.1	44.0	25.0	67.0	23.3	49.5	36.9	45.0	44.5
Not brushing regularly		25.5	56.0	12.7	40.5	27.0	36.2	27.1	56.6	7.8	35.4	29.5	33.3	34.8
Not rinsing		1.1	31.3	0.0	20.2	9.1	16.6	0.0	28.5	0.0	16.7	9.7	14.2	15.4
Consuming tobacco		0.0	2.6	0.0	1.9	0.0	1.3	0.0	2.8	0.0	1.6	1.1	1.4	1.4
Do not know		50.4	23.5	63.7	36.7	54.2	42.3	47.9	20.1	68.9	41.5	46.6	43.3	42.8
3 Reported Preventive Measures														
Not consuming Tobacco		0.3	33.5	1.2	22.5	8.7	18.1	1.4	30.4	0.0	18.9	7.6	14.9	16.5
Cleaning teeth regularly		38.1	66.2	21.0	49.9	36.5	45.6	35.4	70.9	25.5	50.0	48.0	49.3	47.5
Visiting dentist regularly		0.3	28.2	2.4	19.0	9.5	16.0	0.0	27.2	0.4	16.2	9.4	13.7	14.9
Using flouride paste / powder		0.0	0.7	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Avoid sweet items		5.4	25.8	8.5	20.6	10.1	17.2	8.0	25.8	8.5	18.4	14.9	17.2	17.2
Do not know		55.9	21.9	66.9	37.4	54.4	42.8	55.2	19.3	65.2	40.2	43.1	41.3	42.1

5.5.3 15 years olds

About 26% of respondents, across both sexes and places of residence, were not aware of oral health problems. Of those aware of the problems 70% and another about 25% of them across both sexes and places of residence reported problems such as tooth decay and gum disease/bad smell/strained teeth respectively. The respondents, across both sexes and places of residence, unaware of oral health problems were comparatively more in Jammu region than in other two regions. There was comparatively more knowing of tooth decay, a problem of oral health in each of the three regions. Table -5.5.3.

About 35% of respondents, more females than males and more in urban than in rural, had no knowledge of factors that cause oral health problems. Of those aware of the causative factors, 48%, 42% and about 17% of them reported factors such as eating sweet items/ice creams, not brushing regularly and not rinsing/consuming tobacco respectively. There were more males than females and more in rural than in urban could tell the causative factors, in the state.

There were 56%, 40% and 16% in Jammu Ladakh and Srinagar regions unaware of causative factors respectively. However, there were comparatively more aware of factor such as not brushing regularly in each region.

As regard respondents aware of preventive measures, one third of them, more females than males and more in urban than in rural, did not know of preventive measures in the state. Unaware of preventive measure were comparatively more in Jammu region and least in Srinagar region.

Of those aware of preventive measures in the state 55% of them reported regular cleaning of teeth. While other about 22% and 15% told avoiding of sweet items and not consuming of tobacco. Beside this there was another about 15% of respondents who described regular visits to dentists a measure to prevent oral health problems. Those aware of preventive measures, were more males than females and more in rural than in urban area.

There was comparatively high percent of respondents aware of preventive measures in Srinagar region and surprisingly least in Jammu region, which has comparative more literate and economically better population.

Table: 5.5.3 Percent 15 year olds by reported awareness of oral health problems, their causes & preventive measures, sex & geographical area.

AGE: 15 yrs

STATE : Jammu & Kashmir

Awareness of Oral Health Problems, Causes and Preventive Measures	n=	MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Awareness of Oral Health Problems		154	163	154	314	157	471	162	152	155	310	159	469	940
No knowledge		35.2	8.3	44.5	22.8	28.4	24.6	36.8	11.5	44.6	27.6	24.4	26.5	25.6
Tooth decay		58.5	87.2	53.1	73.2	69.0	71.8	60.1	81.4	53.5	66.7	73.8	69.1	70.5
Gum disease		1.6	31.6	2.0	22.6	5.2	16.9	0.8	32.5	1.9	22.2	6.3	16.7	16.8
Bad smell		2.8	7.9	0.8	5.9	1.1	4.4	0.0	10.7	0.0	7.3	1.1	5.2	4.8
Stained teeth		1.6	4.0	0.4	3.0	0.8	2.3	2.3	4.9	0.0	3.2	1.1	2.5	2.4
Others		1.1	0.7	0.0	0.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2
2 Factors that cause Oral Health Problems														
Eating sweets/ice cream		27.1	77.1	23.2	55.4	46.5	52.5	21.8	62.6	24.4	49.0	31.6	43.0	47.8
Not brushing regularly		34.4	61.3	22.7	47.7	34.0	43.2	36.7	63.2	17.8	45.5	33.7	41.4	42.3
Not rinsing		1.1	27.0	0.0	17.3	7.8	14.2	0.0	27.0	0.0	16.6	7.7	13.6	13.9
Consuming tobacco		1.1	5.0	0.0	3.0	2.3	2.7	0.0	5.8	0.0	4.2	0.0	2.7	2.7
Do not know		38.1	10.9	54.5	28.0	35.8	30.6	42.8	21.1	57.8	35.1	45.9	38.8	34.7
3 Reported Preventive Measures														
Not consuming Tobacco		2.3	23.8	1.5	16.2	6.7	13.1	0.0	30.9	0.4	19.7	7.4	15.5	14.3
Cleaning teeth regularly		44.7	76.8	37.0	60.5	55.4	58.8	42.1	71.7	31.2	56.4	43.3	51.9	55.4
Visiting dentist regularly		0.8	25.0	1.6	16.3	9.3	13.9	0.0	30.7	3.6	20.6	10.0	16.9	15.4
Using flouride paste / powder		0.0	0.7	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Avoid sweet items		11.2	40.3	4.8	26.2	19.9	24.1	8.3	28.5	10.5	22.3	13.3	19.2	21.7
Do not know		41.0	9.5	55.5	28.3	33.9	30.1	50.7	18.7	55.0	32.4	44.9	36.7	33.4

5.5.4 35-44 year olds

About 19%, of respondents, more females and more in urban, were not aware of oral health problems in the state. The respondents not aware of oral health problems were comparatively more in Jammu region and least in Srinagar region.

Of those aware of the oral health problems, about 78% of them reported tooth decay and another 21% and 7% reported gum disease and bad smell etc. respectively. Those who could tell the problems, were more males and more living in rural areas of the state. Table – 5.5.4

About 75-80% of respondents in each of the three regions reported tooth decay, a oral health problem.

About 38% of respondents more females and more in urban, could not tell the factors that cause oral health problems in the state. Of those aware of the causative factors, about 41% and another same percent of them reported eating sweets/ice creams and not brushing regularly respectively.

Beside this there was another about 5% reported not rinsing mouth after eating and other 4 percent, more males and more in rural reported consuming tobacco.

The percent of respondents aware of causative factors in Srinagar region, were twice than that in Ladakh and in Jammu regions. The respondents reported causative factors such as eating of sweet/ice creams and not brushing regularly in Srinagar region were twice that in Ladakh and in Jammu regions. There was comparatively more males than females who could tell causative factors in each region.

As regard awareness of preventive measures, about 36% comparatively more females and more in urban, were unaware of preventive measures. Of those aware of measures, about 52% and 17% of them reported regular cleaning of teeth and avoid of sweet items respectively. Another 17% and about 15% told not consuming of tobacco and regular visits to dentists respectively. These respondents were equally divided by sex and more in rural than in urban areas of the state.

There was more unaware of preventive measures in Jammu region (about 52%) and (less 19%) in Srinagar region. More of aware in each region reported regular cleaning of teeth. Their percentage varied from 35% in Jammu region to about 68% in Srinagar region.

Table: 5.5.4 Percent 35-44 year olds by reported awareness of oral health problems, their causes & preventive measures, sex & geographical area.

AGE: 35-44 yrs

STATE : Jammu & Kashmir

Awareness of Oral Health Problems, Causes and Preventive Measures	n=	MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Awareness of Oral Health Problems		159	153	155	307	160	467	158	177	155	334	156	490	957
No knowledge		19.4	5.1	26.3	12.8	20.2	15.4	27.5	15.2	30.4	19.4	29.1	22.4	18.9
Tooth decay		73.8	90.5	71.0	82.5	78.9	81.2	65.1	82.2	65.8	77.5	67.5	74.4	77.8
Gum disease		4.5	37.6	3.1	25.6	10.2	20.2	3.5	39.0	3.4	28.7	7.5	22.1	21.2
Bad smell		0.0	14.5	0.8	10.9	0.0	7.1	1.6	7.8	0.0	5.5	1.1	4.2	5.7
Stained teeth		1.9	4.4	0.0	3.2	0.0	2.1	4.8	1.8	0.0	1.5	0.0	1.1	1.6
Others		0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.7	0.4	0.0	0.3	0.2
2 Factors that cause Oral Health Problems														
Eating sweets/ice cream		33.0	57.5	25.1	45.2	35.2	41.7	22.6	54.2	25.9	45.4	30.8	40.8	41.3
Not brushing regularly		35.5	61.3	29.0	51.6	31.9	44.7	41.1	52.8	19.0	41.6	30.2	38.0	41.4
Not rinsing		3.0	32.5	0.4	20.5	9.4	16.6	1.1	25.7	0.0	16.5	9.0	14.2	15.4
Consuming tobacco		0.8	9.2	1.5	7.2	1.1	5.1	0.0	3.1	1.5	3.1	0.0	2.1	3.6
Do not know		27.0	20.3	44.4	27.3	41.5	32.3	35.5	35.9	54.1	40.2	53.2	44.3	38.3
3 Reported Preventive Measures														
Not consuming Tobacco		2.4	30.2	2.1	20.5	7.6	15.9	1.4	31.3	1.5	21.4	9.0	17.5	16.7
Cleaning teeth regularly		47.1	70.0	39.2	58.5	48.4	55.0	40.8	61.6	30.7	50.3	43.2	48.1	51.6
Visiting dentist regularly		0.8	23.3	4.3	16.0	9.7	13.8	0.8	26.4	2.2	17.0	12.7	15.7	14.8
Using flouride paste / powder		0.8	2.2	0.8	2.0	0.0	1.3	0.0	0.6	0.0	0.5	0.0	0.3	0.8
Avoid sweet items		15.2	30.2	6.0	20.0	16.8	18.9	9.6	20.8	9.5	17.3	11.5	15.5	17.2
Do not know		34.9	18.2	45.8	28.8	36.2	31.4	48.5	28.8	55.3	37.5	48.1	40.8	36.1

5.5.5 65-74 year olds

About 34% of respondents, more females and more in urban, were not aware of oral health problems in the state. Of those aware of the problems, about 63% and 21% reported tooth decay and gum disease respectively. There was others 9%, identified bad smell, strained teeth etc as oral health problems. Those reported the problems were more males, living in rural areas of the state.

Table 5.5.5.

There was more unaware of the problems in Jammu region (55.6%) and less (about 16%) in Srinagar region. There were 41%, 51% and 82% of respondents in Jammu, Ladakh and Srinagar regions reported tooth decay oral health problem, respectively. These were more males than females in each region.

About 52% of respondents could not tell the factors that cause oral health problems. These were more females, more in urban area of the state.

Of those had knowledge of causative factors in the state, about 35% and 30% of them identified eating sweets/ice creams and not brushing regularly respectively. Besides this there was about 16% and 6% told not rinsing and consuming of tobacco factors responsible for oral health problems respectively.

About 71% in Jammu region and 36% in Srinagar region and 51% in Ladakh region, more females than males did not know of causative factors. There were more in each region reported causative factor not brushing regularly followed by factor eating of sweets/ice cream etc. These were more males than females.

About 53% of respondent more females and more in urban, were not aware of preventive measures.

36% and 17% and 30%, more males than females and more in rural than in urban were aware of preventive measures, such as cleaning of teeth regularly, not consuming tobacco and regular visit to dentists regularly, avoid of sweet items. These were more females and more in rural areas of the state.

There were comparatively more unaware of preventive measures in Jammu region, followed by in Ladakh region and less in Srinagar region. More in each region reported cleaning of teeth regularly, a measure to prevent oral health problems.

Table: 5.5.5 Percent 65-74 year olds by reported awareness of oral health problems, their causes & preventive measures, sex & geographical area.

AGE: 65-74 yrs

STATE : Jammu & Kashmir

Awareness of Oral Health Problems, Causes and Preventive Measures		MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Awareness of Oral Health Problems	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
No knowledge		40.0	11.1	52.4	25.4	37.1	29.2	42.3	20.0	58.7	36.8	41.9	38.5	33.9
Tooth decay		52.3	87.9	44.0	72.7	59.5	68.5	50.3	75.3	38.2	59.5	53.1	57.3	62.9
Gum disease		4.2	41.8	2.8	30.8	7.8	23.5	4.0	33.7	3.1	22.7	8.4	17.8	20.7
Bad smell		1.1	14.5	0.8	11.0	1.1	7.9	1.6	7.6	0.0	5.4	0.0	3.5	5.7
Stained teeth		3.9	8.4	0.0	6.1	1.1	4.5	3.4	5.3	0.0	3.8	0.0	2.5	3.5
Others		0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
2 Factors that cause Oral Health Problems														
Eating sweets/ice cream		15.0	56.6	20.4	45.9	25.8	39.5	17.9	48.1	13.5	33.9	25.1	30.8	35.2
Not brushing regularly		33.7	54.0	8.6	39.8	21.2	33.9	29.0	41.3	9.7	28.9	20.3	26.0	30.0
Not rinsing		0.3	37.0	0.8	25.7	8.8	20.3	1.9	24.1	0.0	13.9	9.0	12.2	16.3
Consuming tobacco		1.6	10.2	3.5	9.0	1.8	6.7	1.1	6.8	3.0	6.6	0.0	4.3	5.5
Do not know		50.5	30.1	67.3	40.4	61.8	47.2	51.7	42.1	73.8	54.0	64.6	57.6	52.4
3 Reported Preventive Measures														
Not consuming Tobacco		2.6	38.6	3.5	28.7	7.4	22.0	0.6	23.6	1.5	14.7	7.9	12.4	17.2
Cleaning teeth regularly		30.7	57.2	14.6	42.1	31.6	38.8	30.7	50.7	14.9	35.0	31.0	33.6	36.2
Visiting dentist regularly		0.8	28.7	2.5	19.7	10.7	16.8	0.8	26.4	0.4	15.4	9.7	13.5	15.2
Using flouride paste / powder		0.8	1.8	0.0	1.4	0.0	1.0	0.0	0.8	0.0	0.5	0.0	0.3	0.7
Avoid sweet items		4.3	26.1	5.0	19.4	9.7	16.3	9.9	22.3	5.2	16.7	7.0	13.4	14.9
Do not know		60.7	27.0	73.3	42.4	58.6	47.6	58.1	41.4	77.5	55.8	64.9	59.0	53.3

AWARENESS OF DENTAL PROBLEMS ACROSS AGE GROUPS (SUMMING UP)

- (i) Approximately one third of respondents more females and more in urban, from each age/age group had no knowledge of oral health problems.
- (ii) Two third of those aware of problems from each age/age group reported dental decay. Another a quarter of them told gum disease.
- (iii) About 40 percent of those aware of causative factors from each age/age group reported eating sweets/ice cream etc. Another about 50 percent, from each age/age group told factors such as not brushing regularly and not rinsing always after meal.
- (iv) Nearly half of those aware of preventive measures, from each age group reported regular cleaning of teeth. Another one quarter from each age group told avoid sweet items and not consuming tobacco.

5.6 TOBACCO SMOKING AND CHEWING HABITS

Smoking and chewing tobacco have great effects on oral health. Therefore, questions related to smoking habits, chewing pan with tobacco and drinking of alcohol, were asked from respondents belonging to age groups 35-44 and 65-74 years assuming that negligible fraction of people in younger ages of 5, 12 and 15 years have such habits. The responses thus obtained are presented in Tables 5.6.4 and 5.6.5

5.6.4 35-44 year olds

24 percent of respondents about 43% males, more in rural and 5% females, more in urban, reported habit of smoking tobacco (Table 5.6.4). There were comparatively more males (53.4 percent) as well as more females (8%) smokers, in Srinagar region than in the other two regions.

As regard nature of smoking 75% of respondents more females and more in urban, were smoking Hookah. Other about 14%, more males and more in rural were smoking bidis. While 12.9 percent, all males irrespective of their places of residence reported smoking cigarettes in the state.

Almost 92% in Srinagar region, 84% in Ladakh region and 84% in Jammu region reported smoking hookah, Cigarettes and bidi respectively.

When asked about frequency of smoking, about 95% had smoked less than ten times in a day in the state as well as in each region.

A insignificant percent of respondents reported chewing tobacco or paan masala with tobacco in the state as well as in each region.

Those chewing pan or paan masala with tobacco, almost all males were asked since how long they have been chewing pan or paan masala with tobacco, in the state. Three fourth of them reported chewing pan or paan masala with tobacco for the last five years and chewing five to ten times in a day.

None reported chewing pan or paan masala with tobacco in Srinagar region.

Only 3 percent, more males and more in rural reported consuming alcohol, 87% of these drinking occasionally. These were more in Ladakh and very small in Srinagar.

Table 5.6.4 Percent 35-44 year olds by reported smoking, chewing pan & pan masala and alcohol taking habits, sex & geographical area.

AGE: 35-44 yrs

STATE : Jammu & Kashmir

Tobacco Smoking or Chewing with Pan masala and Alcohol taking habits		MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Smoking Habits	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
Subjects smoking tobacco		13.6	53.4	34.0	45.2	39.8	43.3	0.8	8.4	0.4	4.6	6.4	5.2	24.3
2 Nature of Smoking	n=	24	81	51	104	52	156	1	15	1	11	6	17	173
Chillum		0.0	5.4	0.0	4.6	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Hookah		0.0	91.2	0.0	56.9	67.8	60.4	0.0	92.7	0.0	89.5	88.1	88.9	74.7
Cigars		5.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cigarettes		66.6	3.3	29.5	12.5	13.6	12.9	100.0	0.0	0.0	0.6	0.0	0.3	6.6
Bidis		27.7	0.0	70.5	25.9	18.6	23.5	0.0	0.0	100.0	0.0	11.9	4.6	14.1
3 Number of times Smoking in a day														
< 10 times		81.7	92.6	77.5	86.4	90.6	87.7	100.0	100.0	100.0	100.0	100.0	100.0	93.9
10-20 times		18.3	6.4	21.2	13.6	4.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	5.4
20 + times		0.0	1.0	1.3	0.0	4.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.8
4 Chewing pan/pan masala habits	n=	159	153	155	307	160	467	158	177	155	334	156	490	957
Chew pan or pan masala with tobacco		3.1	0.0	2.7	1.5	0.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6
5 Number of years of chewing pan or pan masala with Tobacco	n=	4	0	4	7	1	8	0	0	0	0	0	0	8
Less than 5 years		50.0	0.0	72.1	65.3	100	72.7	0.0	0.0	0.0	0.0	0.0	0.0	36.4
5 - 10 years		25.0	0.0	27.9	32.7	0.0	25.7	0.0	0.0	0.0	0.0	0.0	0.0	12.9
> 10 years		25.0	0.0	0.0	2.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.8
6 Number of times of chewing tobacco in a day														
Less than 5 times		100.0	0.0	27.9	38.8	0.0	30.5	0.0	0.0	0.0	0.0	0.0	0.0	15.3
5 - 10 times		0.0	0.0	72.1	61.2	100	69.5	0.0	0.0	0.0	0.0	0.0	0.0	34.8
> 10 times		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 Alcohol consumption habits	n=	159	152	155	307	159	466	158	177	155	334	156	490	956
Consuming alcohol		29.5	0.7	10.8	6.9	3.1	5.6	16.2	0.6	0.0	1.0	0.0	0.7	3.2
8 Frequency of alcohol consumption	n=	40	1	16	49	8	57	21	1	0	21	1	22	79
Daily		2.7	0.0	0.0	0.4	0.0	0.3	9.8	0.0	0.0	5.3	0.0	5.2	2.8
3 times a week		14.3	0.0	13.9	15.0	1.2	12.3	14.7	0.0	0.0	8.0	0.0	7.8	10.1
Occasionally		83.0	100	86.1	84.6	98.8	87.3	75.5	100.0	0.0	86.7	100.0	87.0	87.2

5.6.5 65-74 year olds

36 percent of respondents, 54% males, and 19% females, more in urban had the habit of smoking tobacco. (Table 5.6.5). There were comparatively more males (57.9%) and as well as more females (29.2%) smokers in Srinagar region than in other two regions.

As regard nature of smoking, about 70%, more females and more in urban reported smoking hookah. Other 15% more males and more in rural, were smoking bidis. While 14% males and 6% females were smoking cigarettes.

There were comparatively more smoking hookah in Srinagar and, Bidi in Jammu region. As regard frequency of smoking, about 89% more females and more in urban, were smoking less than ten times in a day in the state as well as in each region.

Nearly 2 percent of respondents (2.1% males and 0.8% females more in urban) were chewing pan or paan masala with tobacco. The situation each region was more or less similar to that in the state.

The respondents were asked since how long have been chewing pan or paan masala with tobacco, 84% males and 50% females more in urban, reported chewing pan or paan masala with tobacco for the last ten years.

More in Srinagar and Jammu regions were chewing pan or paan masala with tobacco for the ten years. While all in Ladakh region were chewing pan or paan masala with tobacco for more than ten years.

As regard to frequency of chewing pan or paan masala with tobacco, almost all irrespective of sex and more in urban were chewing pan or paan masala with tobacco five to ten times in a day in the state as well as in each region.

Only 5 percent of respondents, 8% males and one percent females, more in rural areas, reported, taking alcohol. There were more (28%) in Ladakh, followed by (9%) in Jammu region, were taking alcohols.

As regard to frequency of taking alcohol, about 75% of those taking alcohol, more males and more in urban, were taking alcohol occasionally. About 10%, more females and more in rural reported taking alcohol daily.

Table 5.6.5 Percent 65-74 year olds by reported smoking, chewing pan & pan masala and alcohol taking habits, sex & geographical area.

AGE: 65-74 yrs

STATE : Jammu & Kashmir

Tobacco Smoking or Chewing with Pan masala and Alcohol taking habits		MALE						FEMALE						STATE TOTAL
		REGIONS			STATE			REGIONS			STATE			
		1	2	3	R	U	T	1	2	3	R	U	T	
1 Smoking Habits	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
Subjects smoking tobacco		4.3	57.9	48.8	51.3	58.3	53.5	1.1	28.2	7.8	17.5	20.3	18.5	36.0
2 Nature of Smoking	n=	8	105	75	123	65	188	2	41	13	35	21	56	244
Chillum		0.0	1.8	0.0	0.9	1.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Hookah		36.0	96.1	8.3	61.5	71.0	64.8	0.0	89.2	15.1	72.3	81.1	75.6	70.2
Cigars		7.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cigarettes		32.0	2.1	34.1	13.2	15.5	14.0	100.0	0.0	30.2	5.3	7.7	6.2	10.1
Bidis		25.0	0.0	57.6	24.4	11.6	19.9	0.0	0.0	54.8	10.3	11.2	10.6	15.3
3 Number of times Smoking in a day														
< 10 times		75.0	88.0	77.8	81.9	91.1	85.1	100.0	98.1	75.4	94.9	90.7	93.3	89.2
10-20 times		25.0	10.2	22.2	17.2	7.1	13.7	0.0	0.0	24.6	5.1	3.7	4.6	9.2
20 + times		0.0	1.8	0.0	0.9	1.9	1.2	0.0	1.9	0.0	0.0	5.5	2.1	1.7
4 Chewing pan/pan masala habits	n=	160	179	154	335	158	493	161	146	156	306	157	463	956
Chew pan or pan masala with tobacco		0.8	2.1	2.3	2.1	2.2	2.1	0.0	1.1	0.0	0.0	2.2	0.8	1.5
5 Number of years of chewing pan or pan masala with Tobacco	n=	1	4	3	6	2	8	0	2	0	0	2	2	10
Less than 5 years		0.0	29.0	0.0	21.7	0.0	14.6	0.0	50.0	0.0	0.0	50.0	50.0	32.3
5 - 10 years		0.0	42.0	100.0	55.3	100	69.9	0.0	0.0	0.0	0.0	0.0	0.0	35.0
> 10 years		100	29.0	0.0	23.0	0.0	15.5	0.0	50.0	0.0	0.0	50.0	50.0	32.8
6 Number of times of chewing tobacco in a day														
Less than 5 times		0.0	29.0	0.0	21.7	0.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0	7.3
5 - 10 times		100	71.0	100.0	78.3	100.0	85.4	0.0	100	0.0	0.0	100.0	100	92.7
> 10 times		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 Alcohol consumption habits	n=	160	178	154	335	157	492	161	146	156	306	157	463	955
Consuming alcohol		39.4	1.2	17.9	9.6	6.2	8.5	17.7	0.0	0.0	0.7	0.1	0.5	4.5
8 Frequency of alcohol consumption	n=	53	2	27	70	12	82	24	0	0	22	2	24	106
Daily		18.6	0.0	0.0	2.4	0.6	2.0	17.6	0.0	0.0	18.2	0.0	17.1	9.6
3 times a week		21.8	0.0	16.9	19.2	0.0	14.8	13.2	0.0	0.0	13.6	0.0	12.9	13.9
Occasionally		57.7	###	83.1	78.1	99.4	82.9	69.3	0.0	0.0	68.2	100.0	70.0	76.5

TOBACCO SMOKING AND CHEWING HABITS ACROSS AGE GROUPS (SUMMING UP)

- (i) About 40 percent, more males from each age group reported the habit of smoking tobacco.
- (ii) About 70 percent, more males and more in rural from each age group, were smoking Hookah. While 14 percent more males and more in rural from each age group had the habit of smoking Bidis. They were smoking less than ten times in a day.
- (iii) There were very small percent of respondents from each age group, chewing pan or paan masala with tobacco.
- (iv) About 4 percent more males and more in rural from each age group, reported consuming alcohol and most of them were taking occasionally.

