

Dental Indices

Index: A numerical value describing the relative status of a population on a graduated scale with definite upper and lower limits, which is designed to permit and facilitate comparison with other populations classified by the same criteria and methods.

Objectives:

1. To define the specific problem under investigation.
2. To discover populations at high and low risk.
3. To increase understanding of the disease process, leading to methods of control and prevention .

Ideal properties of an index:

Ideally, an index should possess the following properties:

1- Clarity

- The examiner should be able to carry out the index rules in his mind.

Simplicity

- The index should be easily to apply, so there is no undue time lost during examination.

Objectivity

- The index criteria should be clear and unambiguous.

2- Validity:

The index should be measure what it is intended to measure. So it should be correspond with clinical stages of the disease, ex. number of missing teeth in adults is not a valid measure of caries activity.

3- Reliability:

The index should measure consistently at different times and under a variety of conditions, by the same person or different persons.

4- Quantifiability:

The index should be amenable to statistical analysis. So that the status of a group can be expressed by a number that corresponds to a relative position on a scale from zero to the upper limit.

5- Sensitivity:

The index should be able to detect reasonably small shifts, in either direction in the group condition.

6- Acceptability:

The use of the index should not be painful or demeaning to the subject.

Classification of indices:

Which is based upon the:

A- Direction in which their scores can fluctuate:

1. Irreversible index DMF Index that measures conditions will not return to the normal state. Once established cannot decrease in value on subsequent examinations.
2. Reversible index GI Index that measures conditions that can be return to the normal state. Reversible index scores can decrease or increase in value on subsequent examinations.
3. Composite index PDI Index that measures conditions that can be return to the normal state and conditions will not return to the normal state.

B- The extent to which areas of oral cavity are measured:

1. Full mouth index Dean's Fluorosis Index

These indices measure the patient's entire dentition.

2. Simplified index CSI

These index measure only a representative sample of teeth.

C- The entity which they measure:

1. Disease index D M F
2. Treatment index D M F
3. Symptom index PBI

D- The special categories:

1. Simple index CSI

Index that measures the presence or absence of condition.

2. Cumulative index D MF

Index that measures all the evidence of a condition, past and present.

Book: Essential of Preventive and Community Dentistry