OBJECTIVES: Conflicting evidence exists regarding whether very short recall periods are required for making valid judgments about the effectiveness of health care interventions. This analysis explored the influence of two factors thought to impact recall, recency and significance of events, on caregiver recall of symptoms of infant gastroesophageal reflux disease (GERD).

METHODS: Retrospective analyses were conducted on 185 infants with GERD from a multi-national validation study of the Revised Infant-Gastroesophageal Reflux Questionnaire (I-GERQ-R), a measure of symptom severity. Primary caregivers completed a 12-item I-GERQ-R weekly and a 5-item diary daily during the three-week study period. Due to word limitations, this abstract only reports results from the ‘frequency of spit-up’ item during the first week.

RESULTS: Overall, a moderately high Pearson correlation ($r = 0.636$) was observed between the diary and the I-GERQ-R item. When the open-ended diary responses were recoded into the same structured format as the I-GERQ-R item, the correlation improved significantly ($r = 0.829$), indicating that initial moderate correlation was largely due to the different response format rather than recall bias. The correlations between the I-GERQ-R item and the average of the diary item were about equal between the last two days and the first two days of the first week (original: $r = 0.585$ and 0.589; recoded: $r = 0.738$ and 0.745), indicating that the I-GERQ-R response was not largely influenced by the most recent 2-day experience. The correlations between the I-GERQ-R item and the diary item on the day with the largest number of reported spit-ups were not larger than that between I-GERQ-R and the average diary score of other 6 days (original: $r = 0.627$ and 0.630; recoded: 0.767 and 0.821), indicating that I-GERQ-R was not largely influenced by the most symptomatic day.

CONCLUSION: Overall, we found that recency and high frequency of the event did not unduly influence parent’s recall of infant GERD symptoms.

GASTROINTESTINAL DISORDERS—Patient-Reported Outcomes

MENTAL AND PHYSICAL FUNCTIONING REDUCED AMONG PATIENTS WITH FREQUENT ATYPICAL GERD SYMPTOMS


OBJECTIVES: Assess health-related quality of life (HRQOL) among patients with gastroesophageal reflux disease (GERD) who have frequent symptoms considered atypical for GERD.

METHODS: A sample of US adults participated in a web survey including the GERD Symptom & Medication Questionnaire (GERD-SMQ), a validated GERD screener. Frequency of atypical symptoms (globus, sinusitis, dry coughing, throat clearing, sore throat, snoring, wheezing, choking, non-cardiac chest pain, and hoarseness) during the previous 3 months were assessed. Frequent symptoms were defined as ≥2 days/nights per week with each symptom. SF-36 Mental Component Summary (MCS) and Physical Component Summary (PCS) scores were calculated and mean differences were compared for respondents with GERD and atypical symptoms vs. those with GERD but without atypical symptoms. Bonferroni correction was used to adjust for multiple comparisons testing. Lower scores signified worse HRQOL; differences of 2 or more points are generally considered clinically significant.

RESULTS: A total of 2805 of 18,213 invited to participate responded. 2603 satisfied the study criteria; 701 were individuals with GERD. Overall, 74% and 66% of individuals with GERD reported at least one nighttime or daytime atypical symptom, respectively. Mean MCS and PCS scores among GERD cases were significantly lower among those with vs. without each nighttime atypical symptom ($P < 0.007$ for all nighttime atypical symptoms). Similar reductions in mean MCS and PCS were seen among GERD cases with daytime atypical symptoms when compared to those without each daytime symptom ($P < 0.0056$ for all). Mean MCS and PCS scores were 4–10 points lower among GERD cases with atypical symptoms compared with GERD cases without atypical symptoms.

CONCLUSION: Nighttime and daytime atypical symptoms were associated with significantly lower HRQOL scores. Among GERD patients, there may be an incremental negative impact of atypical symptoms on mental and physical functioning. Clinicians should determine the presence of atypical symptoms in an effort to improve HRQOL in patients with GERD.

VALIDATION OF GASTROINTESTINAL QUALITY OF LIFE INDEX FOR ASSESSMENT OF GALLSTONE-RELATED SYMPTOMS


OBJECTIVES: The decision to perform cholecystectomy in case of gallstones is based on a trade-off between the costs and risks of treatment related complications at the one hand and the mortality and morbidity associated with gallstones on the other hand. An adequate instrument for treatment planning, outcome monitoring, and clinical trials of patients with gallstone-related symptoms is therefore crucial. The Gastrointestinal Quality of Life Index (GIQLI) questionnaire has previously been validated for various gastrointestinal disorders. The purpose of the present study was to validate the Swedish translation of GIQLI specifically for gallstone disease.

METHODS: GIQLI was translated to Swedish and re-translated back to German for linguistic control. Responsiveness was tested in 187 consecutive patients who underwent planned cholecystectomy. Internal consistency and test-retest stability 12 and 15 months after surgery was tested on the same sample. Construct validity was assessed by comparing the GIQLI score with the bodily pain scale of SF-36 and four single-item questions regarding pain frequency, pain localisation, the patient’s own conviction of the origin of pain, and a VAS-scale in x consecutive patients.