CHAPTER VI

ORAL HEALTH STATUS

6.0 CLINICAL FINDINGS

The clinical findings are presented under the following broad heads:

1. Dental Caries status & Treatment Need
2. Periodontal Disease status
3. Malocclusion Status
4. Oral Cancers and other oral mucosal conditions
5. Dental Fluorosis status
6. Other conditions:

Extra Oral Lesions; TMJ Assessment; Enamel Opacities and Hypoplasia; Prosthetic Status & Need; and Community need for immediate Care and Referrals.

Tables (tabulated data) and Figures (charts and graphs) accompany the narrative report. The tables present a detailed picture of the findings (male and female subjects) while figures present the high points of the prevalence patterns based on totals (percentages combined for male and female subjects). The tables are numbered based on the chapter and section they represent while the figures are similarly numbered and represent the tables from which the data is drawn. The figures are only selectively prepared and do not always follow a table. The consistency of numbering is maintained and therefore, certain numbers of figures may be absent. A complete list of tables and figures is separately included in the report.

6.1 DENTAL CARIES STATUS

This section presents a review of data for both coronal (crown) caries and root caries. Coronal caries is of interest in all index age groups and was reported using a) the conventional dmft/DMFT index for primary and permanent teeth and b) the Significant Caries Index (SIC). The dmft values can range from 0 to 20 (primary teeth) and DMFT values from 0 to 32 (permanent teeth). The range of dmft/DMFT values has been grouped in such a way so as to provide some indication of decayed, missing and/or filled teeth expressed as a percentage of the normally present teeth in an average mouth. The number of normally present teeth is taken as 20 (age 5 years); 28 (age 12 and 15 years); and 32 (age 35-44 and 65-74 years).

The WHO Significant Caries Index (SIC) helps identify the high-risk groups in the surveyed population. The SIC Index is represented by the mean dmft/DMFT score of one-third of the population with the highest mean dmft/DMFT scores.

Root caries develops in the higher age groups and is, therefore, assessed for the 35-44 and 65-74 age groups; its greatest significance lies in the aging population in the 50-60 years or higher age groups.

6.1.1 Coronal caries

Tables 6.01 present the prevalence proportion of subjects by age and sex who were caries-free and those with caries experience using a range of dmft/DMFT values. The range of values has been grouped in such a way as to provide some indication of the proportion of dentition affected with caries out of the normally present number of teeth in an average mouth in the relevant age groups.

Table 6.02 presents the mean number of teeth decayed, missing and filled (mean dmft and mean DMFT) in the surveyed population and includes the Significant Caries (SIC) Index. The table also gives the mean number of teeth present in the mouth and the per cent subjects who were edentulous.

Table 6.03 presents the breakup of the per centage of subjects with missing teeth, due to caries and due to other reasons. This is presented for age groups 35-44 and 65-74 years.

The prevalence of caries experience (Fig 6.01) was high in the state in all age groups and in both primary teeth and permanent teeth. In 5 year olds, about 50.6 per cent children had experienced caries in the primary teeth. Of these, the dmft value of 1-3 was most prevalent (25.8 per cent). The dmft value of 4-5 (13.9 per cent) was next highest in prevalence followed by dmft value 6-10 (9.6 per cent). The mean dmft value for this age group was 1.8 (Table 6.02) which was contributed completely by the decayed teeth (dt) component. The Significant Caries (SIC) Index, which gives the mean of the one third of the subjects with the highest dmft/DMFT levels, was 5.2 for 5 year olds, indicating a significant high risk group (Table 6.02).

While the prevalence of caries was high in both rural and urban areas, it appeared that the per cent subjects with caries experience was marginally higher in the rural population (51.3 per cent) compared to the urban population (49.4 per cent). The mean dmft and the SIC index were also marginally higher in the rural population. There were no marked differentials between regions and between male and female subjects.

The caries experience in permanent teeth increased as age advanced

(Table 6.01). The percentage of subjects in the state with caries experience (permanent teeth), having one or more decayed, missing or filled teeth (DMFT>0), was approximately 47.5 in 12 year olds; 62.7 in 15 year olds and 87.2 in 35-44 year olds. The proportion of subjects with caries experience peaked in the 65-74 year age group (97.4 per cent). The DMFT value of 1-3 was most prevalent in 12 and 15 year old subjects followed by the next higher DMFT value of 4-7 or 4-8 teeth. Only about 0.5 per cent of 12 year olds and about 3.8 per cent of 15 year olds had a DMFT value of 8-14 teeth indicating a caries experience of one quarter to half the number of teeth in the mouth. In subjects aged 35-44 and 65-74 years, the percentage of subjects with caries experience

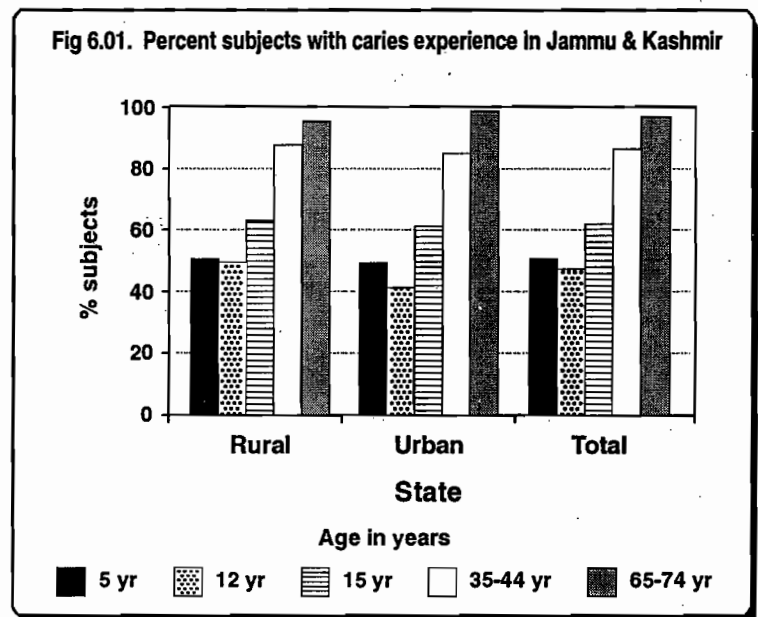


Table 6.01. Percent subjects with caries experience and with dmft/ DMFT values by age, sex and geographical area. State : Jammu & Kashmir

Decayed, Missing, Filled Teeth	n=	5 years			Decayed, Missing, Filled Teeth	n=	12 years			15 years			35-44 years			65-74 years		
		M	F	T			M	F	T	M	F	T	M	F	T	M	F	T
Region 1		161	156	317	Region 1		158	159	317	154	162	316	159	158	317	160	161	321
With caries experience		60.9	61.8	61.4	With caries experience		62.0	57.9	60.0	74.7	77.8	76.3	94.3	96.2	95.3	98.1	99.4	98.8
dmft value 1-3		26.7	31.8	29.3	DMFT value 1-3		46.2	46.5	46.4	45.5	42.0	43.8	23.3	10.8	17.1	2.5	1.2	1.9
dmft value 4-5		17.4	15.3	16.4	DMFT level 4-8		15.2	10.7	13.0	24.0	30.2	27.1	42.1	38.0	40.1	3.8	3.7	3.8
dmft value 6-10		13.7	13.4	13.6	DMFT value 9-16		0.6	0.6	0.6	5.2	4.9	5.1	24.5	31.0	27.8	20.0	15.5	17.8
dmft value 11-15		3.1	1.3	2.2	DMFT value 17-24		0.0	0.0	0.0	0.0	0.6	0.3	4.4	11.4	7.9	20.0	14.9	17.5
dmft value 16 or more		0.0	0.0	0.0	DMFT value 25-28		0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.3	14.4	19.3	16.9
					DMFT value 29 or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.3	37.5	44.7	41.1
Region 2		164	150	314	Region 2		167	147	314	163	152	315	153	177	330	179	146	325
With caries experience		43.9	47.4	45.7	With caries experience		46.7	43.5	45.1	60.1	62.5	61.3	78.4	88.1	83.3	89.4	98.6	94.0
dmft value 1-3		22.0	27.0	24.5	DMFT value 1-3		34.1	34.7	34.4	40.5	34.9	37.7	25.5	24.3	24.9	7.8	3.4	5.6
dmft value 4-5		11.6	14.5	13.1	DMFT level 4-8		11.4	8.2	9.8	19.0	24.3	21.7	32.7	43.5	38.1	21.2	18.5	19.9
dmft value 6-10		8.5	4.6	6.6	DMFT value 9-16		1.2	0.7	1.0	0.6	3.3	2.0	13.7	16.9	15.3	29.1	34.2	31.7
dmft value 11-15		1.8	1.3	1.6	DMFT value 17-24		0.0	0.0	0.0	0.0	0.0	0.0	5.9	2.8	4.4	14.0	22.6	18.3
dmft value 16 or more		0.0	0.0	0.0	DMFT value 25-28		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3	7.3	8.9	8.1
					DMFT value 29 or more		0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.4	10.1	11.0	10.6
Region 3		152	158	310	Region 3		154	156	310	154	155	309	155	155	310	154	156	310
With caries experience		48.0	41.8	44.9	With caries experience		35.7	38.5	37.1	44.8	55.5	50.2	80.0	85.8	82.9	99.4	100.0	99.7
dmft value 1-3		24.3	22.8	23.6	DMFT value 1-3		23.4	28.8	26.1	30.5	31.6	31.1	22.6	22.6	22.6	0.6	3.2	1.9
dmft value 4-5		15.8	8.9	12.4	DMFT level 4-8		12.3	9.6	11.0	10.4	19.4	14.9	34.2	43.2	38.7	8.4	6.4	7.4
dmft value 6-10		7.9	8.9	8.4	DMFT value 9-16		0.0	0.0	0.0	3.9	4.5	4.2	19.4	16.1	17.8	14.9	16.7	15.8
dmft value 11-15		0.0	0.6	0.3	DMFT value 17-24		0.0	0.0	0.0	0.0	0.0	0.0	3.2	2.6	2.9	20.1	22.4	21.3
dmft value 16 or more		0.0	0.6	0.3	DMFT value 25-28		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3	13.0	9.0	11.0
					DMFT value 29 or more		0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	42.2	42.3	42.3
State Rural		321	303	624	State Rural		323	302	625	314	310	624	307	334	641	335	306	641
With caries experience		50.8	51.8	51.3	With caries experience		52.6	48.0	50.3	59.6	67.7	63.7	85.7	90.7	88.2	93.4	99.0	96.2
dmft value 1-3		23.1	25.6	24.4	DMFT value 1-3		37.5	37.4	37.5	36.3	36.5	36.4	26.7	18.0	22.4	3.9	2.0	3.0
dmft value 4-5		15.0	13.8	14.4	DMFT level 4-8		14.2	9.9	12.1	20.1	27.1	23.6	32.6	43.4	38.0	11.9	8.8	10.4
dmft value 6-10		10.9	11.5	11.2	DMFT value 9-16		0.9	0.7	0.8	3.2	3.9	3.6	22.1	20.4	21.3	20.3	20.6	20.5
dmft value 11-15		1.9	0.7	1.3	DMFT value 17-24		0.0	0.0	0.0	0.0	0.3	0.2	3.6	6.3	5.0	17.9	20.3	19.1
dmft value 16 or more		0.0	0.3	0.2	DMFT value 25-28		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.6	11.3	13.1	12.2
					DMFT value 29 or more		0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5	1.1	28.1	34.3	31.2
State Urban		156	161	317	State Urban		156	160	316	157	159	316	160	156	316	158	157	315
With caries experience		51.3	47.5	49.4	With caries experience		39.1	44.4	41.8	60.5	61.0	60.8	81.9	88.5	85.2	99.4	100.0	99.7
dmft value 1-3		26.9	30.2	28.6	DMFT value 1-3		28.8	35.6	32.2	43.9	35.8	39.9	18.1	22.4	20.3	3.8	3.8	3.8
dmft value 4-5		14.7	11.1	12.9	DMFT level 4-8		10.3	8.8	9.6	13.4	20.1	16.8	43.8	37.8	40.8	10.8	10.2	10.5
dmft value 6-10		8.3	4.3	6.3	DMFT value 9-16		0.0	0.0	0.0	3.2	5.0	4.1	13.8	23.1	18.5	24.7	24.2	24.5
dmft value 11-15		1.3	1.9	1.6	DMFT value 17-24		0.0	0.0	0.0	0.0	0.0	0.0	6.3	3.8	5.1	17.7	19.1	18.4
dmft value 16 or more		0.0	0.0	0.0	DMFT value 25-28		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.7	11.4	11.5	11.5
					DMFT value 29 or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	31.2	31.1
State Total		477	464	941	State Total		479	462	941	471	469	940	467	490	957	493	463	956
With caries experience		50.9	50.3	50.6	With caries experience		48.2	46.8	47.5	59.9	65.5	62.7	84.4	90.0	87.2	95.3	99.4	97.4
dmft value 1-3		24.3	27.2	25.8	DMFT value 1-3		34.7	36.8	35.8	38.9	36.2	37.6	23.8	19.4	21.6	3.9	2.6	3.3
dmft value 4-5		14.9	12.8	13.9	DMFT level 4-8		12.9	9.5	11.2	17.8	24.7	21.3	36.4	41.6	39.0	11.6	9.3	10.5
dmft value 6-10		10.1	9.0	9.6	DMFT value 9-16		0.6	0.4	0.5	3.2	4.3	3.8	19.3	21.2	20.3	21.7	21.8	21.8
dmft value 11-15		1.7	1.1	1.4	DMFT value 17-24		0.0	0.0	0.0	0.0	0.2	0.1	4.5	5.5	5.0	17.8	19.9	18.9
dmft value 16 or more		0.0	0.2	0.1	DMFT value 25-28		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.6	11.4	12.5	12.0
					DMFT value 29 or more		0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	0.7	29.0	33.3	31.2

Note: The categories of DMFT values of 4-7, 8-14, 15-21 and 22-28 have been computed and apply to subjects aged 12 and 15 years only. In age groups 35-44 yr and 65-74 yr, the 'M' (Missing) component includes both missing due to caries and missing due to other reasons. Associated Tables :6.02 and 6.03.

in more than half of the teeth present in the mouth was 6.3 and 62 per cent respectively. In the 65-74 year old subjects, the lowest DMFT value of 1-3 was least prevalent.

The mean number of teeth having decayed, missing and/or filled teeth (DMF teeth) was 1.1 (12 year olds); 1.9 (15 year olds); 5.7 (35-44 year olds) and 18.4 (65-74 year olds). The decayed teeth (DT) component accounted for the whole of DMFT in 12 and 15 year old subjects. In 35-44 year old subjects, decayed teeth component was higher than the missing teeth component. In the 65-74 year old subjects, the missing teeth component was significantly much higher (15.1) than the decayed teeth (3.3) component. In all cases, almost all teeth missing were due to caries.

The percentage of females with caries was marginally higher than their male counterparts, except in 5 and 12 year olds. Except in the 65-74 year age group, rural subjects had more caries than urban residents. The caries experience in Region 1 for all age groups except for 65-74 year age group appeared to be higher than the other regions both in terms of per cent subjects affected and their mean DMFT values including the SIC index.

About 9.6 per cent subjects in the age group of 65-74 years were edentulous or without natural teeth. Overall, the number of teeth present in the mouth of individuals surveyed decreased as age advanced (Table 6.02). More females than males, and more rural residents than urban residents, had edentulousness. While almost the full complement of teeth were present in subjects aged 5 years, one to two teeth were missing on an average in subjects aged 12 years, 15 years, and 35-44 years. However, in the age group of 65-74 years, the mean number of teeth present apparently dropped to 16.9 indicating a loss of more than half of the normally present 32 teeth in an average mouth. These findings suggest the cumulative high tooth mortality due to caries, but also probably due to other contributing causes such as periodontal disease, orthodontic or other reasons.

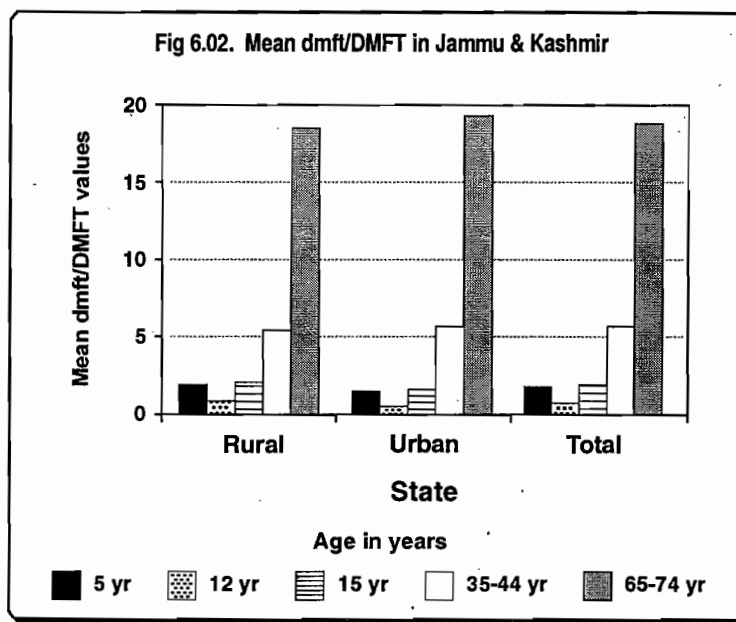


Table 6.02 Mean number of teeth decayed, missing, filled by age, sex and geographical area.

State : Jammu & Kashmir

Decayed, Missing, Filled Teeth		5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	156	317	158	159	317	152	162	314	159	157	316	159	160	319
Mean no. of teeth present (mnt/MNT)		20.0	20.0	20.0	28.0	28.0	28.0	27.9	27.8	27.9	29.0	27.8	28.4	12.1	10.5	11.3
Mean dmft and Mean DMFT		2.7	2.7	2.7	1.7	1.4	1.6	2.6	2.9	2.8	6.7	10.4	8.6	23.1	24.8	24.0
Mean no. of Decayed teeth (dt/DT)		2.7	2.7	2.7	1.6	1.3	1.5	2.5	2.7	2.6	3.7	6.3	5.0	3.1	3.3	3.2
Mean no. of Missing teeth (mt/MT)		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	3.0	4.2	3.6	19.9	21.5	20.7
Mean no. of Filled teeth (ft/FT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIC Index		6.2	6.0	6.1	3.6	3.3	3.5	5.1	5.8	5.5	11.8	18.3	15.1	31.9	32.0	32.0
No. of subjects edentulous		0	0	0	0	0	0	0	0	0	0	0	0	34	38	72
Region 2	n=	164	150	314	166	147	313	163	152	315	147	168	315	165	145	310
Mean no. of teeth present (mnt/MNT)		20.0	20.0	20.0	28.0	28.0	28.0	27.9	27.9	27.9	29.3	29.3	29.3	22.7	19.7	21.2
Mean dmft and Mean DMFT		1.7	1.7	1.7	1.2	1.0	1.1	1.7	2.3	2.0	5.3	5.7	5.5	12.9	16.0	14.5
Mean no. of Decayed teeth (dt/DT)		1.7	1.7	1.7	1.2	1.0	1.1	1.6	2.1	1.9	2.5	3.0	2.8	3.6	3.7	3.7
Mean no. of Missing teeth (mt/MT)		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	2.7	2.7	2.7	9.3	12.3	10.8
Mean no. of Filled teeth (ft/FT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIC Index		4.8	4.3	4.6	3.1	2.7	2.9	4.0	5.3	4.7	11.4	10.7	11.1	24.5	26.1	25.3
No. of subjects edentulous		0	0	0	0	0	0	0	0	0	1	0	1	8	5	13
Region 3	n=	152	158	310	154	156	310	154	155	309	155	155	310	154	156	310
Mean no. of teeth present (mnt/MNT)		20.0	20.0	20.0	28.0	28.0	28.0	28.0	27.9	28.0	29.4	29.6	29.5	11.1	11.7	11.4
Mean dmft and Mean DMFT		1.7	1.7	1.7	0.9	0.9	0.9	1.4	1.9	1.7	5.6	5.7	5.7	23.3	23.1	23.2
Mean no. of Decayed teeth (dt/DT)		1.7	1.7	1.7	0.9	0.9	0.9	1.4	1.8	1.6	2.9	3.3	3.1	2.5	2.8	2.7
Mean no. of Missing teeth (mt/MT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	2.6	2.4	2.5	20.9	20.3	20.6
Mean no. of Filled teeth (ft/FT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIC Index		4.4	4.7	4.6	2.6	2.6	2.6	3.9	4.6	4.3	11.1	11.3	11.2	32.0	32.0	32.0
No. of subjects edentulous		0	0	0	0	0	0	0	0	0	0	0	0	40	54	94
State Rural	n=	321	303	624	322	302	624	313	310	623	301	325	626	320	304	624
Mean no. of teeth present (mnt/MNT)		20.0	20.0	20.0	28.0	28.0	28.0	27.9	27.9	27.9	29.5	29.5	29.5	18.7	16.0	17.4
Mean dmft and Mean DMFT		1.9	1.9	1.9	1.2	1.1	1.2	1.7	2.2	2.0	5.2	5.9	5.6	16.5	19.5	18.0
Mean no. of Decayed teeth (dt/DT)		1.9	1.9	1.9	1.2	1.1	1.2	1.6	2.1	1.9	2.7	3.4	3.1	3.2	3.5	3.4
Mean no. of Missing teeth (mt/MT)		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	2.5	2.5	2.5	13.3	16.0	14.7
Mean no. of Filled teeth (ft/FT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIC Index		5.5	5.5	5.5	3.4	3.0	3.2	4.7	5.5	5.1	11.7	14.5	13.1	31.0	31.6	31.3
No. of subjects edentulous		0	0	0	0	0	0	0	0	0	1	0	1	58	65	123
State Urban	n=	156	161	317	156	160	316	156	159	315	160	155	315	158	157	315
Mean no. of teeth present (mnt/MNT)		20.0	20.0	20.0	28.0	28.0	28.0	28.0	27.8	27.9	29.0	29.2	29.1	16.1	15.7	15.9
Mean dmft and Mean DMFT		1.5	1.4	1.5	0.8	0.8	0.8	1.4	2.0	1.7	5.8	5.6	5.7	18.9	19.1	19.0
Mean no. of Decayed teeth (dt/DT)		1.5	1.4	1.5	0.8	0.8	0.8	1.4	1.8	1.6	2.8	2.8	2.8	3.0	2.8	2.9
Mean no. of Missing teeth (mt/MT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	3.0	2.8	2.9	15.9	16.3	16.1
Mean no. of Filled teeth (ft/FT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIC Index		4.8	4.3	4.6	2.8	2.8	2.8	3.9	4.9	4.4	11.3	12.5	11.9	31.2	31.4	31.3
No. of subjects edentulous		0	0	0	0	0	0	0	0	0	0	0	0	24	32	56
State Total	n=	477	464	941	478	462	940	469	469	938	461	480	941	478	461	939
Mean no. of teeth present (mnt/MNT)		20.0	20.0	20.0	28.0	28.0	28.0	27.9	27.9	27.9	29.4	29.4	29.4	18.0	15.8	16.9
Mean dmft and Mean DMFT		1.8	1.7	1.8	1.1	1.0	1.1	1.6	2.1	1.9	5.4	5.9	5.7	17.2	19.5	18.4
Mean no. of Decayed teeth (dt/DT)		1.8	1.7	1.8	1.1	1.0	1.1	1.6	2.0	1.8	2.8	3.3	3.1	3.2	3.3	3.3
Mean no. of Missing teeth (mt/MT)		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	2.6	2.6	2.6	14.0	16.2	15.1
Mean no. of Filled teeth (ft/FT)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIC Index		5.3	5.1	5.2	3.3	2.9	3.1	4.4	5.3	4.9	11.5	13.9	12.7	31.1	31.5	31.3
No. of subjects edentulous		0	0	0	0	0	0	0	0	0	1	0	1	82	97	179

Note: In age groups 35-44 yr and 65-74 yr, the 'MT' (Missing Teeth) component includes both missing due to caries and missing due to other reasons. For detailed breakup, please refer to and co-relate with Table No. 6.03. Associated Tables : 6.01 and 6.03.

