 impact of child gastroenteritis on parents. METHODS: A literature review was conducted to create the first conceptual model. Semi-directive interviews of 10 parents were conducted and analysed to create items. A 54-item self-administered questionnaire was simultaneously developed in French and UK English and cognitive debriefings were conducted with 5 parents. The questionnaire was linguistically validated in Spanish, Italian and Polish and included in an observational and prospective study conducted with 302 parents of children under 5 presenting at the general practitioner/paediatrician site with acute gastroenteritis. Multitrait analysis and item content were used to confirm the dimensions and define the scoring of the questionnaire. Internal consistency reliability (Cronbach’s alpha), floor and ceiling effects, scale-scale correlations and criterion validity of the resulting version were assessed. RESULTS: The final version of the questionnaire consists of 44 items in five dimensions: “Symptom Severity” (13 items), “Parents’ Worries due to Symptoms” (8 items), “Child’s Behaviour” (6 items), “Impact on Parents’ Daily Activities” (10 items) and “Parents’ Distress” (7 items). Higher scores indicate higher levels of negative feelings. All the scores presented good psychometric properties: no dimension had a floor or ceiling effect, Cronbach’s alpha ranged from 0.78 to 0.85 showing a good internal consistency reliability, and scale-scale correlations ranged from 0.41 to 0.67 showing consistency but no redundancy between the dimensions. Correlations with Clark’s and Vesikari’s scores showed a good criterion validity. The more severe the gastroenteritis episode, the higher the scores of the questionnaire. CONCLUSIONS: The “Impact of child gastroenteritis on parents” questionnaire allows a very complete overview of how an episode of severe gastroenteritis impacts the parents of the ill child. The questionnaire is a valid and reliable instrument, suitable for future studies.

PGI29

INDIVIDUAL AND SOCIETAL PREFERENCE SCORES BOTH IDENTIFY ACTIVE INFLAMMATORY BOWEL DISEASE (IBD) IN GERMANY

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OBJECTIVES: To compare the ability of individual and societal preference scores based on the EQ-5D to identify active inflammatory bowel disease (IBD) in Germany. METHODS: Members of the German IBD Association documented Health-Related Quality of Life (hrQoL) with the EQ5-D and other disease-related factors. Inactive or active disease was based on calculated IBD activity indices. Disease activity was also classified (present or absent) according to sick-leave and hospitalizations, documented retrospectively (three months) and prospectively (four weeks). EQ-5D index scores were calculated using British (EQ-5DBT) and German (EQ-SDGT) tariffs. Differences in EQ-VAS and EQ-5D index scores between patient groups differing in disease activity, sick-leave and hospitalizations were determined by effect size (ES) and bootstrap test for the standardised difference between the means. ES and bootstrap-test probability are always reported in this consecutive order: EQ-VAS, EQ-5DBT and EQ-5DGT. RESULTS: A total of 527 retrospective and 483 prospective questionnaires were analysed. Retrospectively, 20% reported sick-leave, 7% hospitalisation, whereas prospectively, 12% reported sick-leave, 2% hospitalisation. 39% had active disease. All preference scores differed significantly between patients with active and inactive disease (ES: 13.72, 11.47, 9.56; p: 0.0001[all]). Retrospectively, ES of preference scores of patients differing in sick-leave (ES: 4.35, 4.51, 3.37; p: 0.0001, 0.0002, 0.0002) and hospitalisation (ES: 2.07, 2.17, 1.91; p: 0.047, 0.047, 0.081) were large. Prospectively, the ES of preference scores for sick-leave groups (ES: 4.34, 4.32, 3.00; p: 0.0001, 0.0002, 0.0119) and hospitalisation (ES: 3.45, 3.08, 2.50; p: 0.014, 0.022, 0.061) were also large. CONCLUSIONS: In German IBD subjects, the ES of all preference scores was large regarding disease-activity, sick-leave and hospitalisation both retrospectively and prospectively. Bootstrap-test probability showed that the EQ-5DGT discriminated less well between the groups than the other preference scores.