RESULTS: No major deviation was found between the original questionnaire and the re-translated version. A high responsiveness was seen, with GIQLI score increasing from 95.1 (SD 24.8) to 111.8 (SD 20.1) six months after surgery ($p < 0.001$). The GIQLI score correlated significantly with all other measures of gallstone-related symptoms except a question regarding the patient’s own conviction of the origin of the symptoms. There was a high test-retest stabil-
ity, with significant correlations between the ratings 12 and 15 months for all items except one. Cronbach’s alpha was found to be 0.91. CONCLUSION: The Swedish translation of GIQLI has a high validity and reliability for assessing gallstone-related symptoms.

PGI17
SYMPTOMS OF GASTROESOPHAGEAL REFLUX DISEASE, CONCOMITANT DISEASES, HEALTH-RELATED QUALITY OF LIFE AND WORK PRODUCTIVITY: A DATABASE STUDY IN A US COHORT

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OBJECTIVES: To describe the relationship between symptoms of gastroesophageal reflux disease (GERD) and self-reported concomitant diseases, health-related quality of life and work productivity. METHODS: An exploratory database analysis was performed on results from the 2004 National Health and Wellness Survey. US respondents with self-reported symptoms of GERD (n = 10,028, mean age: 52 years, 58% female) were age- and sex-matched to controls without GERD symptoms (n = 10,028). Information on health-related quality of life was obtained using the Short-Form (SF)-8 questionnaire. Data on health-related reduced productivity while at work or when performing daily activities were obtained using the generic version of the Work Productivity and Activity Impairment questionnaire. Respondents with GERD were classified by self-reported symptom severity (mild, moderate or severe) and frequency (low or medium-to-high: symptoms on <2 days or ≥2 days per week, respectively). RESULTS: Respondents with GERD had the following distribution with regard to symptom severity and frequency: 32% had mild and low; 12% mild and medium-to-high; 10% moderate and low; 18% moderate and medium-to-high; 2% severe and low; 6% severe and medium-to-high. Compared with controls, respondents with GERD had a larger number of concomitant diseases (mean difference [MD]: 1.6), lower SF-8 physical and mental health scores (MD: 4.1 and 3.1 units, respectively), more absence from work (MD: 0.9 hours per week), and a higher percentage of health-related reduced productivity while at work (MD: 7.5% units) and when performing daily activities (MD: 12.1% units). The difference between the control group and respondents with GERD increased with increasing symptom severity and/or frequency for all variables. CONCLUSION: Increasing severity and frequency of GERD symptoms is associated with more concomitant diseases, lower health-related quality of life, and reduced work productivity. Further studies are needed to help identify patient populations in which re-evaluating the management of GERD may be warranted.

PGI18
GASTROESOPHAGEAL REFLUX DISEASE AND HEALTH-RELATED QUALITY OF LIFE IN THE GENERAL POPULATION OF SHANGHAI, CHINA

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OBJECTIVES: To evaluate the impact of gastroesophageal reflux disease (GERD) on health-related quality of life (HRQoL) of affected individuals in Shanghai. METHODS: A representative sample of 1200 adults was selected using a randomized cluster sampling method. Subjects completed mainland Chinese versions of the Reflux Disease Questionnaire (RDQ), GERD Impact Scale (GIS), Quality of Life in Reflux and Dyspepsia questionnaire (QOLRAD) and Short Form-36 (SF-36). A clinically meaningful impairment of HRQoL was defined as a statistically significant decrease of ≥0.5 points in a 7-point QOLRAD domain or ≥5 points in a 100-point SF-36 domain. RESULTS: 1034 subjects completed the survey (response rate: 86.2%); 919 responses were suitable for analysis (mean age: 46.7 years; 55.4% female). Subjects with GERD (n = 57) had meaningfully impaired HRQoL compared with subjects without GERD (n = 862) in terms of impaired vitality (mean QOLRAD scores: 6.34 vs 7.00), food/drink problems (6.39 vs 7.00) and emotional distress (6.46 vs 7.00) (all ≤0.001), but not sleep disturbance (6.54 vs 7.00) and impaired physical/social functioning (6.67 vs 7.00) (both P ≤0.001); and in the SF-36 dimensions of role-physical (mean SF-36 scores: 71.9 vs 93.2), general health (49.2 vs 70.1), role-emotional (76.6 vs 96.4), bodily pain (76.3 vs 93.8), vitality (54.9 vs 72.9), mental health (71.9 vs 82.4) and physical function (81.4 vs 90.3) (all P < 0.001) but not social function (90.6 vs 94.5, P = 0.02). According to the GIS, the most common problems caused by GERD were interference with eating and drinking (4.1% of the study population), sleep impairment (2.5%) and reduced work productivity (2.5%). CONCLUSION: GERD has a clinically meaningful impact on the HRQoL of affected individuals in the general population of Shanghai. Further research is needed to assess how this effect responds to appropriate acid-suppressive therapy.