R documentation

of 'tandmobRoos.Rd'

December 15, 2005

`tandmobRoos` *Signal Tandmobiel data, version Roos*

Description

This is the dataset resulting from a longitudinal prospective dental study performed in Flanders (North of Belgium) in 1996 – 2001. The cohort of 4 468 randomly sampled children who attended the first year of the basic school at the beginning of the study was annualy dental examined by one of 16 trained dentists. The original dataset consists thus of at most 6 dental observations for each child.

The dataset presented here contains mainly the information on the emergence and caries times summarized in the interval-censored observations. Some baseline covariates are also included here.

For more detail on the design of the study see Vanobbergen et al. (2000).

This is the version of the dataset used first by Leroy et al. (2005). and contains a subset of the original Signal Tandmobiel data set. Some children were removed to satisfy inclusion criteria given in Leroy et al. (2005). Additionally, left-censored emergence times of the permanent first molars are adjusted according to the eruption stage (see Leroy et al., 2005).

This data set was then used in the analyses presented in Komárek and Lesaffre (2006, 2006b).

IMPORTANT NOTICE: It is possible to use these data for your research work under the condition that each manuscript is first approved by
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Usage

```
data(tandmobRoos)
```

Format

a data frame with 4 394 rows and the following variables

IDNR identification number of a child

GENDER character *boy* or *girl*

DOB character, date of birth in the format DDmmmYY

PROVINCE factor, code of the province with

- **0 =** Antwerpen
- **1 =** Vlaams Brabant
- **2 =** Limburg
- **3 =** Oost Vlaanderen
- **4 =** West Vlaanderen

EDUC factor, code of the educational system with

- **0 =** Free
- **1 =** Community school
- **2 =** Province/council school

GIRL numeric, 0 = *boy*, 1 = *girl*

EBEG.xx lower limit of the emergence (in years of age) of the permanent tooth xx. In contrast to the original Signal Tandmobiel data set, the lower emergence limit for the permanent first molars that were originally left-censored, are adjusted according to the eruption stage (see Leroy, 2005 for more details).

xx takes values 16, 26, 36, 46 (permanent first molars).

EEND.xx upper limit of the emergence (in years of age) of the permanent tooth xx. `NA` if the emergence was right-censored.

xx takes values as for the variable `EBEG.xx`.

FBEG.xx lower limit for the caries time (in years of age, 'F' stands for 'failure') of the permanent tooth xx. `NA` if the caries time was left-censored.

xx takes values as for the variable `EBEG.xx`.

FEND.xx upper limit for the caries time (in years of age, 'F' stands for 'failure') of the permanent tooth xx. `NA` if the caries time was right-censored.

xx takes values as for the variable `EBEG.xx`.

Unfortunately, for all teeth except 16, 26, 36 and 46 almost all the caries times are right-censored. For teeth 16, 26, 36, 46, the amount of right-censoring is only about 25%.

TOOTH.xx numeric, 0 or 1. Equal to 1 if the information concerning the permanent tooth was available, 0 if the permanent tooth xx was removed from the dataset by Kris.

xx takes values 16, 26, 36, 46.

These variables are almost useless for ordinary users.

Txxd numeric, 0 or 1. It is equal to 1 if the deciduous tooth xx was decayed, 0 otherwise.

xx takes values 54, 64, 74, 84 (deciduous first molars), 55, 65, 75, 85 (deciduous second molars).

Txxm numeric, 0 or 1. It is equal to 1 if the deciduous tooth xx was missing due to caries, 0 otherwise.

xx takes values 54, 64, 74, 84 (deciduous first molars), 55, 65, 75, 85 (deciduous second molars).

Txxf numeric, 0 or 1. It is equal to 1 if the deciduous tooth xx was filled, 0 otherwise.
xx takes values 54, 64, 74, 84 (deciduous first molars), 55, 65, 75, 85 (deciduous second molars).

Txxs numeric, 0 or 1. It is equal to 1 if the deciduous tooth xx was sound, 0 otherwise.
xx takes values 54, 64, 74, 84 (deciduous first molars), 55, 65, 75, 85 (deciduous second molars).

SEAL.xx numeric, 0 or 1. It is equal to 1 if the permanent first molar xx was sealed in pits and fissures (a form of protection), 0 otherwise.
xx takes values 16, 26, 36, 46 (permanent first molars).

FREQ.BR numeric, 0 or 1. It is equal to 1 if the child brushes daily the teeth, equal to 0 if he/she brushes less than once a day.

PLAQUE.xx.1 numeric, 0 or 1. It is equal to 1 if there was occlusal plaque in pits and fissures of the permanent tooth xx. It is equal to 0 if there was either no plaque present or the plaque was present on the total occlusal surface.
xx takes values 16, 26, 36, 46 (permanent first molars).

PLAQUE.xx.2 numeric, 0 or 1. It is equal to 1 if there was occlusal plaque on the total occlusal surface of the permanent tooth xx. It is equal to 0 if there was either no plaque present or the plaque was present only in pits and fissures.
xx takes values 16, 26, 36, 46 (permanent first molars).

Source

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URL: `http://med.kuleuven.be/biostat/`

Data collection was supported by Unilever, Belgium. The Signal Tandmobiel project comprises the following partners: D. Declerck (Dental School, Catholic University Leuven), L. Martens (Dental School, University Ghent), J. Vanobbergen (Oral Health Promotion and Prevention, Flemish Dental Association), P. Bottenberg (Dental School, University Brussels), E. Lesaffre (Biostatistical Centre, Catholic University Leuven), K. Hoppenbrouwers (Youth Health Department, Catholic University Leuven; Flemish Association for Youth Health Care).

References

Komárek, A. and Lesaffre, E. (2006). Bayesian accelerated failure time model with multivariate doubly-interval-censored data and flexible distributional assumptions. *Submitted*.

Komárek, A. and Lesaffre, E. (2006b). Bayesian semiparametric accelerated failurew time model for paired doubly-interval-censored data. *Submitted*.

Leroy, R., Bogaerts, K., Lesaffre, E., and Declerck, D. (2005). Effect of caries experience in primary molars on cavity formation in the adjacent permanent first molar. *Caries Research*, **39**, 342–349.

Vanobbergen, J., Martens, L., Lesaffre, E., and Declerck, D. (2000). The Signal-Tandmobiel project – a longitudinal intervention health promotion study in Flanders (Belgium): baseline and first year results. *European Journal of Paediatric Dentistry*, **2**, 87–96.

Examples

```
### How to read the data into R:
tandmobRoos <- read.table("tandmobRoos.dat", header=TRUE, skip=66, na.string=NA)
```

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