Table 6.03 Mean number of teeth missing due to caries or other reasons by age, sex and geographical area.

State : Jammu & Kashmir

Missing Teeth		12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	158	159	317	152	162	314	159	157	316	159	160	319
Mean no. of teeth missing due to caries		0.0	0.0	0.0	0.1	0.2	0.2	3.0	4.2	3.6	19.8	21.4	20.6
Mean no. of teeth missing due to other reasons		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Region 2	n=	166	147	313	163	152	315	147	168	315	165	145	310
Mean no. of teeth missing due to caries		0.0	0.0	0.0	0.1	0.1	0.1	2.6	2.7	2.7	8.9	11.7	10.3
Mean no. of teeth missing due to other reasons		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.6	0.5
Region 3	n=	154	156	310	154	155	309	155	155	310	154	156	310
Mean no. of teeth missing due to caries		0.0	0.0	0.0	0.0	0.1	0.1	2.6	2.4	2.5	20.7	20.1	20.4
Mean no. of teeth missing due to other reasons		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
State Rural	n=	322	302	624	313	310	623	301	325	626	320	304	624
Mean no. of teeth missing due to caries		0.0	0.0	0.0	0.1	0.1	0.1	2.4	2.5	2.5	13.0	15.5	14.3
Mean no. of teeth missing due to other reasons		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.5	0.4
State Urban	n=	156	160	316	156	159	315	160	155	315	158	157	315
Mean no. of teeth missing due to caries		0.0	0.0	0.0	0.0	0.2	0.1	3.0	2.8	2.9	15.8	16.0	15.9
Mean no. of teeth missing due to other reasons		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.3
State Total	n=	478	462	940	469	469	938	461	480	941	478	461	939
Mean no. of teeth missing due to caries		0.0	0.0	0.0	0.1	0.1	0.1	2.6	2.6	2.6	13.8	15.8	14.8
Mean no. of teeth missing due to other reasons		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.4

Note: In age groups 35-44 yr and 65-74 yr, the 'M' (Missing) component in DMF includes both missing due to caries and missing due to other reasons. Related Tables : 6.01 and 6.02.

6.1.2. Root caries

Table 6.04 presents the per cent subjects with root caries and fillings, if any, and the mean number of teeth with root caries and fillings, if any.

The Root Caries, does not appear in children and young adults. Therefore the data on root caries is presented only for the two age groups of 35-44 and 65-74 years.

The proportion of subjects with root caries was approximately 0.5 per cent and 0.8 per cent respectively in the age groups 35-44 and 65-74 years. Root caries was detected only in rural residents. There were no subjects in the state with root fillings.

Table 6.04 Percent subjects and mean no. of teeth with root caries and fillings by age, sex and geographical area. State : Jammu & Kashmir

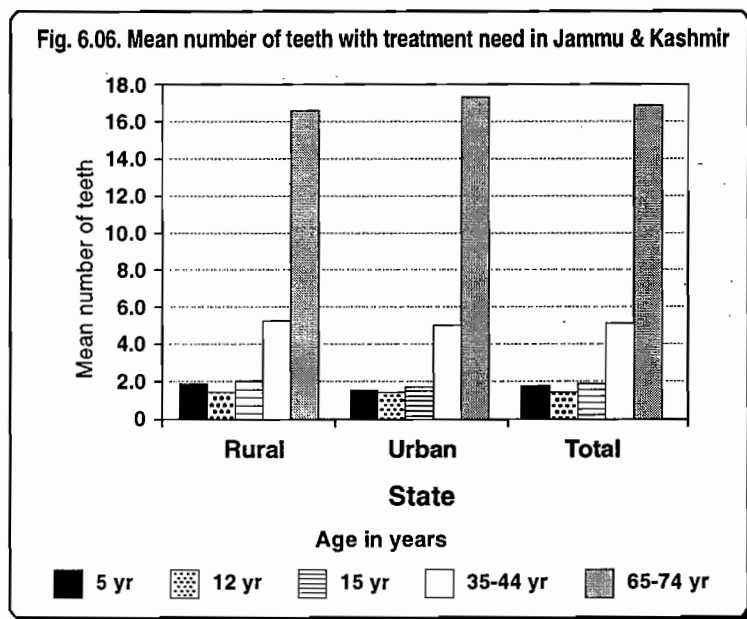
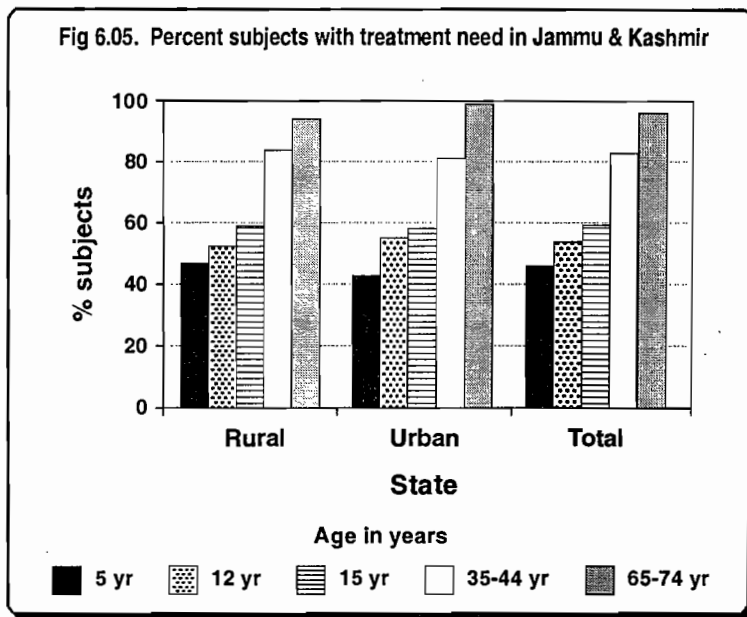
Root Caries		35-44 years			65-74 years		
		M	F	T	M	F	T
Region 1	n=	159	158	317	160	161	321
% Subjects with Root caries		0.8	0.0	0.4	0.0	0.0	0.0
Mean nos of teeth with Root Caries		0.0	0.0	0.0	0.0	0.0	0.0
% Subjects with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Mean nos of teeth with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Region 2	n=	153	177	330	179	146	325
% Subjects with Root caries		1.5	0.6	1.1	3.0	0.8	1.9
Mean nos of teeth with Root Caries		0.0	0.0	0.0	0.2	0.0	0.1
% Subjects with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Mean nos of teeth with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Region 3	n=	155	155	310	154	156	310
% Subjects with Root caries		0.0	0.0	0.0	0.0	0.7	0.4
Mean nos of teeth with Root Caries		0.0	0.0	0.0	0.0	0.0	0.0
% Subjects with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Mean nos of teeth with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
State Rural	n=	307	334	641	335	306	641
% Subjects with Root caries		0.9	0.3	0.6	1.4	0.6	1.0
Mean nos of teeth with Root Caries		0.0	0.0	0.0	0.1	0.0	0.1
% Subjects with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Mean nos of teeth with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
State Urban	n=	160	156	316	158	157	315
% Subjects with Root caries		0.0	0.0	0.0	0.0	0.0	0.0
Mean nos of teeth with Root Caries		0.0	0.0	0.0	0.0	0.0	0.0
% Subjects with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Mean nos of teeth with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	467	490	957	493	463	956
% Subjects with Root caries		0.7	0.2	0.5	1.1	0.5	0.8
Mean nos of teeth with Root Caries		0.0	0.0	0.0	0.1	0.0	0.1
% Subjects with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0
Mean nos of teeth with Root fillings		0.0	0.0	0.0	0.0	0.0	0.0

6.1.3 Treatment need

Table 6.05 presents the per cent subjects requiring preventive and treatment care by type of treatment needed, and Table 6.06 presents the mean number of teeth requiring treatment, by type of treatment.

The subjects were clinically assessed for their need for both preventive and treatment care, based on their caries experience and dentition status. Preventive care need included caries arresting care and fissure sealing. Treatment need included the need for one, two or more surface fillings, extractions of teeth, pulp care, crowns and veneers.

The per cent subjects requiring treatment was consistently high in all age groups in the state and ranged from 46 per cent needing treatment in 5 year olds to about 96 per cent in 65-74 year olds. Except in the age group of 65-74 years, the most prevalent need was for one or more surface fillings followed by extractions and pulp care. There was a high, unspecified need for treatment across age groups. In 65-74 year age group, almost 92.4 per cent subjects needed other but unspecified care and 47.5 per cent needed extractions followed by 38.6 per cent subjects who needed one or more surface fillings. Crowns and veneers were required for 1.4 per cent subjects in this age group. There were no marked differentials between male and female subjects requiring treatment or between rural and urban subjects. The pattern of need was similar in between regions.



Although the per cent subjects needing treatment was high across age groups, the mean number of teeth needing treatment was less than 2 teeth for 5, 12 and 15 year old subjects. The type of treatment varied with age. The mean was higher for 35-44 year subjects (5.2) and it was much higher (16.2) for the highest age group of 65-74 years. There were no differentials between male and female subjects. The mean number of teeth requiring fillings was highest in all age groups except 65-74 year subjects where it was extractions.

Table 6.05. Percent subjects with treatment need by age, sex and geographical area.

State : Jammu & Kashmir

Treatment Need		5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	157	318	158	159	317	154	162	316	159	158	317	160	161	321
Treatment needed		60.1	63.9	62.0	68.6	63.1	65.9	75.4	79.5	77.5	94.5	95.1	94.8	97.8	98.9	98.4
Preventive care & fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		58.5	63.1	60.8	61.5	54.3	57.9	68.0	76.3	72.2	80.2	79.2	79.7	19.5	20.4	20.0
Crown & Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4	1.6	0.8	1.2	2.2	3.2	2.7
Pulp care		0.0	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.8	0.0	0.4
Extraction		8.6	11.5	10.1	7.8	7.3	7.6	16.6	15.8	16.2	48.3	64.4	56.4	49.7	50.0	49.9
Need for other care		1.1	0.0	0.6	12.3	11.9	12.1	6.7	7.2	7.0	66.1	70.5	68.3	95.2	97.1	96.2
Region 2	n=	164	152	316	167	147	314	163	152	315	153	177	330	179	146	325
Treatment needed		45.0	46.4	45.7	58.0	53.8	55.9	62.7	65.7	64.2	76.3	86.1	81.2	87.4	98.5	93.0
Preventive care & fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		43.4	46.4	44.9	44.5	42.2	43.4	56.4	60.1	58.3	59.5	71.0	65.3	48.4	53.9	51.2
Crown & Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.7	0.6	1.9	1.3
Pulp care		0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	3.0	0.0	1.5	0.0	0.0	0.0
Extraction		8.4	6.2	7.3	4.7	2.3	3.5	8.7	7.9	8.3	32.8	36.1	34.5	49.8	53.1	51.5
Need for other care		0.0	0.0	0.0	16.9	15.8	16.4	7.9	12.2	10.1	52.5	62.3	57.4	81.8	94.9	88.4
Region 3	n=	152	158	310	154	156	310	154	155	309	155	155	310	154	156	310
Treatment needed		48.6	42.1	45.4	49.1	48.5	48.8	46.7	57.2	52.0	80.7	89.4	85.1	99.2	100.0	99.6
Preventive care & fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		47.9	41.4	44.7	38.9	36.8	37.9	44.8	54.6	49.7	53.7	60.6	57.2	18.0	29.0	23.5
Crown & Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.4	0.8	1.9	1.4
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0
Extraction		5.5	3.1	4.3	0.8	4.3	2.6	5.4	9.1	7.3	40.6	46.6	43.6	40.3	45.0	42.7
Need for other care		0.0	0.7	0.4	12.1	10.2	11.2	3.1	3.9	3.5	63.4	60.1	61.8	97.7	97.3	97.5
State Rural	n=	321	305	626	323	302	625	314	310	624	307	334	641	335	306	641
Treatment needed		47.9	46.1	47.0	54.5	50.7	52.6	55.8	63.2	59.5	79.2	88.8	84.0	90.4	98.9	94.7
Preventive care & fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		46.9	45.6	46.3	45.9	41.1	43.5	50.8	59.7	55.3	56.5	66.5	61.5	33.7	41.6	37.7
Crown & Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.8	0.9	1.5	1.2
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.2	1.1	0.0	0.0	0.0
Extraction		7.2	5.4	6.3	3.1	3.7	3.4	8.0	9.5	8.8	41.1	44.0	42.6	49.8	51.5	50.7
Need for other care		0.0	0.4	0.2	11.0	9.9	10.5	6.9	7.7	7.3	55.7	61.4	58.6	86.3	95.4	90.9
State Urban	n=	156	162	318	156	160	316	157	159	316	160	156	316	158	157	315
Treatment needed		43.8	41.9	42.9	55.0	54.4	54.7	58.0	60.1	59.1	77.4	83.7	80.6	98.8	100.0	99.4
Preventive care & fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		41.6	41.9	41.8	32.1	37.5	34.8	55.1	53.7	54.4	60.6	68.7	64.7	42.0	42.1	42.1
Crown & Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.1	1.6
Pulp care		0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1	3.2	0.0	1.6	0.0	0.0	0.0
Extraction		7.2	3.6	5.4	3.5	2.4	3.0	6.2	6.1	6.2	23.9	31.2	27.6	33.7	43.1	38.4
Need for other care		0.0	0.0	0.0	27.2	22.3	24.8	2.7	10.6	6.7	63.0	62.5	62.8	95.5	98.0	96.8
State Total	n=	477	467	944	479	462	941	471	469	940	467	490	957	493	463	956
Treatment needed		46.9	45.0	46.0	55.0	51.8	53.4	56.4	62.5	59.5	78.9	87.9	83.4	92.6	99.2	95.9
Preventive care & fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		45.6	44.6	45.1	42.9	40.2	41.6	51.9	58.2	55.1	57.7	67.0	62.4	35.5	41.6	38.6
Crown & Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4	0.6	0.7	2.0	1.4
Pulp care		0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	1.6	0.9	1.3	0.0	0.0	0.0
Extraction		7.2	4.9	6.1	3.2	3.3	3.3	7.5	8.8	8.2	36.6	41.3	39.0	45.9	49.1	47.5
Need for other care		0.0	0.3	0.2	15.0	13.3	14.2	5.7	8.4	7.1	58.0	62.0	60.0	88.7	96.1	92.4

Table 6.06 Mean number of teeth with treatment need by age, sex and geographical area.

State : Jammu & Kashmir

Treatment Need		5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	157	318	158	159	317	152	162	314	159	157	316	158	160	318
Treatment needed		2.7	2.7	2.7	0.8	0.7	0.8	0.9	1.2	1.1	6.0	9.8	7.9	21.2	23.2	22.2
Preventive care/ fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		2.5	2.5	2.5	0.7	0.5	0.6	0.8	1.0	0.9	2.4	3.0	2.7	0.6	0.6	0.6
Crown/ Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraction		0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.1	0.1	1.4	3.5	2.5	2.5	2.7	2.6
Need for other care		0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	2.3	3.3	2.8	17.9	19.8	18.9
Region 2	n=	164	151	315	166	147	313	163	151	314	147	168	315	165	145	310
Treatment needed		1.8	1.7	1.8	1.6	1.5	1.6	1.8	2.4	2.1	4.6	5.2	4.9	11.7	14.4	13.1
Preventive care/ fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		1.5	1.5	1.5	1.1	1.0	1.1	1.6	2.1	1.9	1.7	2.1	1.9	1.3	1.4	1.4
Crown/ Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraction		0.3	0.2	0.3	0.1	0.0	0.1	0.1	0.1	0.1	0.9	0.9	0.9	2.4	2.3	2.4
Need for other care		0.0	0.0	0.0	0.4	0.5	0.5	0.1	0.2	0.2	2.0	2.1	2.1	8.0	10.7	9.4
Region 3	n=	152	158	310	154	156	310	154	155	309	155	155	310	154	156	310
Treatment needed		1.8	1.7	1.8	1.0	1.1	1.1	1.2	1.7	1.5	5.2	5.7	5.5	21.6	21.2	21.4
Preventive care/ fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		1.7	1.4	1.6	0.8	0.8	0.8	1.1	1.5	1.3	1.8	1.8	1.8	0.5	0.7	0.6
Crown/ Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraction		0.1	0.2	0.2	0.0	0.1	0.1	0.1	0.1	0.1	1.1	1.6	1.4	2.0	2.1	2.1
Need for other care		0.0	0.0	0.0	0.2	0.3	0.3	0.0	0.0	0.0	2.3	2.3	2.3	19.1	18.2	18.7
State Rural	n=	321	305	626	322	302	624	313	309	622	301	325	626	320	304	624
Treatment needed		1.9	1.8	1.9	1.4	1.4	1.4	1.7	2.2	2.0	4.9	5.7	5.3	15.4	17.9	16.7
Preventive care/ fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		1.7	1.6	1.7	1.1	1.0	1.1	1.5	2.0	1.8	1.7	2.0	1.9	0.9	1.1	1.0
Crown/ Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraction		0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.1	0.1	1.0	1.4	1.2	2.4	2.4	2.4
Need for other care		0.0	0.0	0.0	0.2	0.4	0.3	0.1	0.1	0.1	2.1	2.2	2.2	12.1	14.3	13.2
State Urban	n=	156	161	317	156	160	316	156	159	315	160	155	315	157	157	314
Treatment needed		1.5	1.4	1.5	1.4	1.4	1.4	1.5	2.0	1.8	5.1	5.0	5.1	17.3	17.3	17.3
Preventive care/ fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		1.4	1.3	1.4	0.8	0.8	0.8	1.3	1.7	1.5	1.9	2.0	2.0	1.2	1.0	1.1
Crown/ Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraction		0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.8	0.8	0.8	1.8	1.8	1.8
Need for other care		0.0	0.0	0.0	0.5	0.6	0.6	0.0	0.2	0.1	2.3	2.2	2.3	14.3	14.5	14.4
State Total	n=	477	466	943	478	462	940	469	468	937	461	480	941	477	461	938
Treatment needed		1.8	1.7	1.8	1.4	1.4	1.4	1.6	2.2	1.9	4.9	5.5	5.2	16.0	17.8	16.9
Preventive care/ fissure sealant		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Filling one or more surfaces		1.6	1.5	1.6	1.1	0.9	1.0	1.5	1.9	1.7	1.8	2.0	1.9	1.0	1.1	1.1
Crown/ Veneer		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	
Pulp care		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraction		0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.1	1.0	1.3	1.2	2.3	2.2	2.3
Need for other care		0.0	0.0	0.0	0.3	0.4	0.4	0.1	0.1	0.1	2.2	2.2	2.2	12.7	14.4	13.6

6.2. PERIODONTAL STATUS

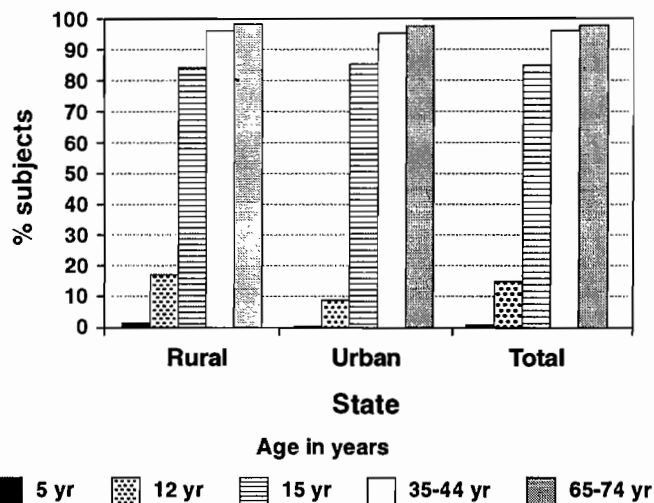
6.2.1 Bleeding, calculus and pockets

The periodontal status was assessed using the Community Periodontal Index (CPI) with its three indicators of gingival bleeding, calculus and periodontal pockets.

Table 6.07 presents the per cent subjects with their periodontal status (bleeding, calculus and pockets) by level of severity and Table 6.08 presents the mean number of teeth with bleeding, calculus and pockets.

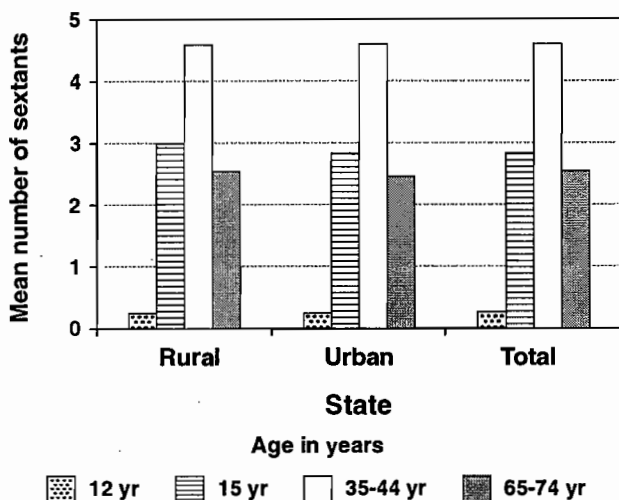
There was little indication of periodontal disease in 5 year olds but the prevalence of periodontal disease increased as age advanced. It ranged from a prevalence of 14.5 per cent in 15 year olds to 98.4 per cent in 65-74 year subjects. There were no marked differentials between sexes or between rural and urban areas. Bleeding with calculus was most prevalent in 15 year olds (74.7 per cent) and 35-44 year (60.2 per cent) subjects. In 35-44 year old subjects, this was followed by the prevalence of bleeding,

Fig 6.07. Percent subjects with bleeding, calculus & pockets in Jammu & Kashmir



calculus & pockets measuring 4-5 mm (29.3 per cent). The prevalence of subjects with bleeding, calculus and pockets measuring 4-5 mm was highest (42.7 per cent) in 65-74 year old subjects followed by those who also had deep pockets measuring more than 4-5 mm (30.2 per cent).

Fig 6.08. Mean number of sextants with periodontal disease in Jammu & Kashmir



The dentition is divided into six sextants, three upper and three lower, for assessment of the periodontal status. The mean number of sextants with periodontal disease, i.e., sextants with bleeding, calculus and/or pockets was highest in 35-44 year old subjects (4.6) followed by the 15 year old subjects (2.9) followed by 65-74 year old subjects (2.6). The mean number of teeth with calculus was generally higher than with pockets and bleeding.

Invariably, across age groups, bleeding emerged as the most prevalent condition to be followed by calculus except in the age group of 65-74 years. Here, calculus was the most prevalent condition (38.2 per cent). The prevalence of shallow and deep pockets was extremely low ranging from 0.2 per cent males in 35-44 year age group to 0.6 per cent males in 65-74 year age group.

The pattern was similar for rural and urban areas.

