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EVALUATION OF THE NEUROPATHIC PAIN SYMPTOM INVENTORY: CONCEPTUAL ADEQUACY IN SIX COUNTRIES**Crawford B¹, Bouhassira D², Wong A³, Duker E⁴**¹Mapi Values, Tokyo, Meguro, Japan, ²Hôpital Ambroise Paré, Boulogne-Billancourt, France, ³Mapi Values, Boston, MA, USA, ⁴Pfizer, New York, NY, USA

OBJECTIVE: The purpose of this study was to determine whether the Neuropathic Pain Symptom Inventory (NPSI) adequately assesses neuropathic pain symptoms in patients with diabetic peripheral neuropathy, post-herpetic neuralgia, trigeminal neuralgia, and sciatica across multiple cultures. **METHODS:** From data collected from 132 subjects in 6 countries, qualitative research methods identified their most important symptoms (and verbal descriptions) associated with neuropathic pain. A core set of commonly described symptoms spanning multiple cultures was also described. Moderators using a semi-structured discussion guide conducted focus groups consisting of patients in the US, Brazil, Japan, China, Finland, and Spain to elicit concepts that were most important and relevant (concept elicitation phase). Study subjects ranked the importance of each neuropathic pain symptom, completed the NPSI, and commented on its ability to capture key symptoms (face and content validation phase). **RESULTS:** Descriptive terms for sensations of neuropathic pain were similar in all countries; burning, electric shocks, and pins and needles were among the most-common sensations. Individuals with neuropathic pain experienced all sensations that were included in the NPSI. They also tended to describe pins and needles and numbness interchangeably, perhaps reflecting the relative number of DPN subjects on study. Chinese subjects tended to favor verbal descriptors and were more likely to relate extreme pain with the heart because they believe the heart is the most critical and sensitive part of the body. In Spain, the two sensations of “pins and needles” and “stabbing” were occasionally combined into one term as “stabbing pins on fire”. **CONCLUSION:** This is the first study to the knowledge of the authors to confirm such a “universality” of core neuropathic pain descriptors across etiologies and cultures. Based on data from these focus groups, the NPSI is an acceptable instrument for assessing neuropathic pain worldwide.

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PSYCHOMETRIC ANALYSIS OF THE THREE-FACTOR EATING QUESTIONNAIRE: RESULTS FROM A LARGE DIVERSE SAMPLE OF OBESE AND NON-OBESE SUBJECTS**Cappelleri JC¹, Bushmakina AG¹, Gerber RA², Leidy NK³, Sexton C³, Lowe MR⁴, Karlsson J⁵**¹Pfizer Inc, Groton, CT, USA, ²Pfizer Inc, New London, CT, USA,³United BioSource Corporation, Bethesda, MD, USA, ⁴Drexel University, Philadelphia, PA, USA, ⁵Sahlgrenska Academy at Göteborg University, Göteborg, Sweden

OBJECTIVE: To assess the psychometric properties of the 21-item Three-Factor Eating Questionnaire (TFEQ-R21) in obese and non-obese subjects. **METHODS:** Data were obtained from adults at baseline from a Phase 3 trial for a weight management drug (n = 1739; mean body mass index [BMI] [SD] = 38.6 [6.7]) and a web-based survey (n = 1275; non-obese [BMI 18–27 kg/m²] and overweight and obese [BMI 27–76 kg/m²]). Confirmatory factor analyses (CFI) were undertaken to test the TFEQ-R21 structure (Cognitive Restraint [CR], 6 items; Uncontrolled Eating [UE], 9 items; Emotional Eating [EE], 6 items). Relationships between TFEQ domains and BMI were evaluated. **RESULTS:** The clinical data indicated that the original TFEQ-R21 structure needed refinement. The original 21-item model had 3 items removed from its CR domain. This resulted in

an 18-item TFEQ model (Bentler's Comparative Fit Index [CFI] = 0.91) that was otherwise identical to the original factor structure (UE, CR, and EE). This modified structure was verified using data from the web-based survey (CFI = 0.96). Cronbach's alphas for the 18-item TFEQ structure for each scale were high and ranged from 0.70–0.92 and 0.78–0.94 in the clinical and web-based studies, respectively. There were no ceiling or flooring effects. Correlations with BMI were small. In the clinical study, the CR domain showed the most visibly linear relationship with BMI; a one category increase led to a 1.55 kg/m² (95% CI: 0.79; 2.30) decrease in BMI. In the web-based survey, there was a visibly linear relationship between BMI and all domains except the CR domain. The relationship between BMI and CR depended in part on obese and diabetes status. **CONCLUSION:** The 18-item TFEQ (with 3 items removed from the TFEQ-R21 CR domain) has satisfactory psychometric properties and may be a useful tool to characterize uncontrolled eating, cognitive restraint, and emotional eating in obese patients.

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IMPACT OF NIGHTTIME PAIN ON SLEEP QUALITY IN PATIENTS WITH CHRONIC PAINFUL CONDITIONS**Chaudhari PK, Richardson DM, Singh VP, Pizzi LT**

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OBJECTIVE: To determine the prevalence of nighttime pain among patients with chronic painful conditions and its impact on sleep quality. **METHODS:** Prospective study of 263 chronic pain outpatients with musculoskeletal problems, arthritis/rheumatism, headache, and sickle cell anemia who completed a diary. Data included demographics, pain-related diagnosis, self-reported pain scores (10-point scale), and resource utilization. Patients completed Pittsburgh Sleep Quality Index (PSQI), which includes questions about duration of sleep and sleep disturbances in previous month, and yields a sleep quality score ranging from 0 (best) to 21 (worst). Statistical tests used were Kruskal-Wallis and Pearson's correlation. **RESULTS:** Among 263 patients, the mean age was 50.6 (SD = 13.9) and 198 were female (75%). Mean PSQI score was 12.1 (SD = 4.8) for females, 11.7 (SD = 4.7) for males, and mean pain score was 5.3 (SD = 2.1). Patients disturbed by nighttime pain less than once, once to twice, or ≥ 3 times per week had a mean PSQI of 8.3, 9.6, and 13.7, respectively, compared to 7.2 for patients' sleep not disturbed by nighttime pain ($p < 0.0001$). Two-hundred twenty-eight patients (86.6%) had trouble sleeping because of pain at least once. Half of all patients were taking sleep medications. Patients taking sleep medication less than once, once to twice, or ≥ 3 times per week had mean PSQI of 10.2, 14.6, and 14.9, respectively, compared to 9.1 for patients not taking any sleep medication ($p < 0.0001$). **CONCLUSION:** Chronic pain patients may not routinely report nighttime pain to providers, but our study confirms that it is common and indeed impairs sleep quality. Also, higher pain scores and worse sleep quality were observed among those who reported taking more sleep medications. Findings underscore need to better manage pain by ensuring that patients' pain medications provide adequate analgesic coverage during sleep. Doing so may reduce the need for sleep medications in this population.