PGI30

A EUROPEAN CROSS-SECTIONAL STUDY TO EVALUATE SYMPTOM BURDEN AND CLINICAL MANAGEMENT OF GASTROESOPHAGEAL REFLUX DISEASE (RANGE-GREECE)

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OBJECTIVES: Limited epidemiological data are available concerning gastroesophageal reflux disease (GERD). The aims of this study were to estimate the proportion of patients with GERD-related symptoms in primary care, and to describe the symptom burden and clinical management of the disease. METHODS: RANGE-Greece was part of a European programme, which was conducted in six countries and comprised similar cross-sectional studies run in parallel. RANGE-Greece recruited retrospectively identified patients who visited an office-based gastroenterologist for a GERD-related reason during a 4-month period (index visit). Consenting subjects were invited to attend a study visit. Data collection was performed for both the index and study visits. Patient-reported outcomes were collected by means of validated questionnaires (RDQ, XQS, GIS, WPALSGERD). RESULTS: From the 29,903 patients identified by 23 gastroenterologists, 2116 (7.1%) had GERD-related reasons for the index visit. 505 randomly selected patients, who consented to participation, comprised the analysed population. Mean (±SD) age was 52 (14) years; 52.5% were women. The main reasons for the index visit were: recurrent symptoms after a remission period (41.8%), new reflux symptoms in a treatment-naive patient (35.6%), persistence of previous reflux symptoms (10.9%), and follow-up visit in an asymptomatic patient (5.5%). 57.4% of patients had an endoscopic diagnosis. At the index visit, 99.8% of patients were prescribed a proton pump inhibitor. The study visit was performed after a median of 6.5 months. A total of 40.6% of patients had not changed treatment, whereas 23.6% and 21.0% were still suffering from heartburn and acid regurgitation, respectively (frequency ≥2 days the previous week). Symptom severity was moderate in 29.3% and 22.8% and severe in 3.2% and 4.2% of patients with heartburn and acid regurgitation, respectively. CONCLUSIONS: Despite medical attention and treatment a considerable proportion of patients did not achieve an acceptable control of GERD-related symptoms.

PGI31

GENDER, AGE AND BODY MASS-RELATED DIFFERENCES IN THE IMPACT OF GASTRO-ESOPHAGEAL REFLUX DISEASE (GERD) SYMPTOMS IN PRIMARY CARE PATIENTS ASSESSED BY THE GASTROINTESTINAL IMPACT SCALE (GIS)

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OBJECTIVES: GERD is associated with obesity, age and gender in several studies. The GERD impact scale is a validated one-page self-administered questionnaire that asks patients about GERD symptoms.
symptoms and its impact in their lives. We aimed to describe if there are some differences in frequency and impact of GERD symptoms in their lives depending on gender, age and body mass index (BMI) measured by GIS. METHODS: The data evaluated in this cross-sectional study were recorded by 1170 primary care physicians, randomly distributed across the country, from 5735, new or previously diagnosed GERD patients who consulted about GERD symptoms in Primary Care Setting. The patients filled the GIS questionnaire at the doctors’ office in the study visit. Data regarding sociodemographic variables, comorbidities co-medications, symptoms and treatment were collected by the primary care physician during the study visit. The GIS results were scored, using a four-graded Likert scale, from 1 (daily) to 4 (never) (the higher value the better is the patient) and the questionnaire was divided in three categories (upper GI symptoms, other acid related GI symptoms and impact of symptoms). Comparisons between the global GIS index and each of the dimensions were performed with an ANCOVA model, adjusting for the confusing variables: gender (male/female), BMI (under or over 30 kg/m^2) and age (under or over 50 years old). RESULTS: The global mean score in the 5735 patients was 2.8. The adjusted-mean was higher in the female (2.82) versus male (2.77) gender (p = 0.0119) and in the non-obese (2.83) versus obese (2.75) patients (p < 0.0001). There were no differences in the adjusted-mean depending on age (p = 0.0568). The female patients had a higher score in the adjusted-means of “other acid related GI symptoms” (p = 0.0163) and “impact of symptoms” (p = 0.01) categories but not in the “upper GI symptoms” (p = 0.0746). The age was only associated with “other acid related symptoms” category. The adjusted-mean score in this category was higher in patients under 50 years old (p = 0.0132). The obesity was associated with lower scores in the three categories (p = 0.0085, p = 0.0016 and p < 0.0001 respectively). CONCLUSIONS: The use of the self-administered GIS tool in patients who consulted in the PCS showed the GERD symptoms are more frequent and have more impact in male and obese patients, as previous population-based studies have concluded. The age has an influence only in the frequency of a small proportion of symptoms and not in the impact of GERD in patients’ everyday lives.

