THE VALIDITY OF THE WORK PRODUCTIVITY AND ACTIVITY IMPAIRMENT QUESTIONNAIRE FOR PATIENTS WITH ASTHMA (WPAI-ASTHMA): RESULTS FROM A WEB-BASED STUDY
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Objective: To validate the Work Productivity and Activity Impairment questionnaire (WPAI-asthma) that measures self-reported absence from work, reduction in productivity while at work, and reduction in productivity while doing regular activities, other than work. Methods: The WPAI-asthma questionnaire and the generic health-related quality of life questionnaire SF-36 were adapted for use over the Internet and administered among 1272 asthmatics from Denmark, Norway and Sweden, in a web-based survey. In addition to the questionnaires, the individuals were asked to report what asthma medication they had been prescribed and how much health care they had used over the previous month because of their asthma. Demographic data were also collected. Individuals were classified into different disease severity based on medication use. Productivity variables derived from the WPAI-asthma were correlated to quality of life dimensions, age, and health care resource use. Furthermore, the relationship between productivity variables and disease severity was investigated. Results: High correlation coefficients (defined as >0.4) were found between productivity while working and doing regular activities and quality of life dimensions related to work and daily activities. A low correlation (defined as <0.2) was found between self-reported productivity and age. On average, the employed asthmatics (n = 785) reported an average of 2.4% of their time absent from work due to asthma symptoms. Productivity while working was reduced by 10.1% and the reduction in productivity while doing regular activities was 13.2%. Unemployed asthmatics (n = 397) only reported reduction in productivity while doing regular activities, and the mean reduction was 22.5% due to asthma symptoms. Asthmatics with a more severe disease status reported higher productivity impairment than those with a milder disease (p < 0.001). Conclusions: The results indicate that the WPAI-asthma has a high convergent and discriminate validity.

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AST-PQ16: A NEW QUESTIONNAIRE FOR MEASURING QUALITY OF LIFE (QOL) OF PARENTS OF CHILDREN WITH ASTHMA
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Objective: Pediatric asthma can affect parent’s QoL. We aimed to develop a specific questionnaire to measure how parents live with children with asthma. We assume that as parents improve their QoL, they can better care their children. Methods: During 1998–2000, an early 48-item questionnaire was developed. To increase its content validity and sensitivity, we carried out new focus group meetings that leaded to a new 60-item questionnaire. It was administered to mothers recruited by pediatricians throughout Italy. Items were reduced by using combined criteria: ceiling-effect, effect-size (by asthma severity); factor analysis (main component oblimin rotated) structure. Results: Questionnaire was administered to 163 mothers (24–52 y.o.). Their children were 4–12 yr, suffering from intermittent (N = 66), mild (N = 45), moderate (N = 38), and severe asthma (N = 16). The first data reduction excluded 30 items (those with ceiling effect ≥35%). Factor analysis produced 5 sub-scales (mother’s worries, perception of children symptoms, comparison to others, social life, avoidance). To preserve the conceptual model, items sensitive to asthma severity were retained after a further reduction, so that each original factor was represented. In the final 16-item solution, items showed 3 factors underlying, though the first one explained 44.628 of variance and second order factor analysis showed their belonging to only one macro factor. This brought to aim at a one-factor scale. Its performances are remarkable, with no ceiling effect, moderate skewness and Alpha = 0.92. Effect size against children asthma severity was 0.770 (severe-intermittent) and 0.480 (mild-intermittent). Conclusions: The AST-PQ16 (ASThma Parents Questionnaire, 16 items) showed to be sensitive to asthma severity, and able to detect parents’ over-under estimation of children clinical condition, that could lead to excessive pediatric examinations or underestimation of the risk. It does not replace children QoL measurement, but it can measure a wider range of age than direct Qol questionnaires can do.