Table: 6.07 Percent subjects with bleeding, calculus and/ or pockets by age, sex, and geographical area. State : Jammu & Kashmir

Periodontal Disease		5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	73	79	152	72	75	147	152	162	314	154	153	307	93	84	177
With bleeding,calculus, or pockets		6.9	2.2	4.6	16.3	16.2	16.3	93.1	90.6	91.9	100.0	98.9	99.5	100.0	95.7	97.9
with bleeding		5.1	2.2	3.7	11.6	12.9	12.3	6.9	7.6	7.3	0.0	0.6	0.3	0.0	0.0	0.0
with calculus		1.7	0.0	0.9	0.0	0.0	0.0	54.7	49.1	51.90	46.8	41.2	44.0	40.0	32.5	36.3
with pockets 4-5 mm		NA	NA	NA	NA	NA	NA	0.8	0.8	0.8	5.2	11.8	8.5	19.1	15.6	17.4
with pockets 6 mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	1.6	1.6	1.6	10.5	19.6	15.05
with bleeding or higher		5.1	2.2	3.7	16.3	16.2	16.3	32.5	29.8	31.2	16.4	17.0	16.7	2.9	4.6	3.8
with calculus or higher		1.7	0.0	0.9	0.0	0.0	0.0	59.8	60.1	59.95	75.7	67.5	71.6	59.6	51.4	55.5
with pockets 4-5 mm or higher		NA	NA	NA	NA	NA	NA	0.8	0.8	0.8	6.3	12.6	9.5	26.9	20.2	23.6
with pockets 6mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	1.6	1.6	1.6	10.5	19.6	15.05
Region 2	n=	49	39	88	43	47	90	161	152	313	146	167	313	148	127	275
With bleeding,calculus, or pockets		2.3	3.0	2.7	23.8	24.5	24.2	88.0	90.6	89.3	97.9	100.0	99.0	100.0	97.9	99.0
with bleeding		2.3	3.0	2.7	10.9	13.5	12.2	7.5	9.2	8.4	0.0	1.3	0.7	0.0	0.0	0.0
with calculus		0.0	0.0	0.0	2.0	6.1	4.1	57.7	48.7	53.2	48.8	61.6	55.2	23.9	25.0	24.5
with pockets 4-5 mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	1.3	0.7	1.0	8.3	8.2	8.3
with pockets 6 mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	8.3	7.1	7.7
with bleeding or higher		2.3	3.0	2.7	21.8	18.4	20.1	30.3	41.3	35.8	18.3	18.0	18.2	5.3	5.4	5.4
with calculus or higher		0.0	0.0	0.0	2.0	6.1	4.1	57.7	49.3	53.5	73.2	79.6	76.4	65.2	64.5	64.9
with pockets 4-5 mm or higher		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	6.4	2.4	4.4	21.2	20.9	21.1
with pockets 6mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0	0.0	0.0	8.3	7.1	7.7
Region 3	n=	75	74	149	73	66	139	153	155	308	152	153	305	84	81	165
With bleeding,calculus, or pockets		0.0	0.0	0.0	6.4	8.5	7.5	78.7	79.4	79.1	96.5	95.2	95.9	99.2	95.7	97.5
with bleeding		0.0	0.0	0.0	6.4	3.9	5.2	6.1	3.6	4.9	0.8	0.8	0.8	0.0	0.0	0.0
with calculus		0.0	0.0	0.0	0.0	0.0	0.0	61.4	53.6	57.50	45.0	47.1	46.1	25.6	13.4	19.5
with pockets 4-5 mm		NA	NA	NA	NA	NA	NA	0.8	1.9	1.4	5.6	4.4	5.0	26.4	25.6	26.0
with pockets 6 mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	1.2	0.4	0.8	8.0	10.5	9.25
with bleeding or higher		0.0	0.0	0.0	6.4	8.5	7.5	15.1	17.9	16.5	12.7	9.0	10.9	1.4	1.4	1.4
with calculus or higher		0.0	0.0	0.0	0.0	0.0	0.0	62.9	59.6	61.3	73.9	79.1	76.5	47.6	42.3	45.0
with pockets 4-5 mm or higher		NA	NA	NA	NA	NA	NA	0.8	1.9	1.4	8.7	6.6	7.7	42.3	41.5	41.9
with pockets 6mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	1.2	0.4	0.8	8.0	10.5	9.25
State Rural	n=	126	121	247	118	116	234	312	310	622	293	319	612	219	190	409
With bleeding,calculus, or pockets		1.7	1.7	1.7	18.6	16.3	17.5	84.0	85.7	84.9	97.0	98.3	97.7	100.0	97.2	98.6
with bleeding		1.6	1.7	1.7	18.6	14.7	16.7	23.0	31.0	27.0	15.5	14.2	14.9	3.9	3.8	3.9
with calculus		0.1	0.0	0.1	6.5	7.8	7.2	77.0	78.5	77.75	89.6	91.8	90.7	64.9	63.4	64.2
with pockets 4-5 mm		NA	NA	NA	NA	NA	NA	1.6	5.7	3.7	39.0	32.7	35.9	64.2	62.6	63.4
with pockets 6 mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	7.4	5.4	6.4	27.8	27.1	27.45
with bleeding or higher		1.6	1.7	1.7	18.6	14.7	16.7	23.0	31.0	27.0	15.5	14.2	14.9	3.9	3.8	3.9
with calculus or higher		0.1	0.0	0.1	0.0	1.6	0.8	60.6	53.8	57.2	75.8	79.5	77.7	61.0	60.4	60.7
with pockets 4-5 mm or higher		NA	NA	NA	NA	NA	NA	0.4	0.9	0.7	5.2	4.6	4.9	26.7	24.8	25.8
with pockets 6mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.5	0.1	0.3	8.4	8.2	8.30
State Urban	n=	71	71	142	70	72	142	154	159	313	159	154	313	106	102	208
With bleeding,calculus, or pockets		0.0	0.1	0.1	2.8	14.9	8.9	84.9	85.5	85.2	98.2	96.9	97.6	99.0	96.7	97.9
with bleeding		0.0	0.1	0.1	0.3	10.0	5.2	27.1	29.9	28.5	16.6	14.7	15.7	4.6	4.7	4.7
with calculus		0.0	0.0	0.0	2.6	6.5	4.6	75.6	76.9	76.3	82.2	92.3	87.3	60.0	51.4	55.7
with pockets 4-5 mm		NA	NA	NA	NA	NA	NA	1.2	3.2	2.2	40.5	24.5	32.5	50.6	59.0	54.8
with pockets 6 mm		NA	NA	NA	NA	NA	NA	0.0	1.1	0.6	13.2	7.7	10.5	34.2	40.9	37.6
with bleeding or higher		0.0	0.1	0.1	0.3	10.0	5.2	27.1	29.9	28.5	16.6	14.7	15.7	4.6	4.7	4.7
with calculus or higher		0.0	0.0	0.0	2.5	4.9	3.7	57.8	54.9	56.35	67.8	77.7	72.75	55.4	46.6	51.0
with pockets 4-5 mm or higher		NA	NA	NA	NA	NA	NA	0.0	0.7	0.4	13.1	3.7	8.4	31.3	36.0	33.7
with pockets 6mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.7	0.8	0.8	7.6	9.4	8.5
State Total	n=	197	192	389	188	188	376	466	469	935	452	473	925	325	292	617
With bleeding,calculus, or pockets		1.2	1.1	1.2	13.3	15.6	14.5	84.3	85.7	85.0	97.3	98.0	97.7	99.8	97.0	98.4
with bleeding		1.1	1.1	1.1	12.5	12.9	12.7	24.1	30.6	27.4	15.8	14.2	15.0	4.1	4.1	4.1
with calculus		0.1	0.0	0.1	5.0	7.3	6.2	76.6	78.2	77.4	87.5	91.9	89.7	63.6	60.2	61.9
with pockets 4-5 mm		NA	NA	NA	NA	NA	NA	1.6	5.3	3.5	39.4	31.3	35.4	60.5	61.6	61.1
with pockets 6 mm		NA	NA	NA	NA	NA	NA	0.0	0.3	0.2	9.0	6.1	7.6	29.5	30.8	30.2
with bleeding or higher		1.1	1.1	1.1	12.5	12.9	12.7	24.1	30.6	27.4	15.8	14.2	15.0	4.1	4.1	4.1
with calculus or higher		0.1	0.0	0.1	0.8	2.7	1.8	59.8	54.2	57.0	73.6	79.1	76.4	59.5	56.7	58.1
with pockets 4-5 mm or higher		NA	NA	NA	NA	NA	NA	0.4	0.9	0.7	7.4	4.5	6.0	28.0	27.7	27.9
with pockets 6mm		NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.6	0.2	0.4	8.2	8.5	8.4

Table: 6.08 Mean no. of sextants with bleeding, calculus and pockets by age, sex and geographical area.

State : Jammu & Kashmir

Periodontal Disease		12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	158	159	317	154	162	316	159	158	317	160	161	321
Mean no. of healthy sextants		2.4	2.4	2.4	2.0	2.2	2.1	0.5	0.6	0.6	0.0	0.1	0.1
With bleeding, calculus, pockets		0.4	0.4	0.4	3.9	3.8	3.9	4.8	4.0	4.4	1.7	1.2	1.5
with bleeding		0.4	0.4	0.4	0.9	0.9	0.9	0.2	0.3	0.3	0.0	0.0	0.0
with calculus		0.0	0.0	0.0	2.7	2.5	2.6	3.4	2.6	3.0	0.8	0.5	0.7
with pockets(4-5 mm)		NA	NA	NA	0.3	0.4	0.4	1.1	1.1	1.1	0.6	0.4	0.5
with pockets (6mm or more)		NA	NA	NA	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.3	0.3
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		3.2	3.2	3.2	0.1	0.0	0.1	0.6	1.4	1.0	4.3	4.7	4.5
Region 2	n=	167	147	314	163	152	315	153	177	330	179	146	325
Mean no. of healthy sextants		1.2	1.6	1.4	2.9	2.6	2.8	0.6	0.5	0.6	0.1	0.2	0.2
With bleeding, calculus, pockets		0.2	0.2	0.2	3.1	3.4	3.3	4.8	4.9	4.9	3.5	3.2	3.4
with bleeding		0.1	0.1	0.1	0.7	0.9	0.8	0.2	0.3	0.3	0.1	0.0	0.1
with calculus		0.1	0.1	0.1	2.4	2.5	2.5	3.6	4.1	3.9	1.8	1.7	1.8
with pockets(4-5 mm)		NA	NA	NA	0.0	0.0	0.0	0.7	0.4	0.6	1.1	1.0	1.1
with pockets (6mm or more)		NA	NA	NA	0.0	0.0	0.0	0.3	0.1	0.2	0.5	0.5	0.5
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		4.6	4.2	4.4	0.1	0.0	0.1	0.6	0.6	0.6	2.4	2.5	2.5
Region 3	n=	154	156	310	154	155	309	155	155	310	154	156	310
Mean no. of healthy sextants		2.8	2.4	2.6	3.7	3.4	3.6	1.0	1.3	1.2	0.1	0.1	0.1
With bleeding, calculus, pockets		0.0	0.1	0.1	2.2	2.6	2.4	4.5	4.1	4.3	1.6	1.5	1.6
with bleeding		0.0	0.1	0.1	0.3	0.3	0.3	0.2	0.1	0.2	0.0	0.0	0.0
with calculus		0.0	0.0	0.0	1.8	2.0	1.9	3.1	2.9	3.0	0.6	0.4	0.5
with pockets(4-5 mm)		NA	NA	NA	0.1	0.2	0.2	1.1	0.9	1.0	0.6	0.7	0.7
with pockets (6mm or more)		NA	NA	NA	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		3.2	3.5	3.4	0.0	0.0	0.0	0.6	0.6	0.6	4.4	4.4	4.4
State Rural	n=	323	302	625	314	310	624	307	334	641	335	306	641
Mean no. of healthy sextants		1.6	1.8	1.7	3.2	2.9	3.1	0.7	0.8	0.8	0.1	0.1	0.1
With bleeding, calculus, pockets		0.2	0.2	0.2	2.8	3.1	3.0	4.6	4.6	4.6	2.7	2.4	2.6
with bleeding		0.1	0.1	0.1	0.5	0.7	0.6	0.2	0.2	0.2	0.0	0.0	0.0
with calculus		0.0	0.1	0.1	2.2	2.3	2.3	3.4	3.6	3.5	1.3	1.2	1.3
with pockets(4-5 mm)		NA	NA	NA	0.0	0.1	0.1	0.9	0.7	0.8	0.9	0.9	0.9
with pockets (6mm or more)		NA	NA	NA	0.0	0.0	0.0	0.2	0.1	0.2	0.4	0.3	0.4
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		4.2	4.0	4.1	0.0	0.0	0.0	0.6	0.7	0.7	3.2	3.4	3.3
State Urban	n=	156	160	316	157	159	316	160	156	316	158	157	315
Mean no. of healthy sextants		2.7	2.4	2.6	3.2	3.0	3.1	0.7	1.1	0.9	0.1	0.2	0.2
With bleeding, calculus, pockets		0.1	0.2	0.2	2.7	3.0	2.9	4.8	4.4	4.6	2.6	2.3	2.5
with bleeding		0.0	0.1	0.1	0.6	0.5	0.6	0.3	0.3	0.3	0.1	0.0	0.1
with calculus		0.1	0.1	0.1	2.0	2.4	2.2	3.3	3.4	3.4	1.2	0.8	1.0
with pockets(4-5 mm)		NA	NA	NA	0.0	0.1	0.1	0.9	0.5	0.7	0.7	0.7	0.7
with pockets (6mm or more)		NA	NA	NA	0.0	0.0	0.0	0.3	0.2	0.3	0.6	0.7	0.7
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		3.2	3.3	3.3	0.1	0.0	0.1	0.5	0.6	0.6	3.3	3.5	3.4
State Total	n=	479	462	941	471	469	940	467	490	957	493	463	956
Mean no. of healthy sextants		1.9	2.0	2.0	3.2	2.9	3.1	0.7	0.8	0.8	0.1	0.2	0.2
With bleeding, calculus, pockets		0.1	0.2	0.2	2.7	3.1	2.9	4.7	4.5	4.6	2.7	2.4	2.6
with bleeding		0.1	0.1	0.1	0.6	0.6	0.6	0.2	0.2	0.2	0.0	0.0	0.0
with calculus		0.1	0.1	0.1	2.1	2.3	2.2	3.3	3.5	3.4	1.3	1.1	1.2
with pockets(4-5 mm)		NA	NA	NA	0.0	0.1	0.1	0.9	0.7	0.8	0.9	0.8	0.9
with pockets (6mm or more)		NA	NA	NA	0.0	0.0	0.0	0.2	0.1	0.2	0.4	0.4	0.4
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		4.0	3.8	3.9	0.1	0.0	0.1	0.6	0.6	0.6	3.2	3.5	3.4

6.2.2. Loss of attachment

Tables 6.09 presents the per cent subjects with loss of epithelial attachment by severity, and Table 6.10 presents the mean number of teeth with loss of attachment, by severity, respectively.

The destructive and degenerative nature of the periodontal disease was assessed, in addition to the CPI scores, with the measurement of Loss of Attachment for 15, 35-44 and 65-74 year age groups only. The CPI Probe was used to measure pocket depth.

Overall, the prevalence proportion of subjects with loss of attachment in one or more sextants was lowest in the 15 year age group (0.5 per cent) and highest in the 65-74 year age group (31.7 per cent) in the state (Fig 6.09). It was almost equally distributed by sex in the age groups of 35-44 year and 65-74 year. The least severe form of loss of attachment (4-5 mm) was the most prevalent across age groups followed by the more severe form of 6-8 mm.

The proportion of urban residents with loss of attachment was higher than rural residents (Table 6.09) but the pattern of distribution of severity of the loss of attachment remained similar in rural and urban areas. There were no major differentials in the distribution pattern by severity between regions.

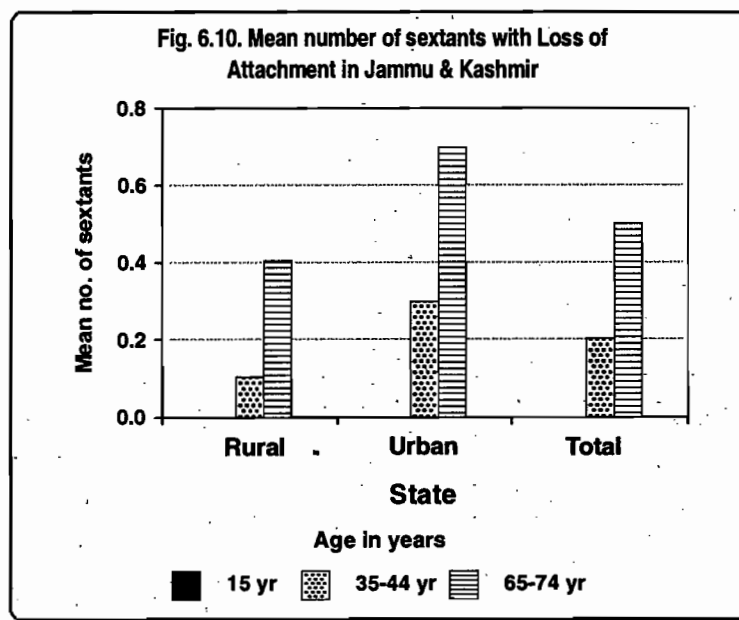
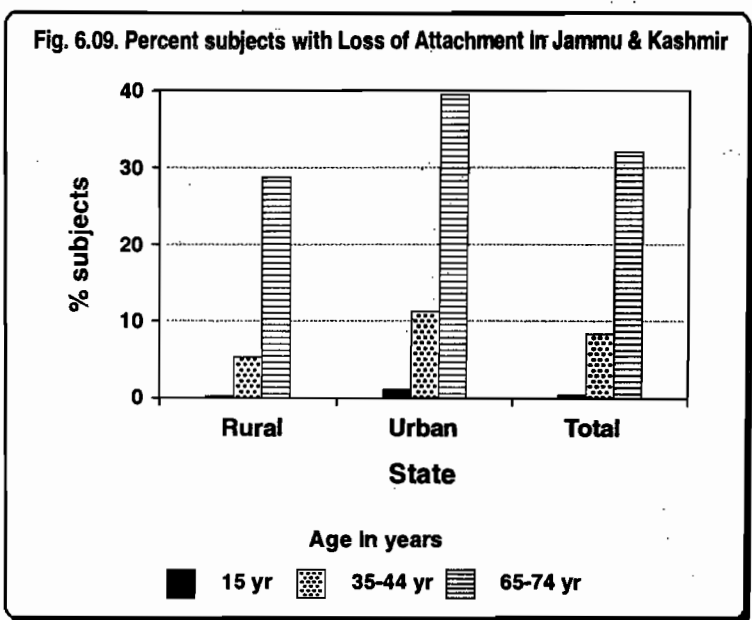


Table 6.09 Percent distribution of subjects with highest scores of loss of attachment by age, sex, and geographical area. State : Jammu & Kashmir

Loss of Attachment (LOA)		15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T
Region 1	n=	152	161	313	153	153	306	95	89	184
With no loss of attachment (0-3 mm)		99.2	100.0	99.6	90.8	93.1	92.0	70.4	63.9	67.2
With loss of attachment		0.8	0.0	0.4	9.2	6.9	8.1	29.6	36.1	32.9
with LOA 4-5 mm only		0.0	0.0	0.0	2.5	0.8	1.7	14.0	24.1	19.1
with LOA 4-5 mm & 6-8 mm		0.8	0.0	0.4	6.7	6.1	6.4	15.1	12.0	13.6
with LOA 4-5 mm & 6-8 mm & 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3
with LOA 4-5 mm & 6-8 mm & 9-11 mm & 12 mm or higher		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 2	n=	157	151	308	145	165	310	146	127	273
With no loss of attachment (0-3 mm)		99.3	99.5	99.4	89.6	94.5	92.1	70.5	67.8	69.2
With loss of attachment		0.7	0.5	0.6	10.4	5.5	8.0	29.5	32.2	30.9
with LOA 4-5 mm only		0.0	0.0	0.0	2.9	0.7	1.8	12.5	8.9	10.7
with LOA 4-5 mm & 6-8 mm		0.7	0.5	0.6	7.5	4.9	6.2	15.0	22.5	18.8
with LOA 4-5 mm & 6-8 mm & 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0
with LOA 4-5 mm & 6-8 mm & 9-11 mm & 12 mm or higher		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.5
Region 3	n=	152	153	305	152	152	304	85	82	167
With no loss of attachment (0-3 mm)		100.0	99.6	99.8	92.2	93.4	92.8	64.8	69.1	67.0
With loss of attachment		0.0	0.4	0.2	7.8	6.6	7.2	35.2	30.9	33.1
with LOA 4-5 mm only		0.0	0.0	0.0	5.0	3.5	4.3	23.5	22.9	23.2
with LOA 4-5 mm & 6-8 mm		0.0	0.4	0.2	2.3	3.1	2.7	10.3	5.9	8.1
with LOA 4-5 mm & 6-8 mm & 9-11 mm		0.0	0.0	0.0	0.5	0.0	0.3	0.0	0.8	0.4
with LOA 4-5 mm & 6-8 mm & 9-11 mm & 12 mm or higher		0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4
State Rural	n=	311	307	618	291	317	608	220	196	416
With no loss of attachment (0-3 mm)		99.5	100.0	99.8	93.0	94.6	93.8	70.3	71.7	71.0
With loss of attachment		0.5	0.0	0.3	7.0	5.4	6.2	29.7	28.3	29.0
with LOA 4-5 mm only		0.0	0.0	0.0	3.2	2.2	2.7	15.6	13.6	14.6
with LOA 4-5 mm & 6-8 mm		0.5	0.0	0.3	3.9	3.3	3.6	12.2	13.4	12.8
with LOA 4-5 mm & 6-8 mm & 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.7
with LOA 4-5 mm & 6-8 mm & 9-11 mm & 12 mm or higher		0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.4	1.0
State Urban	n=	150	158	308	159	153	312	106	102	208
With no loss of attachment (0-3 mm)		100.0	98.1	99.1	85.1	92.2	88.7	63.7	57.6	60.7
With loss of attachment		0.0	1.9	1.0	14.9	7.8	11.4	36.3	42.4	39.4
with LOA 4-5 mm only		0.0	0.0	0.0	5.5	0.8	3.2	17.0	14.9	16.0
with LOA 4-5 mm & 6-8 mm		0.0	1.9	1.0	8.7	7.0	7.9	17.7	26.4	22.1
with LOA 4-5 mm & 6-8 mm & 9-11 mm		0.0	0.0	0.0	0.7	0.0	0.4	1.6	1.1	1.4
with LOA 4-5 mm & 6-8 mm & 9-11 mm & 12 mm or higher		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	461	465	926	450	470	920	326	298	624
With no loss of attachment (0-3 mm)		99.6	99.5	99.6	90.8	93.9	92.4	68.5	68.1	68.3
With loss of attachment		0.4	0.5	0.5	9.2	6.1	7.7	31.5	31.9	31.7
with LOA 4-5 mm only		0.0	0.0	0.0	3.7	1.9	2.8	15.9	13.9	14.9
with LOA 4-5 mm & 6-8 mm		0.4	0.5	0.5	5.3	4.3	4.8	13.7	16.8	15.3
with LOA 4-5 mm & 6-8 mm & 9-11 mm		0.0	0.0	0.0	0.2	0.0	0.1	1.4	0.3	0.9
with LOA 4-5 mm & 6-8 mm & 9-11 mm & 12 mm or higher		0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	0.7

Table 6.10 Mean no. of sextants with loss of attachment by age, sex, and geographical area.

State : Jammu & Kashmir

Loss of Attachment (LOA)		15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T
Region 1	n=	154	162	316	159	158	317	160	161	321
With no loss of attachment (0-3 mm)		5.9	6.0	6.0	5.1	4.5	4.8	1.5	1.0	1.3
With loss of attachment		0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.3	0.3
with loss of attachment 4-5 mm		0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.2
with loss of attachment 6-8 mm		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
with loss of attachment 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with loss of attachment 12 mm or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		0.1	0.0	0.1	0.7	1.4	1.1	4.2	4.7	4.5
Region 2	n=	163	152	315	153	177	330	179	146	325
With no loss of attachment (0-3 mm)		5.8	5.9	5.9	5.1	5.3	5.2	3.1	3.0	3.1
With loss of attachment		0.0	0.0	0.0	0.3	0.1	0.2	0.5	0.5	0.5
with loss of attachment 4-5 mm		0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.2
with loss of attachment 6-8 mm		0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.4	0.4
with loss of attachment 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with loss of attachment 12 mm or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		0.2	0.0	0.1	0.6	0.6	0.6	2.3	2.5	2.4
Region 3	n=	154	155	309	155	155	310	154	156	310
With no loss of attachment (0-3 mm)		5.9	5.9	5.9	5.3	5.3	5.3	1.3	1.3	1.3
With loss of attachment		0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.3	0.4
with loss of attachment 4-5 mm		0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3
with loss of attachment 6-8 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
with loss of attachment 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with loss of attachment 12 mm or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		0.1	0.1	0.1	0.6	0.6	0.6	4.3	4.4	4.4
State Rural	n=	314	310	624	307	334	641	335	306	641
With no loss of attachment (0-3 mm)		5.9	5.9	5.9	5.2	5.3	5.3	2.5	2.3	2.4
With loss of attachment		0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.3	0.4
with loss of attachment 4-5 mm		0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.2
with loss of attachment 6-8 mm		0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.2
with loss of attachment 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with loss of attachment 12 mm or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		0.1	0.1	0.1	0.6	0.6	0.6	3.1	3.4	3.3
State Urban	n=	157	159	316	160	156	316	158	157	315
With no loss of attachment (0-3 mm)		5.6	5.9	5.8	5.2	5.2	5.2	2.0	1.7	1.9
With loss of attachment		0.0	0.0	0.0	0.3	0.2	0.3	0.6	0.7	0.7
with loss of attachment 4-5 mm		0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.3	0.3
with loss of attachment 6-8 mm		0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.4	0.4
with loss of attachment 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with loss of attachment 12 mm or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		0.4	0.1	0.3	0.5	0.6	0.6	3.4	3.5	3.5
State Total	n=	471	469	940	467	490	957	493	463	956
With no loss of attachment (0-3 mm)		5.9	5.9	5.9	5.2	5.2	5.2	2.3	2.2	2.3
With loss of attachment		0.0	0.0	0.0	0.2	0.1	0.2	0.5	0.4	0.5
with loss of attachment 4-5 mm		0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.2
with loss of attachment 6-8 mm		0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
with loss of attachment 9-11 mm		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with loss of attachment 12 mm or more		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excluded sextants		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not recorded		0.1	0.1	0.1	0.6	0.6	0.6	3.2	3.4	3.3

6.3. MALOCCLUSION STATUS

Table 6.11 presents the malocclusion status of subjects measured by DAI scores. The highest age group of 65-74 years is excluded.

The Dental Aesthetic Index (DAI), recommended by the WHO, was used to analyze the severity of malocclusion in the surveyed population.

In calculating per cent subjects with malocclusion, only those subjects with a DAI score of 26 or higher were included.

No significant malocclusion was reported in the age group of 5 years where only primary teeth are present.

