COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (CPITN)

The "Community Periodontal Index of Treatment Needs" (CPITN) was developed for the "joint working committee" of the "World Health Organisation" and "Federation Dentaire Internationale" (WHO/FDI) by Jukka Ainamo, David Barmes, George Beagrie, Terry Cutress, Jean Martin, and Jennifer Sardo-Infirri in 1982.

This index was developed primarily to survey and evaluate periodontal treatment needs rather than determining past and present periodontal status, i.e. the recession of the gingival margin and alveolar bone.

Primarily the CPITN is a screening procedure for identifying actual and potential problems posed by periodontal diseases both in the community and in the individual.

ADVANTAGES:

- Simplicity
- Speed
- International uniformity

LIMITATIONS:

- Does not record the position of the gingival margin.
- Does not provide assessment of past periodontal breakdown.

CPITN is not a diagnostic tool & should not be used for planning of specific clinical treatment for individual patients.

PROCEDURE:

The dentition is divided into sextants (sixths of the dentition), for assessment of periodontal treatment needs. Each sextant is given a score.

SEXTANTS:

The mouth is divided into six sextants defined by tooth numbers as shown below.

17 - 14	13 - 23	24 - 27
47 - 44	43 - 33	34 - 37

INDEX TEETH

For adults, aged 20 years or more, only ten teeth, known as the 'Index teeth' are examined.

17/16	11	26/27
47/46	31	36/37

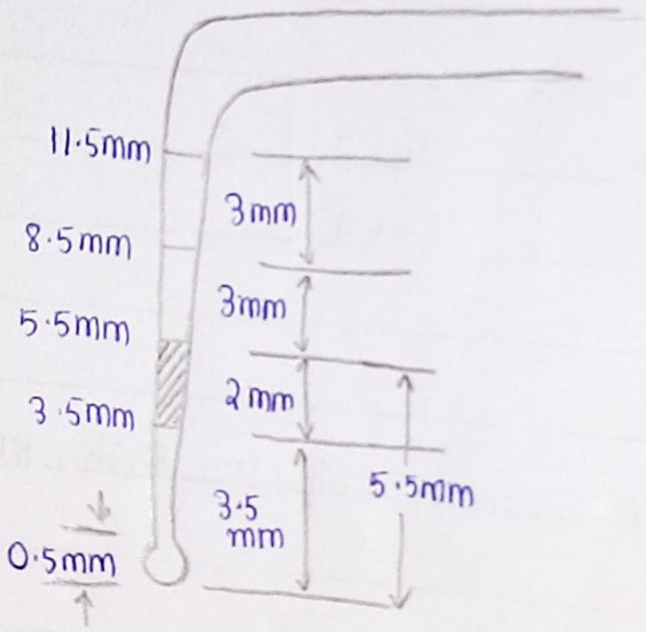
The molars are examined in pairs and only one score, the highest is recorded. Only one score is recorded for each sextant.

For people upto 19 years, only six 'Index teeth' are examined. The second molars are excluded at these ages because of the high frequency of false pockets.

16	11	26
46	31	36

In children less than 15 years, pockets are not recorded although probing for bleeding and calculus are carried out.

WHO PROBE



INSTRUMENTS USED:

Mouth mirror and CPITN probe.

CPITN probe (WHO Periodontal Examination Probe):

- The recommended periodontal probe for use with CPITN was described by WHO (TRS-621-1978).
- The CPITN probe is both thin in the handle and is of very light weight (5 gms).
- This probe is particularly designed for gentle manipulation of the often very sensitive soft tissues around the teeth.
- Pocket depth is measured through color coding with a black marking starting at 3.5 mm and ending at 5.5 mm.
- The probe has a ball tip of 0.5 mm diameter that allows easy detection of subgingival calculus.
- A variant of this basic probe has two additional lines at 8.5 mm and 11.5 mm from the working tip.
- The joint working committee has advised the manufacturers of CPITN probes to identify the instruments as either 'CPITN-E' for epidemiological probe with 3.5 mm and 5.5 mm markings, or 'CPITN-C' for the clinical probe with additional 8.5 & 11.5 mm markings

PROBING PROCEDURE

A tooth is probed to determine pocket depth and to detect subgingival calculus & bleeding response. The probing force can be divided into a 'working component' - to determine pocket depth and a 'sensing component' - to detect subgingival calculus.

The probing may be done by withdrawing the probe between each probing or alternatively, with the probe tip remaining in the sulcus or pocket,

Teacher's Signature _____

the probe may be 'walked around the tooth. "Walking" the probe should be done with short upward and downward movements. A tooth should be probed in at least six points, the mesio-buccal, mid-buccal, disto-buccal, & the corresponding sites on the lingual surface.

EXAMINATION PROCEDURE

The aim is to determine the highest score applicable to each sextant with the least number of measurements.

Determine appropriate highest score for each sextant. Once the highest score has been determined there is no need to examine for the presence of the lower score in that sextant.

CODE	CRITERIA
CODE X	When only one tooth or no teeth are present in a sextant (third molars are excluded unless they function in place of second molars)
CODE 4	Pathological pocket of 6mm or more present i.e, the black area of CPITN probe is not visible.
CODE 3	Pathological pocket of 4mm - 5mm present, i.e, when the gingival margin is on the black area of probe.
CODE 2	Presence of supra or subgingival calculus.
CODE 1	Gingival bleeding after gentle probing.
CODE 0	No signs of disease.

CLASSIFICATION OF TREATMENT NEEDS

TN0 — A recording of code 0 (healthy) or code x (missing) for all six sextants indicates that there is no need for periodontal treatment.

TN1 — A recording of code 1. Indicates a need for improving the personal oral hygiene of that individual.

TN 2a A recording of code 2. Indicates a need for scaling. Indicates a need for improving the personal oral hygiene of that individual.

TN 2b A recording of code 3 (shallow to moderate pocketing of 4-5 mm) Indicates a need for scaling and root planing. Indicates a need for improving the personal oral hygiene of that individual. Scaling and root planing will usually reduce inflammation and bring 4mm or 5 mm pockets to values 3mm or below. Thus sextants with code 3 are placed in the same treatment category as for code 2

TN 3 A recording of code 4 (6mm or deeper pockets) Complex treatment which could involve deep scaling, root planing and more complex surgical procedures