

KiGGS – The German Health Interview and Examination Survey for Children and Adolescents

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Sexual maturation of children and adolescents in Germany. Results of the German Health Interview and Examination Survey for Children and Adolescents (KiGGS)

Abstract Following the standstill in maturity acceleration in the eighties of the twentieth century, now a further shift in maturity development towards younger ages is the issue of an international and also German discussion. The collection of sexual maturity data in boys and girls as part of the nationwide German Health Interview and Examination Survey for Children and Adolescents (KiGGS) is intended to provide population-representative information on sexual maturation and to evaluate associations between maturity status and selected health and social data. Girls were interviewed regarding their first menstrual period (menarche) and boys regarding voice change (status-quo method). Pubic hair was self-assessed by children and adolescents from 10 to 17 years of age, based on drawings of Tanner's defined developmental stages. The median age for menarche, for voice change and pubic hair stages were calculated using a logit model. At an age of 10 years, 42.4 % of girls and 35.7 % of boys report the development of pubic hair. At 17 years of age, the majority of girls and boys have reached the stages PH5 (girls 57.5 %, boys 47.8 %) and PH6 (girls 23.6 %, boys 46.5 %) according to Tanner. The average age for each pubic hair stage is lower in girls (PH2 10.8; PH3 11.7; PH4 12.3; PH5 13.4 years) than in boys (PH2 10.9; PH3 12.6; PH4 13.4; PH5 14.1). The median age at menarche is 12.8 years, the median for voice change (voice low) 15.1 years. Significant differences in age at menarche are found in girls depending on socioeconomic status (12.7/12.9/13.0 years for low/middle/high status) and between girls with and without migration background (12.5/12.9 years). No differences in age at menarche can be seen between East and West Germany or cities and rural areas. The association between maturity status and BMI is more pronounced in girls than in boys. Overall, the onset of maturity development in German children and adolescents is not significantly earlier than in other European studies.

Keywords Health survey - Children - Adolescents - Sexual maturity - Menarche - Mutation - Pubic hair