The majority of the subjects examined had low prevalence of definite or severe form of malocclusion (Fig 6.11). The prevalence of definite malocclusion, as indicated by the DA Index, was 7.6 per cent in 12 year old subjects and about 7.0 per cent in 15 year old subjects. The prevalence of severe malocclusion was lower in both age groups. However, very severe malocclusion was more prevalent than severe or definite malocclusion in the 35-44 year old subjects. Malocclusion appeared more prevalent in rural than in urban areas although the differences were marginal. There were no marked differentials between sexes. There was no significant variation between the regions.

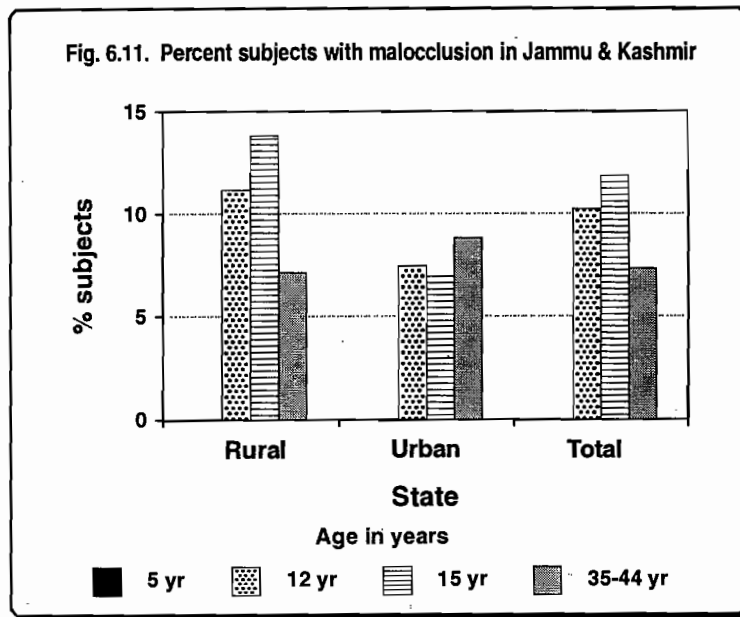


Table 6.11 Percent subjects with malocclusion by age, sex and geographical areas.

State : Jammu & Kashmir

Malocclusion (DAI Score)	n=	5 years			12 years			15 years			35-44 years		
		M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	157	318	158	159	317	154	162	316	159	158	317
No malocclusion (<25)		100.0	100.0	100.0	93.8	93.4	93.6	93.2	87.5	90.4	93.3	87.4	90.4
Malocclusion present		0.0	0.0	0	6.2	6.6	6.4	6.8	12.5	9.7	6.7	12.6	9.7
Definite malocclusion (26 -30)		0.0	0.0	0	6.2	5.9	6.1	3.4	9.4	6.4	0.0	0.0	0.0
Severe malocclusion (31 - 35)		0.0	0.0	0	0.0	0.3	0.2	2.3	0.8	1.6	0.0	4.3	2.2
V Severe malocclusion (36 or more)		0.0	0.0	0	0.0	0.3	0.2	1.1	2.3	1.7	6.7	8.4	7.6
Region 2	n=	164	152	316	167	147	314	163	152	315	153	177	330
No malocclusion (<25)		100.0	100.0	100.0	84.8	87.4	86.1	82.1	82.8	82.5	90.5	91.4	91.0
Malocclusion present		0.0	0.0	0.0	15.2	12.6	13.9	17.9	17.2	17.6	9.5	8.6	9.1
Definite malocclusion (26 -30)		0.0	0.0	0.0	9.5	8.3	8.9	7.3	12.5	9.9	0.0	0.4	0.2
Severe malocclusion (31 - 35)		0.0	0.0	0.0	3.3	2.8	3.1	9.2	2.9	6.1	5.0	4.0	4.5
V Severe malocclusion (36 or more)		0.0	0.0	0.0	2.4	1.5	2.0	1.3	1.8	1.6	4.5	4.1	4.3
Region 3	n=	152	158	310	154	156	310	154	155	309	155	155	310
No malocclusion (<25)		100.0	100.0	100.0	93	94.5	93.8	94.1	95.5	94.8	94.2	95.7	95.0
Malocclusion present		0.0	0.0	0.0	7.0	5.5	6.3	5.9	4.5	5.2	5.8	4.3	5.1
Definite malocclusion (26 -30)		0.0	0.0	0.0	7.0	5.5	6.3	3.9	3.0	3.5	0.0	0.0	0.0
Severe malocclusion (31 - 35)		0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.5	1.4	1.9	0.7	1.3
V Severe malocclusion (36 or more)		0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.4	3.9	3.6	3.8
State Rural	n=	321	305	626	323	302	625	314	310	624	307	334	641
No malocclusion (<25)		100.0	100.0	100.0	86.9	90.5	88.7	86	86.6	86.3	92.9	93	93.0
Malocclusion present		0.0	0.0	0.0	13.1	9.5	11.3	14.0	13.4	13.7	7.1	7.0	7.1
Definite malocclusion (26 -30)		0.0	0.0	0.0	9.3	6.8	8.1	5.7	9.8	7.8	0.0	0.0	0.0
Severe malocclusion (31 - 35)		0.0	0.0	0.0	2.4	1.6	2.0	6.9	3.0	5.0	3.0	2.8	2.9
V Severe malocclusion (36 or more)		0.0	0.0	0.0	1.4	1.1	1.3	1.4	0.6	1.0	4.1	4.1	4.1
State Urban	n=	156	162	318	156	160	316	157	159	316	160	156	316
No malocclusion (<25)		100.0	100.0	100.0	93.5	91.5	92.5	92	94.2	93.1	90.1	93.1	91.6
Malocclusion present		0.0	0.0	0.0	6.5	8.5	7.5	8.0	5.8	6.9	9.9	6.9	8.4
Definite malocclusion (26 -30)		0.0	0.0	0.0	5.4	7.4	6.4	6.1	3.6	4.9	0.0	1.1	0.6
Severe malocclusion (31 - 35)		0.0	0.0	0.0	0.0	1.1	0.6	1.9	0.0	1.0	5.0	2.3	3.7
V Severe malocclusion (36 or more)		0.0	0.0	0.0	1.1	0.0	0.6	0.0	2.2	1.1	4.8	3.5	4.2
State Total	n=	477	467	944	479	462	941	471	469	940	467	490	957
No malocclusion (<25)		100.0	100.0	100.0	88.7	90.9	89.8	87.7	88.7	88.2	92.2	93.1	92.7
Malocclusion present		0.0	0.0	0.0	11.3	9.1	10.2	12.3	11.3	11.8	7.8	6.9	7.4
Definite malocclusion (26 -30)		0.0	0.0	0.0	8.3	6.9	7.6	5.8	8.1	7.0	0.0	0.3	0.2
Severe malocclusion (31 - 35)		0.0	0.0	0.0	1.8	1.4	1.6	5.5	2.2	3.9	3.5	2.7	3.1
V Severe malocclusion (36 or more)		0.0	0.0	0.0	1.3	0.8	1.1	1.1	1.0	1.1	4.3	4.0	4.2

Note: 'No malocclusion (<25)' includes minor malocclusion.

6.4. ORAL CANCER & ORAL MUCOSAL LESIONS

Tables 6.12 presents the proportion of subjects with oral cancer and other oral mucosal lesions and Table 6.13 presents the number of lesions by their location in the mouth of affected subjects.

The prevalence of oral mucosal lesions was quite low in the state (Fig 6.12). In subjects aged 5 year, only 0.4 per cent, all males and all from urban area, had oral mucosal lesions. These were equally distributed in the form of ulcerations and candidiasis (Table 6.12).

In subjects aged 12 years, only 1 per cent subjects, all females and all from rural area, had lesions of which half were ulcerations and the other half were candidiasis.

Only 0.5 per cent females, from rural area in the age group of 15 years had ulcerations and no other lesions.

Oral cancer was recorded in one female child aged 5 years and one male child aged 15 years, from urban and rural areas respectively. The lesions were located on the vermilion border in the mouth. Leukoplakia is the most common precancerous lesion while lichen planus is categorized as a probable precancerous lesion . Leukoplakia was detected in 3 males (0.7 per cent) in the age group of 35-44 years and 2 females (0.5 per cent) in the age group of 65-74 years (Tables 6.12 & 6.13). It was located on the sulci and buccal mucosa, and equally distributed in rural and urban area.

The other more prevalent but still very rare conditions were Ulceration and Abscess, appearing on the alveolar ridges and gingiva.

A broad analysis of the lesions by location in the oral mucosa (Table 6.13) showed that Ulceration was distributed on the buccal mucosa, vermilion border and tongue; and abscesses occurred on alveolar border/ gingiva.

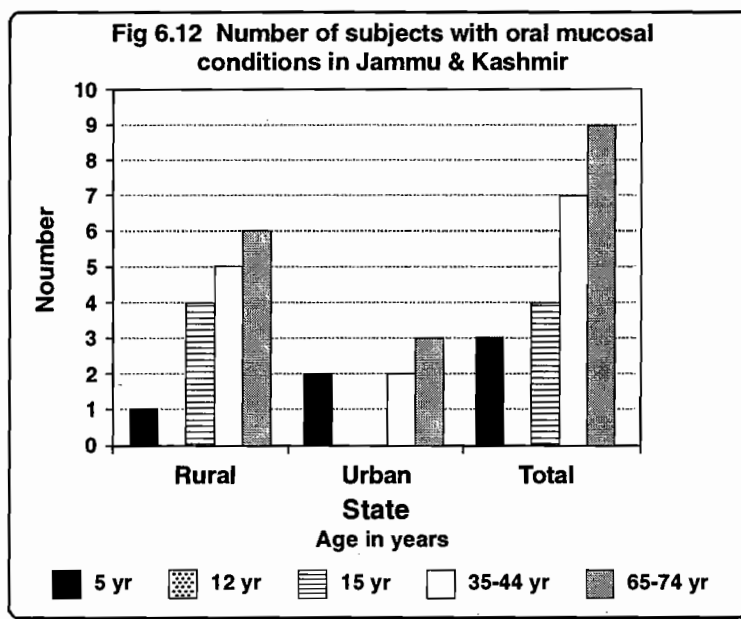


Table 6.12 Numbers of subjects with oral mucosal lesions and type of lesions by age, sex and geographical area. State : Jammu & Kashmir

Oral Mucosal Lesions	n=	5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	157	318	157	159	316	153	161	314	158	156	314	158	160	318
Oral mucosal lesions present		0	3	3	0	0	0	2	0	2	4	0	4	3	1	4
Oral Cancer		0	1	1	0	0	0	1	0	1	0	0	0	0	0	0
Leukoplakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lichen planus		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ulceration		0	1	1	0	0	0	1	0	1	2	0	2	0	1	1
ANUG		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candidiasis		0	1	1	0	0	0	0	0	0	1	0	1	3	0	3
Abscess		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other condition		0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Region 2	n=	164	150	314	166	147	313	163	151	314	145	168	313	166	144	310
Oral mucosal lesions present		0	0	0	0	0	0	0	1	1	0	2	2	2	2	4
Oral Cancer		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leukoplakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lichen planus		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ulceration		0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
ANUG		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candidiasis		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Abscess		0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Any other condition		0	0	0	0	0	0	0	0	0	0	1	1	2	2	4
Region 3	n=	152	158	310	153	155	308	154	155	309	155	153	308	153	156	309
Oral mucosal lesions present		0	0	0	0	0	0	0	1	1	0	1	1	1	0	1
Oral Cancer		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leukoplakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lichen planus		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ulceration		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANUG		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candidiasis		0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Abscess		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other condition		0	0	0	0	0	0	0	1	1	0	0	0	1	0	1
State Rural	n=	321	304	625	320	301	621	314	308	622	300	322	622	320	303	623
Oral mucosal lesions present		0	1	1	0	0	0	2	2	4	2	3	5	4	2	6
Oral Cancer		0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
Leukoplakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lichen planus		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ulceration		0	1	1	0	0	0	1	1	2	2	0	2	0	0	0
ANUG		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candidiasis		0	0	0	0	0	0	0	0	0	0	1	1	1	0	1
Abscess		0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Any other condition		0	0	0	0	0	0	0	1	1	0	1	1	3	2	5
State Urban	n=	156	161	317	156	160	316	156	159	315	158	155	313	157	157	314
Oral mucosal lesions present		0	2	2	0	0	0	0	0	0	2	0	2	2	1	3
Oral Cancer		0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Leukoplakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lichen planus		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ulceration		0	0	0	0	0	0	0	0	0	0	0	0	1	1	
ANUG		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candidiasis		0	1	1	0	0	0	0	0	0	1	0	1	2	0	2
Abscess		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other condition		0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
State Total	n=	477	465	942	476	461	937	470	467	937	458	477	935	477	460	937
Oral mucosal lesions present		0	3	3	0	0	0	2	2	4	4	3	7	6	3	9
Oral Cancer		0	1	1	0	0	0	1	0	1	0	0	0	0	0	0
Leukoplakia		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lichen planus		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ulceration		0	1	1	0	0	0	1	1	2	2	0	2	0	1	1
ANUG		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candidiasis		0	1	1	0	0	0	0	0	0	1	1	2	3	0	3
Abscess		0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Any other condition		0	0	0	0	0	0	0	1	1	1	1	2	3	2	5

Table 6.13 Distribution of subjects with oral mucosal conditions by location of conditions in the mouth. State : Jammu & Kashmir

Location	Oral Mucosal Condition																	
	Oral Cancer		Leuko-plakia		Lichen Planus		Ulceration		ANUG		Candi-diasis		Abscess		Others		Total by Location	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
State Rural																		
Vermilion Border	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commissures	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
Lips	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Sulci	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	0
Buccal mucosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Floor of mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tongue	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	4	2	4
Hard/Soft palate	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Alv ridges/ Gingiva	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Rural Total	1	0	0	0	0	0	2	2	0	0	1	0	0	1	3	4	7	7
State Urban																		
Vermilion Border	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commissures	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Lips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulci	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buccal mucosa	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	1
Floor of mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tongue	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Hard/Soft palate	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0
Alv ridges/ Gingiva	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Urban Total	0	1	0	0	0	0	0	1	0	0	4	0	0	0	1	0	5	4
State Total																		
Vermilion Border	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commissures	1	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	4
Lips	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Sulci	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	0
Buccal mucosa	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	2	1
Floor of mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tongue	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	4	3	4
Hard/Soft palate	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	0
Alv ridges/ Gingiva	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
State Total	1	1	0	0	0	0	2	3	0	0	5	0	0	1	4	4	12	11

6.5 DENTAL FLUOROSIS STATUS

Table 6.14 presents the per cent subjects with dental fluorosis by level of severity

The prevalence of fluorosis was very low in the state. It ranged from 0.2 per cent in 5 year old subjects to 0.7 per cent in 35-44 year old subjects. Only 0.6 per cent subjects in 35-44 year age group, 0.4 per cent subjects in 15 year age group and 0.3 per cent subjects in 65-74 year age group had very mild to mild fluorosis. It was evenly distributed between male and female subjects and was reported from only rural areas. No fluorosis was reported from Region 3.

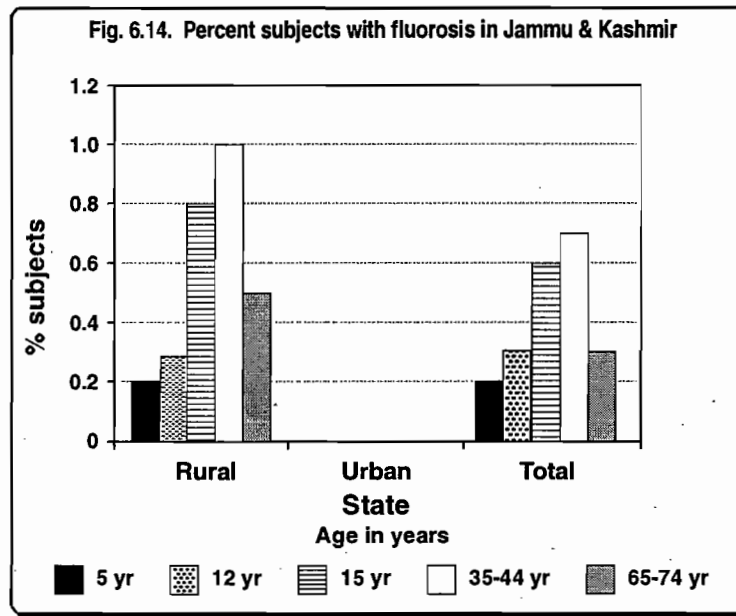


Table 6.14 Percent distribution of subjects with severity of dental fluorosis by age, sex and geographical area. State : Jammu & Kashmir

Dental Fluorosis		5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	159	156	315	152	157	309	148	159	307	153	148	301	75	65	140
With Fluorosis		4.7	2.7	3.7	7.8	8.3	8.1	6.0	6.3	6.2	6.1	4.3	5.2	0.0	2.0	1.0
Questionable		4.7	2.7	3.7	7.8	8.3	8.1	6.0	6.3	6.2	6.1	3.4	4.8	0.0	2.0	1.0
V Mild & Mild		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.0	0.0	0.0
Moderate		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 2	n=	155	148	303	164	144	308	163	152	315	143	165	308	141	124	265
With Fluorosis		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.8	0.8	1.3	1.1	0.0	0.9	0.5
Questionable		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
V Mild & Mild		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.8	0.8	1.3	1.1	0.0	0.9	0.5
Moderate		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 3	n=	152	155	307	152	154	306	153	155	308	152	150	302	69	64	133
With Fluorosis		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Questionable		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
V Mild & Mild		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Moderate		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Rural	n=	312	299	611	314	296	610	308	307	615	290	310	600	191	165	356
With Fluorosis		0.2	0.1	0.2	0.2	0.3	0.3	0.2	1.3	0.8	0.8	1.1	1.0	0.0	0.9	0.5
Questionable		0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.0	0.0	0.0
V Mild & Mild		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.6	1.0	0.8	0.0	0.8	0.4
Moderate		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Urban	n=	154	160	314	154	159	313	156	159	315	158	153	311	94	88	182
With Fluorosis		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Questionable		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
V Mild & Mild		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Moderate		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	466	459	925	468	455	923	464	466	930	448	463	911	285	253	538
With Fluorosis		0.2	0.1	0.2	0.2	0.3	0.3	0.2	1.0	0.6	0.6	0.8	0.7	0.0	0.6	0.3
Questionable		0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.0	0.0	0.0
V Mild & Mild		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.4	0.4	0.7	0.6	0.0	0.6	0.3
Moderate		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

6.6 OTHER LESIONS

6.6.1 Extra oral lesions

Table 6.15 presents the per cent subjects with extra oral lesions by type of lesions.

The extra oral lesions were prevalent in all age groups and ranged from 2.0 per cent in 65-74 year age group to 16.9 per cent in 15 year old subjects. Enlarged lymph nodes of head and neck were most prevalent in all age groups followed by ulceration, sores, erosions or fissures

Generally, extra oral lesions were more prevalent in urban areas rather than rural areas. There were no marked gender related differentials.

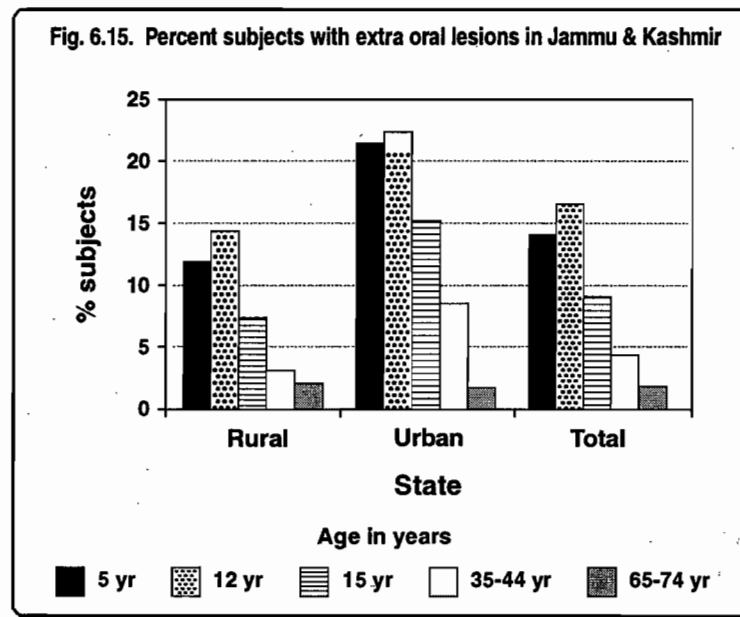


Table 6.15 Percent distribution of subjects with extra oral lesions by age, sex and geographical area.

State : Jammu & Kashmir

Extra Oral Lesions	n=	5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	157	318	157	159	316	152	162	314	158	157	315	159	160	319
With extra oral lesions		12.8	14.4	13.6	17.3	18.2	17.8	14.9	14.2	14.6	8.4	9.7	9.1	3.8	3.4	3.6
Ulceration,sores,erosions,fissures		1.5	1.9	1.7	2.4	0.8	1.6	1.7	0.8	1.3	1.6	0.8	1.2	0.3	1.1	0.7
head, neck, limbs		0.0	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0
nose, cheeks, chin		0.0	0.0	0.0	0.0	0.8	0.4	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0
commissures		1.5	0.0	0.8	2.4	0.0	1.2	0.8	0.8	0.8	0.0	0.8	0.4	0.3	1.1	0.7
vermilion border		0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Cancrum oris		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Abnormalities of upper & lower lips		0.0	0.0	0.0	0.0	0.8	0.4	0.8	1.6	1.2	0.0	0.8	0.4	0.0	0.0	0.0
Enlarged lymph nodes(head & neck)		11.2	12.5	11.9	14.8	16.6	15.7	12.4	11.9	12.2	6.8	8.1	7.5	3.4	2.4	2.9
Region 2	n=	164	149	313	166	147	313	161	151	312	147	166	313	167	146	313
With extra oral lesions		12.7	8.6	10.7	8.8	12.5	10.7	7.4	3.9	5.7	3.9	3.7	3.8	1.1	2.3	1.7
Ulceration,sores,erosions,fissures		1.6	1.3	1.5	1.3	0.0	0.7	0.7	0.5	0.6	0.8	0.0	0.4	0.0	0.0	0.0
head, neck, limbs		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nose, cheeks, chin		0.0	0.7	0.4	0.7	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
commissures		1.6	0.5	1.1	0.7	0.0	0.4	0.7	0.5	0.6	0.8	0.0	0.4	0.0	0.0	0.0
vermilion border		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cancrum oris		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Abnormalities of upper & lower lips		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Enlarged lymph nodes(head & neck)				0.0			0.0			0.0			0.0			0.0
Region 3	n=	152	158	310	153	155	308	154	155	309	155	154	309	153	156	309
With extra oral lesions		19.1	19.7	19.4	28.6	20.6	24.6	18.0	10.4	14.2	3.3	6.0	4.7	0.4	3.8	2.1
Ulceration,sores,erosions,fissures		0.8	0.0	0.4	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.4	0.2	0.4	1.2	0.8
head, neck, limbs		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.4	0.2
nose, cheeks, chin		0.0	0.0	0.0	0.0	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2
commissures		0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
vermilion border		0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.4
Cancrum oris		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Abnormalities of upper & lower lips		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Enlarged lymph nodes(head & neck)		18.4	19.7	19.1	27.8	19.9	23.9	18.0	10.4	14.2	3.3	5.5	4.4	0.0	2.7	1.4
State Rural	n=	321	303	624	320	301	621	311	309	620	300	322	622	321	305	626
With extra oral lesions		13.3	11.2	12.3	15.5	14.1	14.8	9.3	5.9	7.6	2.8	3.3	3.1	0.6	3.5	2.1
Ulceration,sores,erosions,fissures		1.0	0.6	0.8	1.5	0.5	1.0	0.6	0.0	0.3	0.6	0.0	0.3	0.0	0.5	0.3
head, neck, limbs		0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nose, cheeks, chin		0.0	0.5	0.3	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
commissures		1.0	0.0	0.5	0.6	0.0	0.3	0.5	0.0	0.3	0.5	0.0	0.3	0.0	0.0	0.0
vermilion border		0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3
Cancrum oris		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Abnormalities of upper & lower lips		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Enlarged lymph nodes(head & neck)		12.3	10.6	11.5	14.1	13.5	13.8	8.7	5.8	7.3	2.2	3.3	2.8	0.6	3.0	1.8
State Urban	n=	156	161	317	156	160	316	156	159	315	160	155	315	158	157	315
With extra oral lesions		21.8	20.9	21.4	22.5	22.4	22.5	20.4	10.6	15.5	6.3	9.6	8.0	1.9	1.6	1.8
Ulceration,sores,erosions,fissures		2.2	1.1	1.7	0.0	0.0	0.0	0.0	1.1	0.6	0.0	0.8	0.4	0.8	0.8	0.8
head, neck, limbs		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4	0.0	0.8	0.4
nose, cheeks, chin		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.4
commissures		2.2	1.1	1.7	0.0	0.0	0.0	0.0	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
vermilion border		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cancrum oris		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Abnormalities of upper & lower lips		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Enlarged lymph nodes(head & neck)		19.5	19.7	19.6	22.5	22.4	22.5	20.4	9.5	15.0	6.3	8.8	7.6	1.1	0.8	1.0
State Total	n=	477	464	941	476	461	937	467	468	935	460	477	937	479	462	941
With extra oral lesions		15.5	13.9	14.7	17.3	16.5	16.9	12.1	7.3	9.7	3.7	4.9	4.3	0.9	3.0	2.0
Ulceration,sores,erosions,fissures		1.3	0.7	1.0	1.1	0.4	0.8	0.4	0.3	0.4	0.4	0.2	0.3	0.2	0.6	0.4
head, neck, limbs		0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.2	0.1
nose, cheeks, chin		0.0	0.4	0.2	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1
commissures		1.3	0.3	0.8	0.4	0.0	0.2	0.4	0.3	0.4	0.4	0.0	0.2	0.0	0.0	0.0
vermilion border		0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2
Cancrum oris		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Abnormalities of upper & lower lips		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Enlarged lymph nodes(head & neck)		14.2	13.1	13.7	16.2	16.1	15.2	11.7	6.9	9.3	3.3	4.7	4.0	0.7	2.4	1.6

6.6.2 T M joint symptoms and signs

Table 6.16 presents the per cent subjects with temporomandibular joint (TM Joint) symptoms and signs.

