

1223 / Validation of a Scale to Measure Patient-Perceived Barriers to Medication Use

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AIMS: Medication adherence may explain why patients show very different clinical outcomes. Previous assessments of adherence have used refill rates and pill counts. Few studies have investigated patient-identified barriers to using medications as prescribed. This is particularly true for persons with diabetes, most of whom are using poly-pharmacy regimens. We created a questionnaire to measure patient perceptions of barriers to medication adherence (PBMA) targeting a predominately low income, inner-city minority population.

METHODS: Twenty items (Likert scale) leading with "I sometimes don't take my diabetes medicines because..." were developed from 5 focus groups (N=48). A questionnaire including these items was mailed to 1000 patients who have diabetes.

RESULTS: Using data from 267 respondents (Mean age=58, 74% female, 43% non-Hispanic Caucasian, 77% income<\$15,000), exploratory factor analyses with varimax rotation identified 5 factors, that may contribute to poor medication adherence: personal access to medications (F1); communication with providers (F2); understanding or appropriately following the prescribed regimen (F3); side effects (F4) and system factors that inhibited access to medication (F5). Cronbach alphas ranged from .73 to .83 for the five factors and was .92 for total scale score. No relationships were found between total scores and gender, race, or income. Greater perception of barriers was significantly ($p<0.01$) associated with being younger ($r= -0.21$), being bothered more by physical ($r= -0.40$) and emotional side effects ($r= 0.43$), and less satisfaction with control of blood sugar by diabetes medications ($r= 0.45$).

CONCLUSIONS: This instrument is reliable, factorially valid, and consistent with clinical observation regarding factors known to be associated with patient medication adherence. Although study participants were patients with diabetes, the PBMA may be applicable to other therapeutic areas.

Abstract published as:

Marrero, David G., Monahan, Patrick O., Lane, Kathleen A., Hayes, Risa P. (2006) Quality of Life in Macular Degeneration: Age-Related Macular Degeneration Alliance International (AMDAl) White Paper. 2006 International Society for Quality of Life Research meeting abstracts [www.isoqol.org/2006mtgabstracts]. The QLR Journal, **A-68**, Abstract #1223