PGI32
CORRELATION BETWEEN THE SEVERITY OF UPPER GASTROINTESTINAL (GI) SYMPTOMS AND ENDOSCOPIC FINDINGS IN THE GREEK PRIMARY CARE SETTING
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OBJECTIVES: The diagnosis of upper GI disorders is based on symptoms or endoscopic findings. This study evaluated whether the severity and frequency of upper GI symptoms correlate with endoscopic findings. METHODS: This was a single visit cross-sectional study, regarding primary care patients with upper GI symptoms and recent endoscopy data. Investigators (gastroenterologists) recorded demographic data, medical history and endoscopic findings. Frequency and severity of GERD (heartburn/regurgitation) and dyspeptic symptoms (epigastric pain/early satiety/postprandial fullness) were recorded by a patient questionnaire. RESULTS: A total of 112 investigators recruited 1120 patients (male/female: 604/516, mean age: 50 years, mean BMI: 27 kg/m^2) in two periods (November–December 2006 and June–September 2007). Upper GI symptoms for ≥2 days in the last week were reported by 98% of patients (GERD: 71%, Dyspepsia: 76%). Symptoms were present for 3–5 and 6–7 days/week in 51% and 30% of patients, respectively, and were mild, moderate or severe in 14%, 57% and 28% of patients, respectively. The predominant endoscopic findings were peptic ulcer (26%), esophagitis (43%), gastritis (14%) and hiatus hernia (5%). In these groups, upper GI symptoms were present for ≥3 days/week in 83%, 83%, 79% and 71% of patients, respectively, and were moderate/severe in 88%, 88%, 81% and 84%, respectively. Among patients with esophagitis, GERD symptoms were present for ≥3 days/week in 47%, 56%, 63% and 86% and were moderate-to-severe in 68%, 95%, 100% and 100% of cases with LA grade A, B, C and D, respectively. CONCLUSIONS: The majority of patients with upper GI symptoms visiting gastroenterologists have frequent (98%) and moderate-to-severe (86%) symptoms. The severity and frequency of symptoms may be affected by the severity of endoscopic findings. However, they cannot be used as predictors of endoscopic findings, because frequent and moderate-to-severe symptoms are reported not only by most patients with more severe but also most of those with milder endoscopic findings.

PGI33
A POPULATION-BASED SURVEY TO ASSESS IMPACT OF TROUBLESOME SYMPTOMS IN GASTROESOPHAGEAL REFLUX DISEASE ON WORK PRODUCTIVITY
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OBJECTIVES: According to the Montreal definition gastroesophageal reflux disease (GERD) develops when reflux causes troublesome symptoms. Mild symptoms on ≥2 days a week or moderate/severe symptoms on ≥1 day a week are associated with reduced quality of life and are considered troublesome. Objectives were to assess impact and cost of reflux symptoms in the general population on work productivity and to evaluate if troublesome symptoms is associated with significantly larger work productivity loss. METHODS: Members of a web-panel responding to an e-mail invitation (1623/3506, median age interval 40–44 yr, 51% female) were linked to screening questions on employment status and any reflux symptom during the preceding 4 weeks. Employed respondents (n = 1284) reporting reflux symptoms were linked to the full questionnaire (23 questions). Troublesome symptoms were defined as mild symptoms ≥2 days/week or moderate/severe symptoms ≥1 day/week. Work productivity impairment was quantified with the GERD-specific Work Productivity and Activity Impairment questionnaire (WPAI-GERD). Overall productivity losses were converted into monetary cost using the human capital method. RESULTS: Weekly or daily reflux symptoms were reported by 32% (408/1284). Of these 408 respondents, 266 had troublesome symptoms. Mean productivity loss per subject with troublesome reflux symptoms (N = 266): absenteeism 2.1% ($28/week); presenteeism 18% ($203/week); overall loss 18.1% ($205/week). This was significantly higher than in the group with not troublesome symptoms (n = 142) reporting absenteeism of 0.1% (p = 0.01), presenteeism of 5.7% (p < 0.001) and overall loss of 5.3% (p < 0.001). The proportion of subjects with troublesome symptoms reporting productivity loss was significantly higher compared to subjects with not troublesome reflux symptoms: (10% vs. 3%; p = 0.01) and (62% vs. 37%; p < 0.001)). Troublesome symptoms were associated with an increased risk of productivity impairment with an OR of 3.1 (95% CI, 2.0–4.7). CONCLUSIONS: Categorizing reflux symptoms as troublesome based on frequency and severity of symptoms identifies subjects with more marked impact on work performance.