Overall, TM Joint symptoms and signs did not appear to be a major public health problem in the state as the prevalence and distribution was extremely low and rare. Symptoms and signs were reported only in age groups 5, 15, and 65-74 years in the state. The prevalence was extremely low (0.4 per cent) in the 65-74 year age group. The signs present were tenderness and clicking in 65-74 year age group.

Since the prevalence was extremely low, its exact prevalence by rural and urban areas in the state could not be ascertained although it appeared that these were detected only in rural residents in the state. The signs and symptoms appeared in only two out of the three regions studied.

Table 6.16 Percent subjects with symptoms and signs in the tempromandibular joints by age, sex and geographical area State : Jammu & Kashmir

T M Joints Assessment		5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	157	318	157	159	316	153	162	315	158	157	315	159	159	318
Symptoms present		0.0	0.3	0.2	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Signs present		0.0	0.3	0.2	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Clicking		0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tenderness		0.0	0.3	0.2	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Reduced jaw mobility		0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 2	n=	163	148	311	166	146	312	162	151	313	146	165	311	167	143	310
Symptoms present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.8
Signs present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.8
Clicking		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.4
Tenderness		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.8
Reduced jaw mobility		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 3	n=	152	158	310	153	154	307	154	155	309	154	154	308	153	156	309
Symptoms present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Signs present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Clicking		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tenderness		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduced jaw mobility		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Rural	n=	320	303	623	320	299	619	313	309	622	298	322	620	321	301	622
Symptoms present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
Signs present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
Clicking		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.3
Tenderness		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
Reduced jaw mobility		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Urban	n=	156	160	316	156	160	316	156	159	315	160	154	314	158	157	315
Symptoms present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Signs present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Clicking		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tenderness		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduced jaw mobility		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	476	463	939	476	459	935	469	468	937	458	476	934	479	458	937
Symptoms present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
Signs present		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
Clicking		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2
Tenderness		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
Reduced jaw mobility		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

6.6.3 Enamel defects (opacities, hypoplasia)

Table 6.17 presents the per cent subjects with enamel defects by type of defect and Table 6.18 presents the mean number of teeth affected with enamel defects by type of defects.

Structural enamel defects in teeth were recorded in terms of opacities and hypoplasias, types of opacities and combinations of both. The lower age group of 5 years was excluded from examination.

Overall, there was a very low prevalence of enamel defects in the state ranging from 0.9 per cent in 65-74 year old subjects to about 4.1 per cent subjects in 12 and 15 year old subjects. Demarcated opacity appeared most prevalent followed by enamel hypoplasia. Combinations of opacities and hypoplasias were recorded in 12 and 35-44 year old subjects with prevalence of 0.2 and 0.4 per cent respectively. The mean number of teeth affected was only 0.1 at the state level and did not exceed about one tooth in the regions.

The mean number of teeth affected was only 0.1 at the state level and did not exceed about one tooth in the regions.

There were no major rural and urban or male and female differentials in the pattern of distribution of enamel defects by type.

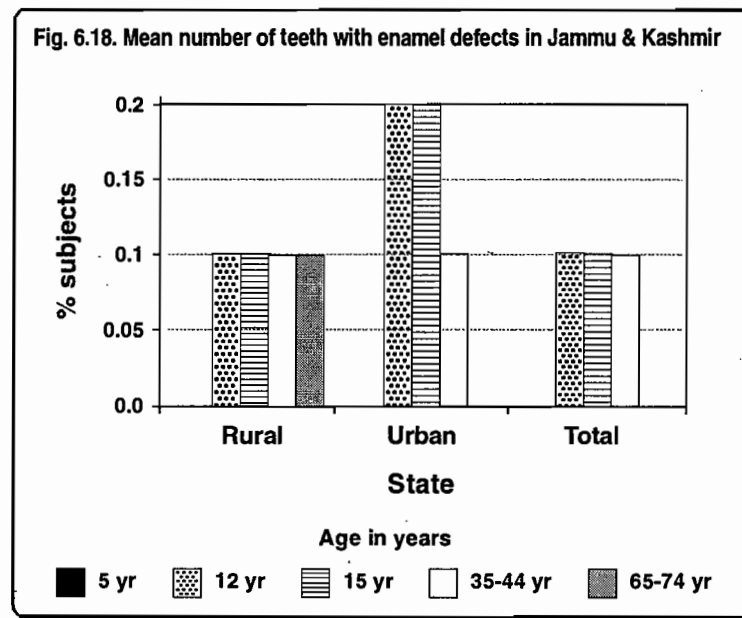
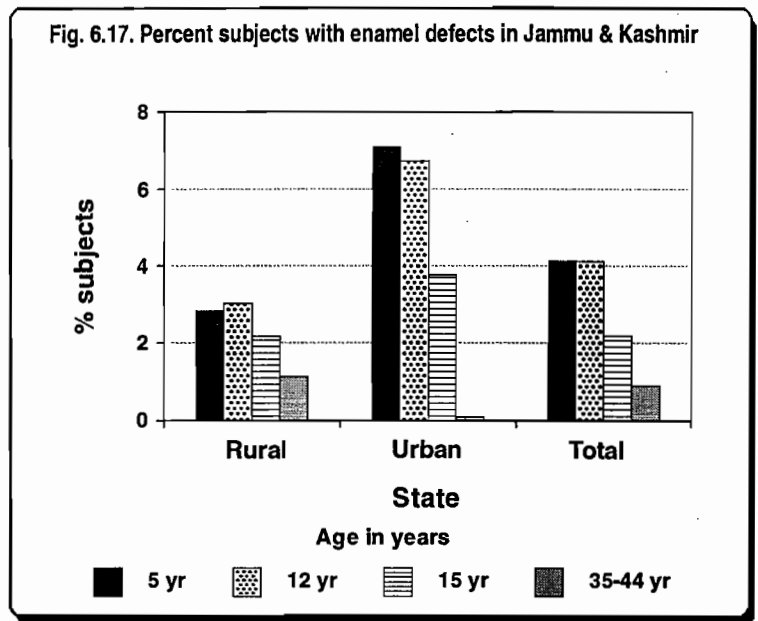


Table 6.17 Percent distribution of subjects with enamel defects (opacities/ hypoplasia) by age, sex & geographical area. State : Jammu & Kashmir

Enamel Opacities/Hypoplasia	n=	12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	157	159	316	153	162	315	157	149	306	83	75	158
With enamel defects		32.3	34.8	33.6	32.9	32.0	32.5	14.1	21.5	17.8	1.2	4.0	2.6
with demarcated opacity		28.3	29.7	29.0	31.2	30.1	30.7	11.7	17.8	14.8	1.2	2.3	1.8
with diffuse opacity		1.6	3.1	2.4	2.5	0.8	1.7	0.8	0.8	0.8	0.0	0.0	0.0
with hypoplasia		1.6	1.9	1.8	1.1	0.8	1.0	0.8	1.7	1.3	0.0	1.7	0.9
with other defects		0.8	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.3	0.2	0.0	1.2	0.6	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 2	n=	165	145	310	163	152	315	146	167	313	143	131	274
With enamel defects		2.3	3.6	3.0	1.7	4.1	2.9	1.3	3.6	2.5	0.8	1.7	1.3
with demarcated opacity		2.3	3.6	3.0	1.7	4.1	2.9	0.6	0.5	0.6	0.0	1.7	0.9
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.3	1.1	0.8	0.0	0.4
with hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.4	0.8	0.0	0.4
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.6	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 3	n=	153	155	308	154	155	309	152	153	305	90	79	169
With enamel defects		4.5	2.4	3.5	5.1	2.1	3.6	0.0	0.8	0.4	0.0	0.0	0.0
with demarcated opacity		3.0	2.4	2.7	4.3	2.1	3.2	0.0	0.8	0.4	0.0	0.0	0.0
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.8	0.0	0.4	1.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Rural	n=	320	300	620	314	310	624	297	316	613	211	185	396
With enamel defects		3.2	2.6	2.9	3.6	2.5	3.1	1.1	3.0	2.1	0.7	1.6	1.2
with demarcated opacity		2.2	2.5	2.4	3.1	2.5	2.8	0.4	0.9	0.7	0.0	1.6	0.8
with diffuse opacity		0.1	0.1	0.1	0.1	0.0	0.1	0.6	1.0	0.8	0.7	0.0	0.4
with hypoplasia		0.5	0.1	0.3	0.9	0.0	0.5	0.0	0.5	0.3	0.7	0.0	0.4
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Urban	n=	155	159	314	156	159	315	158	153	311	105	100	205
With enamel defects		6.6	7.5	7.1	5.0	8.4	6.7	1.2	2.5	1.9	0.1	0.1	0.1
with demarcated opacity		6.6	7.5	7.1	5.0	8.3	6.7	1.2	1.3	1.3	0.1	0.1	0.1
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.6	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	475	459	934	470	469	939	455	469	924	316	285	601
With enamel defects		4.1	4.1	4.1	4.1	4.1	4.1	1.2	2.9	2.1	0.5	1.2	0.9
with demarcated opacity		3.3	4.0	3.7	3.7	4.1	3.9	0.7	1.1	0.9	0.0	1.1	0.6
with diffuse opacity		0.1	0.1	0.1	0.1	0.0	0.1	0.4	0.7	0.6	0.5	0.0	0.3
with hypoplasia		0.4	0.1	0.3	0.7	0.0	0.4	0.0	0.4	0.2	0.5	0.0	0.3
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.7	0.4	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 6.18 Mean number of teeth with enamel defects (opacities/ hypoplasia) by age, sex & geographical area.

State : Jammu & Kashmir

Enamel opacities/Hypoplasia	n=	5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	157	318	158	159	317	154	162	316	159	158	317	160	161	321
Mean no. of teeth with enamel defects		0.3	0.4	0.4	1.0	1.2	1.1	1.1	1.2	1.2	0.6	0.8	0.7	0.0	0.2	0.1
with demarcated opacity		0.3	0.4	0.4	0.9	0.9	0.9	1.0	1.1	1.1	0.4	0.7	0.6	0.0	0.1	0.1
with diffuse opacity		0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 2	n=	164	152	316	167	147	314	163	152	315	153	177	330	179	146	325
Mean no. of teeth with enamel defects		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
with demarcated opacity		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Region 3	n=	152	158	310	154	156	310	154	155	309	155	155	310	154	156	310
Mean no. of teeth with enamel defects		0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
with demarcated opacity		0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Rural	n=	321	305	626	323	302	625	314	310	624	307	334	641	335	306	641
Mean no. of teeth with enamel defects		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
with demarcated opacity		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Urban	n=	156	162	318	156	160	316	157	159	316	160	156	316	158	157	315
Mean no. of teeth with enamel defects		0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.3	0.2	0.0	0.1	0.1	0.0	0.0	0.0
with demarcated opacity		0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.3	0.2	0.0	0.1	0.1	0.0	0.0	0.0
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	477	467	944	479	462	941	471	469	940	467	490	957	493	463	956
Mean no. of teeth with enamel defects		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0
with demarcated opacity		0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
with diffuse opacity		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with other defects		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with combinations of opacities and hypoplasia		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
with all three conditions		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

6.6.4 Prosthetic status

The prosthetic status was recorded for subjects 15 years and above. The information was collected to assess the extent to which subjects were wearing dental prostheses including bridge, partial dentures and full dentures. The data was recorded separately for upper arch (maxillary teeth) and the lower arch (mandibular teeth).

Table 6.19 and 6.20 presents the per cent subjects with prosthetic status of upper and lower dental arches respectively by type of prostheses. Table 6.21 presents the per cent subjects wearing full mouth removable dentures.

Only nine per cent subjects in the age group 65-74 years had any prostheses present (upper or lower jaw) in their mouth. The percentage was much lower (2.4 per cent) for 35-44 year old subjects. The prostheses being worn by the subjects examined included full dentures and partial dentures. The full denture prosthesis was the most prevalent, followed by partial dentures.

More males than females were wearing prostheses in 35-44 year age group while this situation was reversed in the 65-74 year age group. Generally, more urban residents, compared to their rural counterparts, were wearing prostheses.

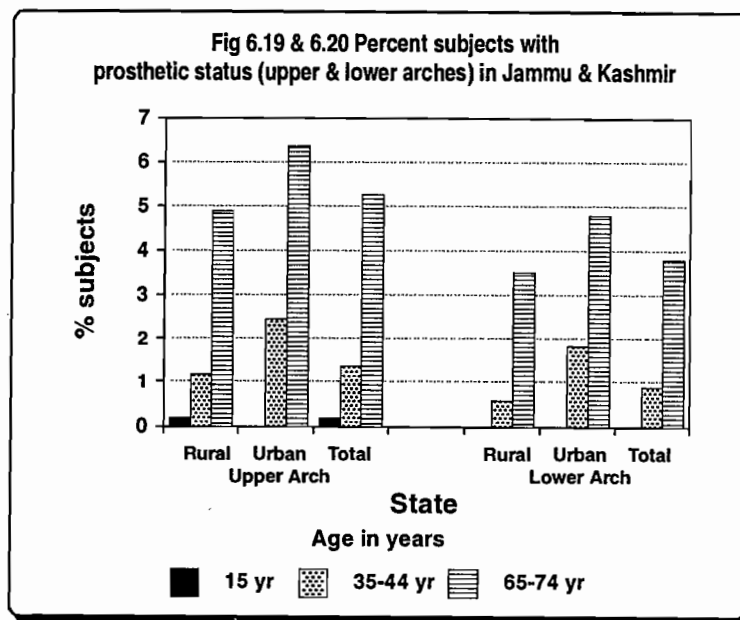


Table 6.19 Percent distribution of subjects with their prosthetic status (upper arch) by age, sex, and geographical area. State : Jammu & Kashmir

Prosthetic Status (Upper)		15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T
Region 1	n=	154	162	316	159	158	317	160	161	321
With Prostheses present		0.8	0.0	0.4	3.8	4.1	4.0	4.3	4.9	4.6
Bridge or more than one bridge		0.8	0.0	0.4	0.8	0.0	0.4	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	2.7	2.2	2.5	0.9	3.2	2.1
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.3	1.9	1.1	3.4	1.7	2.6
Region 2	n=	163	152	315	153	177	330	179	146	325
With Prostheses present		0.0	0.0	0.0	3.0	0.0	1.5	3.0	2.6	2.8
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	2.3	0.0	1.2	1.8	1.9	1.9
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.7	0.0	0.4	1.2	0.8	1.0
Region 3	n=	154	155	309	155	155	310	154	156	310
With Prostheses present		0.0	0.7	0.4	0.8	1.6	1.2	4.9	11.2	8.1
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.7	0.4	0.8	1.6	1.2	1.5	2.7	2.1
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.0	0.0	0.0	3.4	8.6	6.0
State Rural	n=	314	310	624	307	334	641	335	306	641
With Prostheses present		0.0	0.4	0.2	1.6	0.5	1.1	3.5	6.1	4.8
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.4	0.2	1.1	0.4	0.8	2.2	2.0	2.1
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.5	0.1	0.3	1.4	4.2	2.8
State Urban	n=	157	159	316	160	156	316	158	157	315
With Prostheses present		0.0	0.0	0.0	3.3	1.6	2.5	4.8	7.8	6.3
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	3.3	1.6	2.5	0.1	3.1	1.6
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7	4.7
State Total	n=	471	469	940	467	490	957	493	463	956
With Prostheses present		0.0	0.3	0.2	2.1	0.8	1.5	3.7	6.6	5.2
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.3	0.2	1.7	0.7	1.2	1.7	2.3	2.0
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.4	0.1	0.3	2.0	4.3	3.2

Note: For information on current status and need for full mouth removable dentures, please refer to Tables 6.24 and 6.25 respectively. present, please refer to

Table 6.20 Percent distribution of subjects with their prosthetic status (lower arch) by age, sex, and geographical area. State : Jammu & Kashmir

Prosthetic Status (Lower)		15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T
Region 1	n=	154	162	316	159	158	317	160	161	321
Prostheses present		0.0	0.0	0.0	1.1	0.0	0.6	1.7	1.7	1.7
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	0.8	0.0	0.4	0.0	0.6	0.3
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.3	0.0	0.2	1.7	1.1	1.4
Region 2	n=	163	152	315	153	177	330	179	146	325
Prostheses present		0.0	0.0	0.0	1.8	0.6	1.2	2.4	0.8	1.6
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.6	0.3	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	1.1	0.0	0.6	1.2	0.8	1.0
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.7	0.0	0.4	1.2	0.0	0.6
Region 3	n=	154	155	309	155	155	310	154	156	310
Prostheses present		0.0	0.0	0.0	0.4	0.4	0.4	4.2	9.3	6.8
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	0.4	0.4	0.4	0.8	1.6	1.2
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.0	0.0	0.0	3.4	7.7	5.6
State Rural	n=	314	310	624	307	334	641	335	306	641
Prostheses present		0.0	0.0	0.0	0.6	0.5	0.6	2.6	4.6	3.6
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.0	1.2
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.5	0.0	0.3	1.3	3.6	2.5
State Urban	n=	157	159	316	160	156	316	158	157	315
Prostheses present		0.0	0.0	0.0	2.9	0.8	1.9	4.6	4.7	4.7
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	2.9	0.8	1.9	0.0	1.6	0.8
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.0	0.0	0.0	4.6	3.1	3.9
State Total	n=	471	469	940	467	490	957	493	463	956
Prostheses present		0.0	0.0	0.0	1.2	0.5	0.9	3.0	4.6	3.8
Bridge or more than one bridge		0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0
Partial denture		0.0	0.0	0.0	0.8	0.2	0.5	1.0	1.1	1.1
Both Bridge and partial denture		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full removable denture		0.0	0.0	0.0	0.4	0.0	0.2	2.0	3.5	2.8

Note: For information on current status and need for full mouth removable dentures, please refer to Tables 6.24 and 6.25 respectively. present, please refer to

Table 6.21 Percent subjects with full mouth removable denture (upper and lower arch) by age, sex and geographical area. State : Jammu & Kashmir

Prosthetic status of full denture (upper & lower arch)		35-44 years			65-74 years		
		M	F	T	M	F	T
Region 1	n=	159	157	316	159	159	318
Percent subjects with full mouth removable denture		0.3	0.0	0.2	1.7	1.1	1.4
Region 2	n=	144	158	302	162	143	305
Percent subjects with full mouth removable denture		0.8	0.0	0.4	1.4	0.0	0.7
Region 3	n=	155	155	310	153	154	307
Percent subjects with full mouth removable denture		0.0	0.0	0.0	3.4	7.8	5.6
State Rural	n=	298	318	616	318	299	617
Percent subjects with full mouth removable denture		0.0	0.0	0.0	0.0	0.0	0.0
State Urban	n=	160	152	312	156	157	313
Percent subjects with full mouth removable denture		0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	458	470	928	474	456	930
Percent subjects with full mouth removable denture		0.0	0.0	0.0	0.0	0.0	0.0

6.6.5 Prosthetic need

The prosthetic need refers to the unmet need for replacement of lost or missing teeth. Prostheses may include partial or full removable dentures and fixed prostheses including bridges. The data on prosthetic needs (upper and lower arches) should be correlated with the section on Prosthetic Status.

Table 6.22 and Table 6.23 present the per cent subjects with prosthetic need by type of prostheses needed of upper and lower dental arches, respectively. Table 6.24 presents the per cent subjects who needed full mouth removable dentures.

It appeared that the need for prostheses was high in the state for both upper and lower dental arches, with a slightly higher need for prostheses in the lower jaw in the subjects aged 35-44 years. Almost 30 per cent subjects needed full mouth removable dentures in the state. This was followed by the need for multi-unit and one unit prostheses for both upper and lower dental arches. More females than males required prostheses. There were no major differentials between rural and urban areas.

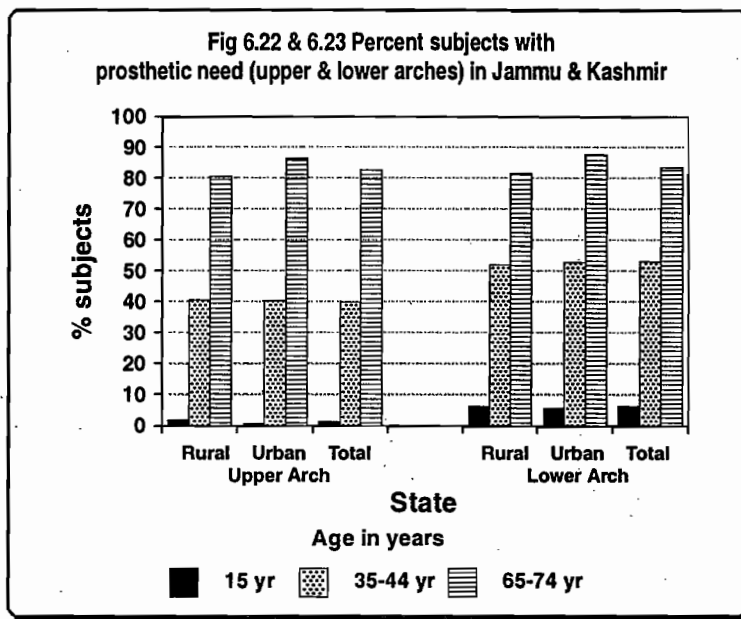


Table 6.22 Percent distribution of subjects with their prosthetic need status (upper arch) by age, sex, and geographical area. State : Jammu & Kashmir

Prosthetic Need (Upper)		15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T
Region 1	n=	154	162	316	159	158	317	160	161	321
With Prosthetic need		4.2	4.2	4.2	44.4	59.6	52.0	91.3	90.0	90.7
Need for one unit prosthesis		1.5	3.4	2.5	17.7	12.0	14.9	6.1	0.8	3.5
Need for multi unit prosthesis		2.8	0.8	1.8	22.4	29.8	26.1	19.5	17.0	18.3
Need for combination of one and/or MUP		0.0	0.0	0.0	3.4	13.6	8.5	10.8	11.6	11.2
Need for full prosthesis		0.0	0.0	0.0	0.8	4.3	2.6	54.9	60.6	57.8
Region 2	n=	163	152	315	153	177	330	179	146	325
With Prosthetic need		3.2	4.2	3.7	38.6	43.3	41.0	73.8	87.5	80.7
Need for one unit prosthesis		1.8	3.4	2.6	20.4	22.1	21.3	10.1	7.3	8.7
Need for multi unit prosthesis		1.3	0.7	1.0	16.5	16.7	16.6	39.3	44.0	41.7
Need for combination of one and/or MUP		0.0	0.0	0.0	1.1	4.0	2.6	10.7	16.8	13.8
Need for full prosthesis		0.0	0.0	0.0	0.7	0.6	0.7	13.7	19.4	16.6
Region 3	n=	154	155	309	155	155	310	154	156	310
With Prosthetic need		0.0	1.5	0.8	39.6	37.9	38.8	87.5	83.0	85.3
Need for one unit prosthesis		0.0	0.7	0.4	19.3	16.7	18.0	2.0	5.9	4.0
Need for multi unit prosthesis		0.0	0.7	0.4	15.5	11.3	13.4	19.7	16.1	17.9
Need for combination of one and/or MUP		0.0	0.0	0.0	3.6	8.8	6.2	15.3	13.3	14.3
Need for full prosthesis		0.0	0.0	0.0	1.2	1.2	1.2	50.6	47.6	49.1
State Rural	n=	314	310	624	307	334	641	335	306	641
With Prosthetic need		2.1	3.6	2.9	38.4	42.3	40.4	78.6	84.1	81.4
Need for one unit prosthesis		1.0	2.6	1.8	22.0	19.5	20.8	6.9	6.8	6.9
Need for multi unit prosthesis		1.1	1.0	1.1	13.9	15.2	14.6	30.9	30.5	30.7
Need for combination of one and/or MUP		0.0	0.0	0.0	1.5	6.5	4.0	11.2	12.1	11.7
Need for full prosthesis		0.0	0.0	0.0	1.0	1.0	1.0	29.7	34.7	32.2
State Urban	n=	157	159	316	160	156	316	158	157	315
With Prosthetic need		1.2	1.1	1.2	41.5	39.3	40.4	83.1	89.8	86.5
Need for one unit prosthesis		1.2	1.1	1.2	13.5	20.1	16.8	6.3	5.6	6.0
Need for multi unit prosthesis		0.0	0.0	0.0	22.8	13.6	18.2	31.4	31.2	31.3
Need for combination of one and/or MUP		0.0	0.0	0.0	4.4	4.8	4.6	17.0	23.7	20.4
Need for full prosthesis		0.0	0.0	0.0	0.7	0.8	0.8	28.5	29.3	28.9
State Total	n=	471	469	940	467	490	957	493	463	956
With Prosthetic need		1.8	3.0	2.4	39.1	41.7	40.4	79.9	85.7	82.8
Need for one unit prosthesis		1.0	2.2	1.6	19.7	19.8	19.8	6.7	6.6	6.7
Need for multi unit prosthesis		0.8	0.7	0.8	16.2	14.8	15.5	30.7	30.4	30.6
Need for combination of one and/or MUP		0.0	0.0	0.0	2.3	6.2	4.3	12.6	15.1	13.9
Need for full prosthesis		0.0	0.0	0.0	0.9	0.9	0.9	29.9	33.6	31.8

Note : For information on current status and need for full mouth removable dentures, please refer to Tables 6.24 and 6.25 respectively.

