Perceived vs Actual Oral Health Status of Maltese School Children

Dr Ethel Vento Zahra
Dr Paula Vassallo

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Data Collection

– Stratified random sampling, all types of schools, Malta and Gozo
– n= 603 12 year olds part of National Oral Health Survey
– n=367 8 year olds part of COSI survey
– All children included in the study were given:
  • a full mouth examination
  • a questionnaire sent home to parents (8 year olds - 74.1% response rate) or administered to the child (12 year olds – 99.3% response rate)

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Data Assessment

• Perceived Health of teeth assessed by a Likert scale with 6 categories ranging from Excellent to Very Poor

• Actual Health for decay assessed by DMFT (decayed, missing, filled permanent teeth) and subdivided into categories to match the perceived health Likert scale.

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Data Assessment

• Perceived Health of gums assessed by a Likert scale with 6 categories ranging from Excellent to Very Poor

• Actual Health for periodontal health assessed by scoring:
  – presence of plaque and calculus in 8 year olds
  – presence of plaque, calculus, bleeding or inflamed gingivae on 6 predetermined tooth surfaces in 12 year olds

The resulting data was then subdivided into categories to match the perceived health Likert scale

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Data Analysis

• Data analysed using SPSS by Dr Neville Calleja, Department of Health Information and Research
Dental Caries

8 year olds

DMFT 1
lesions affecting both enamel and dentine

DMFT 0.21
lesions affecting dentine only (requiring Rx)

53.4%
caries free when considering both enamel and dentine lesions

57.5%
caries free when considering dentine lesions only

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Dental Caries

12 year olds

DMFT 2.3  lesions affecting both enamel and dentine

DMFT 0.74 lesions affecting dentine only (requiring Rx)

34.5% caries free when considering both enamel and dentine lesions

67.8% caries free when considering dentine lesions only

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Perceived vs Actual Dental Health

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Perceived caries enamel and caries dentine.

Excellent
Very good
Good
Average
Poor
Very Poor
Perceived vs Actual Dental Health

- Perceived health of teeth and both caries in enamel and caries in dentine are highly correlated \( p \) value of .000
Periodontal Health

8 year olds
Mean of 1.2 teeth were scored for presence of plaque
Mean of 0.25 teeth were scored for calculus
Overall mean of 1.45 teeth scored for these early markers for periodontal disease

12 year olds
Mean of 15 out of 48 surfaces examined scored for plaque, calculus, bleeding or inflamed gingivae

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Perceived vs Actual Periodontal Health

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Perceived vs Actual Periodontal Health

- Perceived health of gums and actual periodontal health are highly correlated – p value of .014
Further analysis for correlations gave:

- p value of **0.002** for perceived health and level of education of father – significant correlation

- p value of **0.088** for actual health and level of education of father – no significant correlation, but could possibly be correlated if the study had more power with a larger sample size.
Limitations

74.1% response rate in questionnaires for 8 year olds

Questionnaire filled in by parents – possible bias issues

Narrow age range – further analysis of other age groups that are part of the National Oral Health Survey should give a wider view

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Conclusion

Very significant correlation between perceived and actual oral health in these two age groups.

Further investigation required as to:
Whether service use reflects this pattern
Whether perception and actual oral health are also correlated in older age groups in the population

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Thank you for your attention.
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