Table 6.23 Percent distribution of subjects with their prosthetic need status (lower arch) by age, sex, and geographical area. State : Jammu & Kashmir

Prosthetic Need (Lower)		15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T
Region 1	n=	154	162	316	159	158	317	160	161	321
With Prosthetic need		15.2	11.6	13.4	61.0	75.9	68.5	91.6	92.7	92.2
Need for one unit prosthesis		9.5	8.2	8.9	17.2	16.5	16.9	2.2	1.9	2.1
Need for multi unit prosthesis		5.7	2.6	4.2	32.7	40.3	36.5	26.3	19.4	22.9
Need for combination of one and/or MUP		0.0	0.0	0.0	10.3	14.3	12.3	9.9	14.2	12.1
Need for full prosthesis		0.0	0.8	0.4	0.8	4.8	2.8	53.3	57.3	55.3
Region 2	n=	163	152	315	153	177	330	179	146	325
With Prosthetic need		6.9	4.5	5.7	42.3	50.3	46.3	70.8	90.5	80.7
Need for one unit prosthesis		5.5	3.2	4.4	19.2	21.5	20.4	6.2	7.5	6.9
Need for multi unit prosthesis		1.3	1.3	1.3	17.7	24.9	21.3	40.6	49.0	44.8
Need for combination of one and/or MUP		0.0	0.0	0.0	4.7	4.0	4.4	7.0	13.5	10.3
Need for full prosthesis		0.0	0.0	0.0	0.7	0.0	0.4	16.9	20.5	18.7
Region 3	n=	154	155	309	155	155	310	154	156	310
With Prosthetic need		4.7	5.8	5.3	58.3	60.4	59.4	90.9	85.1	88.0
Need for one unit prosthesis		3.5	3.4	3.5	24.1	21.4	22.8	2.4	2.1	2.3
Need for multi unit prosthesis		1.2	2.4	1.8	29.6	31.4	30.5	18.6	23.6	21.1
Need for combination of one and/or MUP		0.0	0.0	0.0	3.9	7.6	5.8	18.5	14.6	16.6
Need for full prosthesis		0.0	0.0	0.0	0.8	0.0	0.4	51.4	44.8	48.1
State Rural	n=	314	310	624	307	334	641	335	306	641
With Prosthetic need		6.5	5.1	5.8	48.6	56.0	52.3	78.3	86.7	82.5
Need for one unit prosthesis		4.9	3.6	4.3	20.6	20.7	20.7	4.5	4.2	4.4
Need for multi unit prosthesis		1.6	1.5	1.6	22.3	29.0	25.7	31.5	36.7	34.1
Need for combination of one and/or MUP		0.0	0.0	0.0	4.8	6.2	5.5	9.6	13.5	11.6
Need for full prosthesis		0.0	0.0	0.0	1.0	0.2	0.6	32.7	32.3	32.5
State Urban	n=	157	159	316	160	156	316	158	157	315
With Prosthetic need		5.0	5.8	5.4	53.2	51.7	52.5	82.4	92.2	87.3
Need for one unit prosthesis		4.2	3.1	3.7	23.2	23.4	23.3	4.9	6.8	5.9
Need for multi unit prosthesis		0.8	2.6	1.7	26.3	24.2	25.3	31.7	36.8	34.3
Need for combination of one and/or MUP		0.0	0.0	0.0	3.7	4.1	3.9	18.3	15.5	16.9
Need for full prosthesis		0.0	0.0	0.0	0.0	0.0	0.0	27.6	33.1	30.4
State Total	n=	471	469	940	467	490	957	493	463	956
With Prosthetic need		6.2	5.3	5.8	50.1	55.5	52.8	79.6	88.2	83.9
Need for one unit prosthesis		4.8	3.5	4.2	21.4	21.4	21.4	4.5	4.8	4.7
Need for multi unit prosthesis		1.4	1.8	1.6	23.5	28.1	25.8	31.4	36.6	34.0
Need for combination of one and/or MUP		0.0	0.0	0.0	4.5	5.8	5.2	11.8	14.1	13.0
Need for full prosthesis		0.0	0.0	0.0	0.7	0.1	0.4	31.9	32.7	32.3

Note: For information on current status and need for full mouth removable dentures, please refer to Tables 6.24 and 6.25 respectively.

Table 6.24. Percent subjects with need for full mouth removable denture (upper and lower arch) by age, sex and geographical area. State : Jammu & Kashmir

Prosthetic need for full denture (upper & lower arch)		35-44 years			65-74 years		
		M	F	T	M	F	T
Region 1	n=	159	157	316	158	159	317
Percent subjects needing full mouth removable denture		0.0	3.2	1.6	48.0	53.8	50.9
Region 2	n=	145	159	304	163	145	308
Percent subjects needing full mouth removable denture		0.8	0.0	0.4	14.2	18.0	16.1
Region 3	n=	155	155	310	153	154	307
Percent subjects needing full mouth removable denture		0.8	0.0	0.4	46.6	42.2	44.4
State Rural	n=	299	320	619	318	301	619
Percent subjects needing full mouth removable denture		1.0	0.1	0.6	29.9	30.7	30.3
State Urban	n=	160	151	311	156	157	313
Percent subjects needing full mouth removable denture		0.0	0.0	0.0	24.5	27.7	26.1
State Total	n=	459	471	930	474	458	932
Percent subjects needing full mouth removable denture		0.7	0.1	0.4	29.0	30.2	29.6

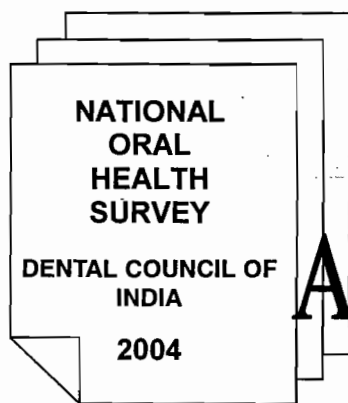
6.6.6 Community need for immediate care and referrals

Table 6.25 presents the per cent subjects with life threatening conditions, pain or infection, other conditions, and referrals made.

Overall, life threatening conditions were virtually absent and painful or infective conditions were extremely rare (0.2 per cent males in 35-44 year age group) in the state. Other conditions (unspecified) were reported in 0.2 to 0.4 per cent subjects in various age groups. Referrals were made for almost all of the conditions recorded.

Table 6.25 Percent distribution of subjects with life threatening and painful conditions requiring immediate care and referral by age, sex and geographical area.
State : Jammu & Kashmir

Need For Care & Referral		5 years			12 years			15 years			35-44 years			65-74 years		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Region 1	n=	161	156	317	154	157	311	151	161	312	159	157	316	159	160	319
Life threatening condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pain or infection		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other condition		0.0	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4
Referral		0.0	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4
Region 2	n=	163	150	313	165	147	312	163	152	315	146	166	312	165	145	310
Life threatening condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pain or infection		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.3	0.0	0.0	0.0
Other condition		0.0	0.7	0.4	0.7	0.8	0.8	0.0	1.3	0.7	0.8	0.0	0.4	0.7	0.8	0.8
Referral		0.0	0.7	0.4	0.7	0.8	0.8	0.0	1.3	0.7	0.8	0.0	0.4	0.7	0.8	0.8
Region 3	n=	152	158	310	154	155	309	153	155	308	155	155	310	153	155	308
Life threatening condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pain or infection		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Referral		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State Rural	n=	321	304	625	319	299	618	311	309	620	300	324	624	319	303	622
Life threatening condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pain or infection		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other condition		0.0	0.6	0.3	0.5	0.5	0.5	0.0	0.5	0.3	0.5	0.0	0.3	0.5	0.6	0.6
Referral		0.0	0.6	0.3	0.5	0.5	0.5	0.0	0.5	0.3	0.5	0.0	0.3	0.5	0.6	0.6
State Urban	n=	155	160	315	154	160	314	156	159	315	160	154	314	158	157	315
Life threatening condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pain or infection		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.6	0.0	0.0	0.0
Other condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Referral		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0
State Total	n=	476	464	940	473	459	932	467	468	935	460	478	938	477	460	937
Life threatening condition		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pain or infection		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0
Other condition		0.0	0.4	0.2	0.4	0.4	0.4	0.0	0.7	0.4	0.4	0.0	0.2	0.4	0.4	0.4
Referral		0.0	0.4	0.2	0.4	0.4	0.4	0.0	0.7	0.4	0.4	0.0	0.2	0.4	0.4	0.4



ANNEXURES

DENTAL COUNCIL OF INDIA

EXECUTIVE COMMITTEE

Dr. R K Bali
President
New Delhi

Dr. C. Bhasker Rao,
Vice President,
Dharwad.

Dr. Anil Kohli
New Delhi

Dr. Ravindra Ratollikar,
Hyderabad

Dr. S. G. Damle
Mumbai

Dr. B. H. Sripathi Rao
Mangalore.

Dr. J. R. Sabharwal
New Delhi

Dr. S. P. Agarwal,
New Delhi

OUTGOING MEMBERS

Dr. Mahesh Verma, New Delhi.

Dr. V. Surindra Shetty, Mangalore.

Dr. B. Suresh Chandra, Mangalore.

SUPPORT STAFF

Mr. A. L. Miglani, Secretary (Retd.)

Mr. Shiv Kumar

Mr. S.S. Arora, Secretary I/c.

Mr. Praveen Kumar

Mr. C.L. Bhatia

Mr. S. S. Kanyal

Mr. K. V. Abraham

Mr. Puneet Bansal

Mr. P. K. De

Mr. Anil Kumar

NOHS SECRETARIAT

Mrs. Sarita Verma

ANNEXURE - 1

CENTRAL SURVEY TEAM

Dr. R. K. Bali

Dr. V. B. Mathur

Prof. P. P. Talwar

Mr. H. B. Chanana

ANNEXURE - 2

TECHNICAL WORKING GROUP

Dr. R. K. Bali, President, DCI

Dr. V.B. Mathur

Dr. Shankar Aradhya

Dr. K.V.V. Prasad

Dr. M.B. Aswathnarayana

Prof. P.P. Talwar

Dr. Amrit Tiwari

LIST OF STATES, REGIONS WITHIN STATES AND SELECTED DISTRICTS

ANNEXURE - 3

Sr. No	State	Regions	Region Code	Selected Districts
1	Andhra Pradesh	North Coastal Andhra	01	Vishakapatnam
		South Coastal Andhra	02	Guntur
		Nellore	03	Nellore
		Rayalseema	04	Chittoor
		S Telangana	05	Ranga Reddy
		N Telangana	06	Khammam
2	Assam	N Eastern Hills	01	Karbi Anglong
		Lower Brahmaputra	02	Kamrup
		Upper Brahmaputra	03	Jorhat
3	Gujarat	S Hills	01	Bulsar
		S Gujarat	02	Surat
		M Gujarat	03	Baroda
		N Gujarat	04	Ahmedabad
		N W Arid	05	Kutch
		N Saurashtra	06	Jamnagar
		Saurashtra	07	Junagarh
4	Haryana	Foot Hills of Shivalik	01	Yamunanagar
		Plains	02	Rohtak
		Arid	03	Sirsa
5	Himachal Pradesh		01	Simla
			02	Kinnaur
6	Punjab	N Punjab	01	Roppas (Ropar)
		C Punjab	02	Patiala
		S Punjab	03	Sangrur
7	Chandigarh	Chandigarh	01	Chandigarh
8	Delhi	Delhi	01	Delhi
9	Karnataka	N Dry Region	01	Dharwad
		Central Region	02	Bangalore
		S Region	03	Mysore
		Hills & Coastal Region	04	Kodagu
10	Kerala	Coastal Midland	01	Malappuram
		Midlands	02	Kottayam
		Hills	03	Wayanad
11	Madhya Pradesh	Bundelkhand	01	Chattarpur
		Chattisgarh Hills	02	Mandla
		Keymora Plateau & Satapura Hills	03	Jabalpur

Sr. No	State	Regions	Region Code	Selected Districts
		Vindhya Plateau	04	Bhopal
		Satpura Plateau	05	Chindwara
		Central Narmada Valley	06	Hoshangabad
		Gird	07	Guna
		Malwa & Nimar (?) Plateau	08	Indore
12	Maharashtra	E Vidharba	01	Bhandara
		W Hills & Plains	02	Nasik
		Scarcity Region	03	Ahmednagar
		C Plateau	04	Amrawati
		C Vidharba	05	Wardha
		Konkan	06	Thane
13	Goa	Goa	01	Goa
14	Orissa	Inland	01	Dhankonal
		N Plateau Hills	02	Keonjar
		S W Hills	03	Koraput
		Coastal	04	Cuttack
		Ganjan	05	Ganjam
15	Rajasthan	N Arid	01	Ganganagar
		S Plains	02	Udaipur
		E Plains	03	Jaipur
		S Plateau	04	Jhalawar
		W Arid	05	Sikar
16	Tamil Nadu	N Region	01	Salem
		C Region	02	Coimbatore
		NE Coastal	03	Chennai
		Delta	04	Thanjavur
		SE Coastal	05	Tirunevalli
		S Region	06	Kanyakumari
		Hills Region	07	Nilgiri
17	UP	N E Plains	01	Gonda
		E Plains	02	Ballia
		C Plains	03	Sitapur
		N W Plains	04	Ghaziabad
		S W Plains	05	Aligarh
		Bundelkhand	06	Banda
18	J & K	Ladhakh	01	Ladhakh
		Kashmir Valley	02	Srinagar
		Jammu	03	Jammu
19	Pondicherry	Pondicherry	01	Pondicherry

LIST OF PARTICIPATING DENTAL COLLEGES

1.	Regional Dental College, Guwahati, (Assam)
2.	Govt. Dental College & Hospital, Ahmedabad (Gujarat)
3.	Dental College & Hospital, Delhi
4.	B.R.S. Dental College & Hospital Panchkula (Haryana)
5.	Dental College, Rohtak (Haryana)
6.	H.P. Govt. Dental College, Shimla (H.P.)
7.	College of Dental Surgery, Kasturba Medical College, Mangalore (Karnataka)
8.	Govt. Dental College, Bangalore
9.	Bharati Vidyapeeth Dental College & Hospital, Pune
10.	Dental Wing, S.C.B. Medical College, Cuttak (Orissa)
11.	Mahatma Gandhi Dental College & Hospital, Pondicherry.
12.	Dental College & Hospital, Lucknow
13.	Govt Dental College, Indore (M.P)
14.	Principal, Sri Sai College of Dental Surgery, Vikarabad – 501 101 (R.R. Dist. – A.P.)
15.	Govt. Dental College, Srinagar (J&K)
16.	Pacific Dental College, Udaipur, Rajasthan

REGIONAL COORDINATORS

S. No.	State	Regional Coordinator
1.	Andhra Pradesh	Dr. A. Jayakumar, Principal Sri Sai College of Dental Surgery, Vikarabad
2.	Assam	Dr. Rubi Kataki Deptt. of Conservative Dentistry, Regional Dental College, Guwahati
3.	Delhi	Dr. Mahesh Verma, Principal, Dental College & Hospital, Maulana Azad Medical College, New Delhi
4.	Gujarat	Dr. Jayesh K. Parikh Govt. Dental College & Hospital, Ahmedabad.
5.	Himachal Pradesh, Punjab, Haryana, Chandigarh	Dr. N.C. Rao H.P. Govt. Dental College & Hospital, Shimla Deptt. of Community Dentistry,
6.	Jammu & Kashmir	Dr. Tara Singh Govt. Dental College, Srinagar.
7.	Karnataka	Dr. S.S. Hiremath Deptt. Of Community Dentistry, Govt. Dental College, Bangalore.
8.	Kerala	Dr. K. Nanda Kumar, Dental College, Medical Campus, Trivandrum
9.	Madhya Pradesh	Dr. S.V. Dhodapkar, Professor & Head of the Deptt. of Periodontics, College of Dentistry, Indore.
10.	Maharashtra, Goa	Dr. S.G. Damle, Dean, Nair Hospital Dental College, Mumbai.
11.	Orissa	Dr. Ashok K. Mahapatra Deptt. of Community Dentistry, S.C.B. Medical College, Cuttack.
12.	Tamil Nadu, Pondicherry	Dr. M.B. Aswathnarayanan, Deptt. of Community Dentistry, Govt. Dental College & Hospital, Chennai.
13.	Rajasthan	Dr. G. V. N. Ramesh, Principal, Pacific Dental College, Udaipur

NATIONAL ORAL HEALTH SURVEY & FLUORIDE MAPPING

ANNEXURE - 6

TEAM MEMBERS (JAMMU & KASHMIR)

S. No.	Name	Designation
1	Dr. Tara Singh	Regional Coordinator
2	Dr. A.W. Malik	Supervisor
3	Dr. S.C. Gupta	Supervisor
4	Dr. Arik Iqbal	Dental Surgeon
5	Dr. A.P. Singh	Dental Surgeon
6	Dr. Showkat Wani	Dental Surgeon
7	Dr. Farooq Ahmed	Dental Surgeon
8	Mrs. Tasleema	Hygienist
9	Mrs. Safira	Hygienist
10	Mr. Girdhari Lal	Hygienist

DENTAL COUNCIL OF INDIA, NEW DELHI
भारतीय दंत चिकित्सा परिषद, नई दिल्ली

ANNEXURE - 7

NATIONAL ORAL HEALTH SURVEY & FLUORIDE MAPPING 2002
राष्ट्रीय मुख स्वास्थ्य सर्वेक्षण तथा फ्लोराइड मैपिंग 2002

(A NATIONAL EPIDEMIOLOGICAL STUDY OF ORAL HEALTH PROBLEMS AND FLUORIDE ESTIMATION IN WATER SAMPLES)
 (मुख स्वास्थ्य समस्याओं सम्बन्धी महामारी विज्ञान का राष्ट्रीय अध्ययन तथा जल-नमूनों में फ्लोराइड एस्टीमेशन)

DATE / तिथि	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	FORM NO.	<input type="text"/>	<input type="text"/>	<input type="text"/>	(1-2)
	(DAY)				(YEAR)	फार्म संख्या	1	0		
STATE / राज्य	<input type="text"/>					TEAM NO.	<input type="text"/>	<input type="text"/>	<input type="text"/>	(3-5)
	(6-7)					दल संख्या (टीम)				
ZONE / क्षेत्र (जोन)	<input type="text"/>									
	(8-9)									
DISTRICT / जिला	<input type="text"/>									
	(10)									

NAME OF VILLAGE / URBAN BLOCK (11-12)
 गांव/शहरी ब्लॉक का नाम

VILLAGE CODE R/U/आर/यू

R = 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	(13)
U = 2	R	2	U		

SERIAL NO. OF HOUSEHOLD VISITED (14-16)
 सर्वेक्षण किये गये (सर्वेक्षित) घरों की क्रम संख्या

NAME OF HEAD OF HOUSEHOLD Mr. / Mrs.

घर के मुखिया का नाम

NAME OF SPOUSE

पत्नी का नाम

ADDRESS OF THE HOUSEHOLD

घर का पता

NAME OF INTERVIEWER (NAME) / नाम (SIGN) / हस्ताक्षर

साक्षात्कारकर्ता का नाम

FIELD CHECKED BY (NAME) / नाम (SIGN) / हस्ताक्षर (SUPERVISOR) / (सुपरवाइजर)

क्षेत्र जांचकर्ता

SCRUTINISED BY (NAME) / नाम (SIGN) / हस्ताक्षर (SUPERVISOR) / (सुपरवाइजर)

जांचकर्ता

CHECKED BY (NAME) / नाम (SIGN) / हस्ताक्षर (COORDINATOR) / (संयोजक)

जांचकर्ता

S. No./ क्रम सं.	Question / प्रश्न	Code / कोड
9.	Total No. of members in the family (probe and record the number) परिवार में कुल सदस्यों की संख्या (जांच करें व लिखें)	M / पु F / स्त्री (29-30)
10.	No. of persons 5 years old पांच वर्ष की आयु के व्यक्तियों की संख्या	M / पु F / स्त्री (31-32)
11.	No. of persons 12 years old बारह वर्ष की आयु के व्यक्तियों की संख्या	M / पु F / स्त्री (33-34)
12.	No. of persons 15 years old पंद्रह वर्ष की आयु के व्यक्तियों की संख्या	M / पु F / स्त्री (35-36)
13.	No. of persons 35-44 years old 35-44 वर्ष की आयु के व्यक्तियों की संख्या	M / पु F / स्त्री (37-38)
14.	No. of persons 65-74 years old 65-74 वर्ष की आयु के व्यक्तियों की संख्या	M / पु F / स्त्री (39-40)

B. FOOD HABITS / खाद्य सम्बन्धी आदतें

S. No./ क्रम सं.	Question / प्रश्न	Code / कोड
15.	What is your staple (main) food in the Household? आपका मुख्य अन्न क्या है? (Tick One)/ (एक पर चिन्ह लगायें)	Wheat / गेहूँ 1 Rice / चावल 2 Maize / मक्का 3 Jowar / ज्वार 4 Bajra / बाजरा 5 Others / अन्य 6 (41)
16.	What is your main source of drinking water? (Take a sample of water in the given jar if the source of water is different from the one where earlier sample was collected) आपका पीने के पानी का मुख्य स्रोत क्या है? (पूर्व घर में एकत्रित नमूने से यदि यहाँ का स्रोत भिन्न है तो जार में पानी का नमूना लें) (Tick One)/ (एक पर चिन्ह लगायें)	Pipe/Tap / पाइप/टोटी 1 Tubewell/Handpump / ट्यूबवैल 2 Draw Well / हैंड पम्प 3 Pond / कुआँ 4 River / नदी 5 Others / अन्य 6 (42)
17.	Identification of the drinking water source as marked on jar or bottle in which sample collected from this HH source or one before (if source is same) पानी के नमूने की संख्या?	<input type="text"/> (43)
18.	Is your family predominantly Veg./Non-Veg. क्या आपका परिवार मुख्य रूप से शाकाहारी/सामिश्र है? (Tick One)/ (एक पर चिन्ह लगायें)	Veg. / शाकाहारी 1 Non-Veg. / सामिश्र 2 (44)

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
24.	Your occupation or Profession ? / आपका रोजगार या व्यवसाय?	Farmer 1 कृषक Agriculture Labour 2 कृषि श्रमिक Business 3 व्यापार Professional 4 व्यवसाय White Collar Worker 5 व्हाइट-कालर कार्य Skilled Worker 6 सीखा हुआ कर्मचारी Unskilled Worker 7 बिना सीखा हुआ कर्मचारी Other (Specify) 8 अन्य		A S K F D	A S K F D			
25.	How often do you read a Newspaper? / आप समाचार-पत्र कब पढ़ते हैं?	Daily 1 प्रतिदिन Sometime 2 कभी-कभी Not at all 3 कभी नहीं		F B	F B			
26.	How often do you listen to Radio? / आप रेडियो कब सुनते हैं?	Daily 1 प्रतिदिन Sometime 2 कभी-कभी Not at all 3 कभी नहीं		O	O			
27.	How often do you watch to TV? / आप टी वी कब देखते हैं?	Daily 1 प्रतिदिन Sometime 2 कभी-कभी Not at all 3 कभी नहीं		T	T			
28.	How often do you watch Cinema in a Hall? / आप सिनेमा हाल में कब देखते हैं? (Tick One)	Once in 3 months 1 3 माह में एक बार Less often 2 बहुत कम Not at all 3 कभी नहीं		O N	O N			

(70-74)

(75-79)

(80-84)

(85-89)

(90-94)

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
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B. Abnormal Oral Habits

ब. मुख सम्बन्धी असामान्य आदतें

29.	Does the interviewee generally breathe by nose or mouth ? / आप साधारणतया नाक से सांस लेते हैं या मुँह से?	Nose/ नाक 1 Mouth/ मुँह 2 Can't Say/ कह नहीं सकता 3						(95-99)
30.	Did/does the interviewee have a habit of sucking or biting his/her fingers or Thumb? क्या आपको अपनी उँगली चूसने या दातों से दबाने की आदत है या थी? (देखें और लिखें)	No/ नहीं 1 Yes/ हाँ 2 Can't Say/ कह नहीं सकता 3						(100-104)
31.	Did/does the interviewee have a habit of thrusting his/her tongue on his/her teeth? (Observe & Record) / क्या आपको अपनी जीभ दातों पर दबाने की आदत है या थी? (देखें और लिखें)	No/ नहीं 1 Yes/ हाँ 2 Can't Say/ कह नहीं सकता 3						(105-109)
32.	Did/does the interviewee have a habit of biting nails, lips or objects like a pencil क्या साक्षात्कार देने वाले को नाखून, होंठ या पेन्सिल जैसी चीजें चबाने की आदत है या थी?	No/ नहीं 1 Yes/ हाँ 2 Can't Say/ कह नहीं सकता 3						(110-114)
33.	Did/does the interviewee have a habit of gritting or grinding his/her teeth consciously, unconsciously, during sleep or moments of stress? / क्या आपको जाने-अनजाने सोते समय या किसी दबाव के समय अपने दांत रगड़ने की आदत है या थी?	No Habit/ आदत नहीं 1 In Sleep/ नींद में 2 In Stress/ दबाव में 3 Can't Say/ कह नहीं सकता 4						(115-119)

C. Eating Habits

स. खान-पान की आदतें

34.	How many times between today & yesterday have you taken anything sweet? (Help to recall number of times sweet taken during last 24 hrs.) / आपने कल और आज के बीच कितनी बार मीठा खाया? (पिछले 24 घंटों के दौरान कितनी बार मीठा खाया, याद दिलाने में सहायता करें)	1 times/ एक बार 1 2 times/ 2 बार 2 3 times/ 3 बार 3 4 times/ 4 बार 4 5 times/ 5 बार 5 > 5 times/ 6 बार 6 Not taken/ नहीं खाई 7						(120-124)
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S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
35.	When were these sweet eaten ? / मीठा कब-कब खाया गया?	During Meals..... भोजन के समय In Between Meals..... भोजन के समय के बीच During & In Between Meals..... भोजन के समय व बीच में N.A. / लागू नहीं होता.....	1 2 3 4					

(125-129)

D. Oral Hygiene Practices

द. मुख की सफाई

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
36.	How do you generally clean your teeth?/ सामान्यतः आप अपने दांत कैसे साफ करते हैं?	Finger/ उंगली से 1 Brush/ ब्रुश से 2 Datum/ दातुन 3 Others (Specify) 4 अन्य	1 2 3 4					
37.	How often do you clean your teeth in a day?/ दिन में आप कितनी बार दांत साफ करते हैं?	Once/ दिन में एक बार 1 Twice/ दिन में दो बार 2 After every meal 3 प्रति भोजन के बाद Don't clean every day 4 प्रतिदिन साफ नहीं करते	1 2 3 4					
38.	What are your timings of cleaning teeth ? / दांत साफ करने का समय क्या है?	Morning only/ केवल प्रातःकाल 1 Night only (before going to bed) 2 केवल रात में सोने से पहले Morning & Night 3 प्रातःकाल व रात After meals 4 भोजन के बाद Others (Specify) 5 अन्य	1 2 3 4 5					
39.	What material do you generally use to clean teeth ? / सामान्यतः आप अपने दांत किस चीज से साफ करते हैं?	Toothpaste 1 दूधपेस्ट Toothpowder 2 दूधपाउडर Others (Specify) 3 अन्य	1 2 3					

(130-134)

(135-139)

(140-144)

(145-149)

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
40.	Check tooth paste/powder used and record whether it is fluoridated or non-fluoridated? प्रयुक्त किये गए टूथ पेस्ट / पाउडर को चैक करें व लिखें वह फ्लोराइड-युक्त है या फ्लोराइड रहित?	Fluoridated 1 फ्लोराइड-युक्त Non-Fluoridated 2 फ्लोराइड-रहित Can't Say 3 कह नहीं सकता None 4						(150-154)
41.	(Ask only if code in Q. 36 was 2.) How often do you change your toothbrush? आप अपना टूथ ब्रश कितने समय बाद बदलते हैं?	1-3 months/ 1-3 माह 1 4-6 months/ 4-6 माह 2 6 + months/ 6 से अधिक 3 NA (Not using/ Brush) 4						(155-159)
42.	How often you rinse your mouth with water after eating? / क्या भोजन करने के बाद आप पानी से कुल्ला करते हैं।	Never 1 कभी नहीं Sometimes 2 कभी-कभी Always 3 सर्वदा						(160-164)
43.	Do you use any other oral hygiene aids? क्या आप मुँह साफ करने के लिए किसी अन्य साधन का इस्तेमाल करते हैं?	Dental Floss 1 डेंटल फ्लॉश Interdental Brush 2 इंटरडेंटल ब्रुश Toothpicks 3 टूथ पिक्स Fluoride Mouthrinse 4 फ्लोराइड माउथरिन्स Other 5 Mouthwash/Rinse (Specify) अन्य माउथवाश / रिन्स लिखें None/ कोई नहीं 6						(165-184)

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
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E. Pattern of Practices for Dental Treatment

द. दंत-चिकित्सा के तरीके

44.	Have you suffered from any mouth or teeth problems in the last one year? क्या पिछले एक वर्ष में आपको मुख या दांत सम्बन्धी कोई बीमारी हुई है?	No/ नहीं 1 Yes / हां 2 Can't Say/ 3 कह नहीं सकता							
45.	What were or was the problem? यदि हां, तो समस्या क्या थी या है? (Tick as many as reported) (जितना बताएं सब लिखें)	Dental decay 1 दंत-क्षय Gum disease 2 मसूड़ों की बीमारी Foul breath 3 दुर्गन्धित सांस Bleeding gums 4 मसूड़ों से खून बहना Trauma 5 ट्रोमा (घोट) Abscess 6 एबसेस (फोड़ा) Crooked teeth 7 टेढ़े-मेढ़े दांत Ulcer 8 अल्सर Others (Specify) 9 अन्य (लिखें)							
46.	Who was or were consulted? आपने किससे राय ली? (Tick as many as reported) (जितना बताएं सब लिखें)	None/ कोई नहीं 1 Friend/Neighbour 2 मित्र / पड़ोसी Relative/ रिश्तेदार 3 Med. Practitioner 4 मेडिकल प्रैक्टिशनर Pharmacist/ 5 Chemist फार्मासिस्ट / केमिस्ट Untrained Dentist 6 अनट्रेण्ड डेन्टिस्ट Trained Dentist 7 ट्रेण्ड डेन्टिस्ट Others (Specify) 8 अन्य							

(185-189)

(190-209)

(210-229)

(230-249)

(250-269)

(270-274)

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
47.	<p>Are you suffering or have you ever suffered from one or more of the following : क्या आपको कभी निम्न बीमारियों शो या हैं?</p> <p>(Tick as many as reported) (जितना बताएं सब लिखें)</p>	<p>None/ कोई नहीं 1 Hypertension 2 हाईपरटेन्शन Diabetes 3 डाईबिटीज Epilepsy 4 एपिलेप्सी Jaundice 5 जॉन्डिस Asthma 6 अस्थमा Others (Specify) 7 अन्य Can't Say/ 8 कह नहीं सकता</p>	1 2 3 4 5 6 7 8					
48.	<p>What is or are the availability of dental treatment facilities in your area? / आपके क्षेत्र में दंत-चिकित्सा सम्बन्धी क्या सुविधाएं उपलब्ध हैं?</p> <p>(Tick as many as reported) (जितना बताएं सब लिखें)</p>	<p>None/ कोई नहीं 1 Govt. Hosp./ 2 Dispensary सरकारी हस्पताल/ डिस्पेन्सरी Private Hospitals 3 निजी हस्पताल Private Practitioner 4 प्राइवेट प्रैक्टिशनर Don't Know 5 नहीं जानते</p>	1 2 3 4 5					
49.	<p>How accessible are the Oral health facilities with available transport? उपलब्ध परिवहन द्वारा मुख-स्वास्थ्य सुविधाओं तक पहुंच का समय।</p>	<p>Less than ½ hour 1 आधा घण्टा से कम ½ to 1 hour 2 आधा से 1 घण्टा > 1 hour 3 1 घण्टा से अधिक Can't Say 4 कह नहीं सकता</p>	1 2 3 4					

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
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F. Awareness and Knowledge of Dental Health Problems
एफ. दंत-स्वास्थ्य समस्याओं की जानकारी व जागरूकता

50.	What, in your opinion, are the common problems associated with mouth and teeth? / आपकी राय में मुख व दांतों से सम्बन्धित सामान्य समस्याएँ क्या हैं?	<p>Tooth Decay 1 दंत-क्षय</p> <p>Gum Disease 2 मसूड़ों की बीमारी</p> <p>Bad Smell 3 दुर्गन्ध</p> <p>Crooked teeth 4 टढ़े-भेड़े दांत</p> <p>Mouth Ulcers 5 मुख का अल्सर</p> <p>Stained teeth 6 गन्दे दांत</p> <p>Others (Specify) 7 अन्य</p> <p>Don't Know 8 नहीं जानता</p>						
51.	What, in your opinion, are the major factors which cause dental problems? / आपकी राय में, किन मुख्य कारणों से दांतों की समस्याएँ पैदा होती हैं?	<p>Eating sweets 1 icecreams/chocolates मिठाई / आइसक्रीम / चाकलेट खाना</p> <p>Not brushing 2 regularly नियमित रूप से ब्रश न करना</p> <p>Not rinsing 3 पानी से मुख साफ न करना</p> <p>Consuming 4 Tobacco products/ तम्बाकू उत्पाद खाना</p> <p>Others (Specify) 5 अन्य</p> <p>Don't Know 6 नहीं जानता</p>						

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष	
52.	How can you prevent dental problems? आप किस प्रकार दांतों की बीमारियों को रोक सकते हैं? (Tick as many as reported) (जितना बताएं सब लिखें)	<p>Not consuming tobacco products / तम्बाकू उत्पादों का इस्तेमाल न करके</p> <p>Regular cleaning of teeth with brush ब्रुश द्वारा दांतों की नियमित सफाई</p> <p>Visiting dentist regularly दंत-चिकित्सक द्वारा नियमित जांच</p> <p>Using Fluoride Toothpaste फ्लोराइड टूथ-पेस्ट का इस्तेमाल</p> <p>Avoiding sweets icecreams/chocolates मिठाई, आइसक्रीम व चाकलेट छोड़कर</p> <p>Others (Specify) 6 अन्य तरीके</p> <p>Don't Know 7 नहीं जानता</p>	1 2 3 4 5 6 7	D F K S A					

(315-334)

G. Tobacco Smoking and Chewing Habits

जी. तम्बाकू चबाने व पीने की आदतें

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
53.	Do you smoke? / क्या आप धूम्रपान करते हैं?	No/ नहीं 1 Yes/ हाँ 2	1 2					
54.	What do you smoke? / आप कौन सा धूम्रपान करते हैं? (Tick as many as reported) (जितना बताएं सब लिखें)	<p>Chillum/ चिलम 1</p> <p>Hookah/ हुक्का 2</p> <p>Cigars/ सिगार 3</p> <p>Cigarettes/ सिगरेट 4</p> <p>Bidis/ बिड़ी 5</p> <p>Others (Specify)/ अन्य 6</p>	1 2 3 4 5 6					

(335-339)

(340-359)

S. No./ क्रम सं.	Question / प्रश्न	Response / उत्तर	Code/कोड	5 Yrs. / 5 वर्ष	12 Yrs. / 12 वर्ष	15 Yrs. / 15 वर्ष	35-44 Yrs./ 35-44 वर्ष	65-74 Yrs./ 65-74 वर्ष
55.	Whether it is with or without Filter? क्या यह फिल्टर सहित है या फिल्टर रहित?	With Filter/ फिल्टर युक्त Without Filter/ फिल्टर रहित Don't Know/ नहीं जानता	1 2 3	D				
56.	How many times a day do you normally Smoke? / एक दिन में सामान्यतः कितनी बार धूम्रपान करते हैं?	< 5 times/ पांच बार तक 5-10 times/ पांच से दस बार 10-20 times/ दस से बीस बार > 20 times/ बीस से अधिक	1 2 3 4	E				
57.	Did you or do you chew pan with tobacco? / क्या आप पान तम्बाकू के साथ चबाते हैं या चबाते थे?	No/ नहीं Yes/ हाँ Don't Know/ पता नहीं	1 2 3	S				
58.	Did you or do you chew pan-masala with tobacco? / क्या आप पान-मसाला तम्बाकू के साथ चबाते हैं या चबाते थे?	No/ नहीं Yes/ हाँ Don't Know/ पता नहीं	1 2 3	A				
59.	How long have you been in the habit of chewing pan or pan masala with tobacco? / आप कब से पान या पान-मसाला तम्बाकू के साथ चबाते रहे हैं? (एक पर टिक लगायें)	< 5 Yrs./ 5 साल से 5-10 Yrs./ 5-10 साल से > 10 Yrs./ 10 साल से अधिक	1 2 3	F				
60.	How often do you chew tobacco in a day? / एक दिन में आप तम्बाकू कितनी बार चबाते हैं? (एक पर टिक लगायें)	< 5 times/ 5 बार 5-10 times/ 5-10 बार > 10 times/ 10 से अधिक	1 2 3	B				
61.	Did you or do you take Alcohol? / क्या आप अल्कोहल (शराब) लेते थे या लेते हैं? (एक पर टिक लगायें)	No/ नहीं Yes/ हाँ	1 2	O				
62.	How often do you take Alcohol/ आप अल्कोहल (शराब) कितनी बार लेते हैं या लेते थे? (एक पर टिक लगायें)	Daily/ प्रतिदिन 3 times a week/ सप्ताह में 3 बार Occasionally/ कभी-कभी < 3 times a week/ सप्ताह में 3 बार से अधिक	1 2 3 4	T				
				O				
				N				

(360-364)

(365-369)

(370-374)

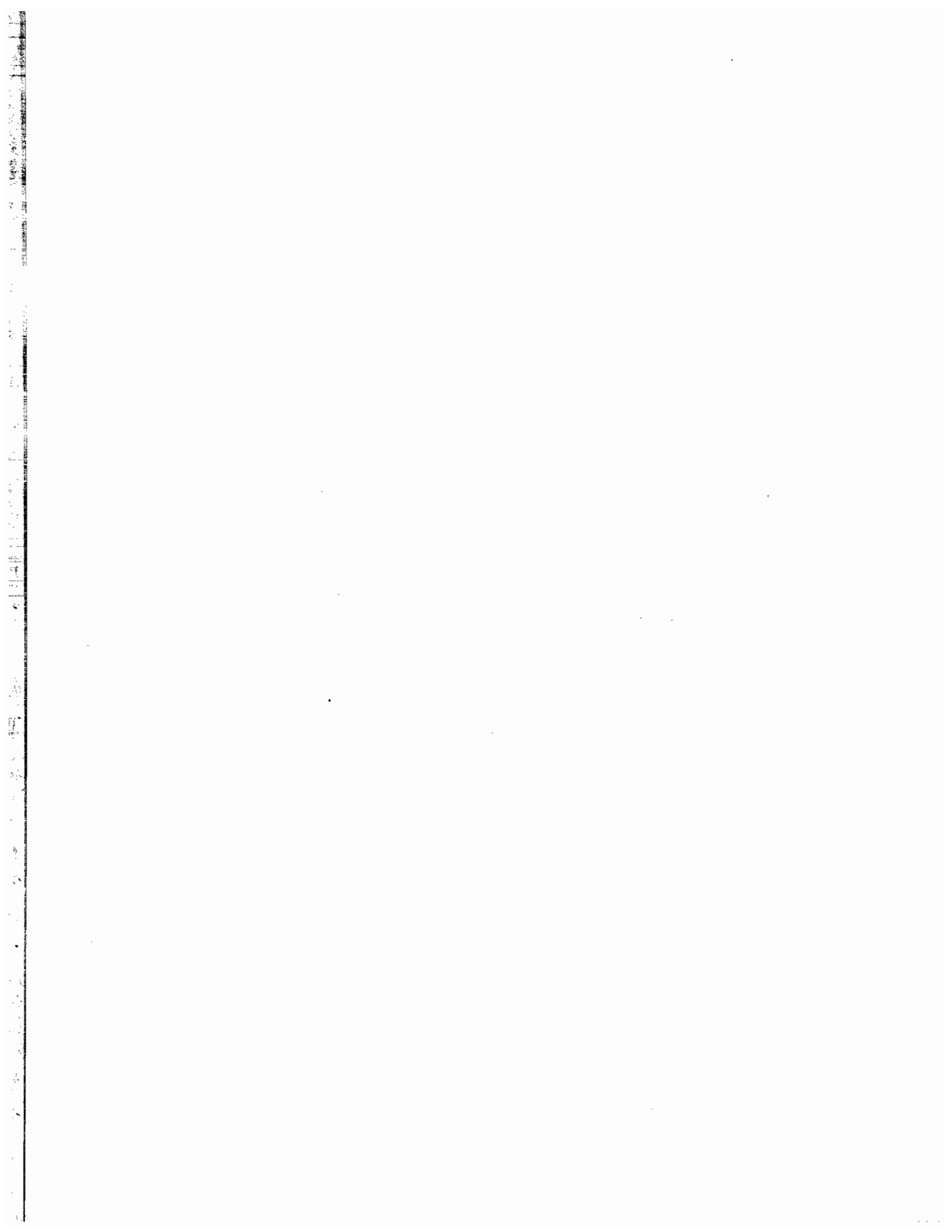
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(395-399)



WHO ORAL HEALTH ASSESSMENT FORM (1997)

GENERAL INFORMATION

Name (29)

Date of birth (17) Year Month (20) Occupation (25) (30)

Age in years (21) (22) Geographical location (26) (27) **CONTRAINDICATION TO EXAMINATION**

Sex (M = 1, F = 2) (23) Location type: (28) Reason..... (31)

Ethnic group (24) 1 = Urban
2 = Periurban
3 = Rural 0 = No
1 = yes

OTHER DATA (specify and provide codes)

CLINICAL ASSESSMENT

EXTRA-ORAL EXAMINATION

- 0 = Normal extra-oral appearance
- 1 = Ulceration, sores, erosions, fissures (head, neck, limbs)
- 2 = Ulceration, sores, erosions, fissures (nose, cheeks, chin)
- 3 = Ulceration, sores, erosions, fissures (commissures)
- 4 = Ulceration, sores, erosions, fissures (vermillion border)
- 5 = Cancrum oris
- 6 = Abnormalities of upper and lower lips
- 7 = Enlarged lymph nodes (head, neck)
- 8 = Other swellings of face and jaws

 (32)

TEMPOROMANDIBULAR JOINT ASSESSMENT

SYMPTOMS

- 0 = NO
 - 1 = Yes
 - 9 = Not recorded
-
- (33)

SIGNS

- 0 = No
- 1 = Yes
- 9 = Not recorded

Clicking (34)

Tenderness (35)

(on palpation)

Reduced jaw mobility

(< 30 mm opening) (36)

ORAL MUCOSA

CONDITION

- 0 = No abnormal condition
- 1 = Malignant tumour (oral cancer)
- 2 = Leukoplakia
- 3 = Lichen Planus
- 4 = Ulceration (aphthous, herpetic, traumatic)
- 5 = Acute necrotizing gingivitis
- 6 = Candidiasis
- 7 = Abscess
- 8 = Other condition (specify if possible).....
- 9 = Not recorded

(37)	<input type="checkbox"/>	(40)
(38)	<input type="checkbox"/>	(41)
(39)	<input type="checkbox"/>	(42)

LOCATION

- 0 = Vermilion border
- 1 = Commissures
- 2 = Lips
- 3 = Sulci
- 4 = Buccal Mucosa
- 5 = Floor of mouth
- 6 = Tongue
- 7 = Hard and / or soft palate
- 8 = Alveolar ridges / gingiva
- 9 = Not recorded

ENAMEL OPACITIES/HYPOPLASIA

Permanent teeth

- 0 = Normal
- 1 = Demarcated opacity
- 2 = Diffuse opacity
- 3 = Hypoplasia
- 4 = Other defects
- 5 = Demarcated and diffuse opacities
- 6 = Demarcated opacity and hypoplasia
- 7 = Diffuse opacity and hypoplasia
- 8 = All three conditions
- 9 = Not recorded

14	13	12	11	21	22	23	24
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(43)							(50)
(51)							(52)
							36
							46

(53)

LOSS OF ATTACHMENT*

- 0 = Normal
- 1 = Questionable
- 2 = Very mild
- 3 = Mild
- 4 = Moderate
- 5 = Severe
- 8 = Excluded
- 9 = Not recorded

COMMUNITY PERIODONTAL INDEX (CPI)

- 0 = Healthy
- 1 = Bleeding
- 2 = Calculus
- 3 = Pocket 4-5 mm (black band on probe) partially visible
- 4* = Pocket 6 mm or more (black band on probe not visible)
- X = Excluded sextant
- 9 = Not recorded

17/16	11	26/27
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(54)		(56)
(57)		(59)
		47/46 31 36/37

LOSS OF ATTACHMENT*

- 0 = Healthy
- 1 = 4-5 mm (cementoenamel junction (CEJ) within black band)
- 2 = 6-8 mm (CEJ between upper limit of black band and 8.5 mm ring)
- 3 = 9-11 mm (CEJ between 8.5 mm and 11.5 mm rings)
- 4 = 12 mm or more (CEJ beyond 11.5 mm ring)
- X = Excluded sextant
- 9 = Not recorded

17/16	11	26/27
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(60)		(62)
(63)		(65)
		47/46 31 36/37

*Not recorded under 15 years of age

*Not recorded under 15 years of age

DENTITION STATUS AND TREATMENT NEED

	55	54	53	52	51	61	62	63	64	65						
Primary teeth	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
Crown (66)																
Root (82)																
Treatment (98)																

	85	84	83	82	81	71	72	73	74	75						
Permanent teeth	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Crown (114)																
Root (130)																
Treatment (146)																

Identification Number

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Primary teeth	Crown	Permanent teeth	Crown/Root	STATUS	TREATMENT
A	0	0	Sound	0 = None	
B	1	1	Decayed	P = Preventive, caries arresting care	
C	2	2	Filled, with decay	F = Fissure sealant	
D	3	3	Filled, no decay	1 = One surface filling	
E	4	-	Missing, as a result of caries	2 = Two or more surface fillings	
-	5	-	Missing, any other reason	3 = Crown for any reason	
F	6	-	Fissure sealant	4 = Veneer or laminate	
G	7	7	Bridge abutment special crown or veneer/implant	5 = Pulp care and restoration	
-	8	8	Unruptured tooth, (Crown) / unexposed root	6 = Extraction	
T	T	-	Trauma (fracture)	7 = Need for other care (specify).....	
-	9	9	Not recorded	8 = Need for other care (specify).....	
				9 = Not recorded	

PROSTHETIC STATUS

- 0 = No Prosthesis
- 1 = Bridge
- 2 = More than one bridge
- 3 = Partial denture
- 4 = Both bridge (s) and partial denture (s)
- 5 = Full removable denture
- 9 = Not recorded

Upper Lower

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(162) (163)

PROSTHETIC NEED

- 0 = No Prosthesis needed
- 1 = Need for one-unit prosthesis
- 2 = Need for multi-unit prosthesis
- 3 = Need for a combination of one- and/or multi-unit prostheses
- 4 = Need for full prosthesis (replacement of all teeth)
- 9 = Not recorded

Upper Lower

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(164) (165)

DENTOFACIAL ANOMALIES

DENTITION

(166) (167)

Missing incisor, canine and premolar teeth-maxillary and mandibular - enter number of teeth

SPACE

(168)

(169)

(170)

(171)

(172)

Crowding in the incisal segments.

- 0 = No crowding
- 1 = One segment crowding
- 2 = Two segments crowding

Spacing in the incisal segments:

- 0 = No spacing
- 1 = One segment spaced
- 2 = Two segments spaced

Diastema in mm

Largest anterior maxillary irregularity in mm

Largest anterior mandibular irregularity in mm

OCCLUSION

(173)

Anterior maxillary overjet in mm

(174)

Anterior mandibular overjet in mm

(175)

Vertical anterior openbite in mm

(176)

Antero-posterior molar relation :

- 0 = Normal
- 1 = Half cusp
- 2 = Full cusp

NEED FOR IMMEDIATE CARE AND REFERRAL

Life-threatening condition

(177)

0 = Absent

Pain or infection

(178)

1 = Present

Other condition (specify).....

(179)

2 = Not recorded

Referral

0 = No

(180)

1 = Yes

9 = Not recorded

NOTES

