# Quality of life role in risky alcohol use research: should it be a more relevant outcome in any study?

## *Rol de la calidad de vida en el consumo de riesgo de alcohol: ¿debe ser una variable más relevante en cualquier investigación en este campo*

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Dear Editor:

In recent years, treatment for patients with alcohol-related problems has evolved from a paradigm based on abstinence to a paradigm that places greater emphasis on reducing alcohol consumption in mild and moderate cases as an attainable goal of the therapeutic strategy, and that is coherent with the ethics of our profession (Barrio & Gual, 2016; Bradley & Kivlahan, 2014; Luquiens & Aubin, 2014). Furthermore, we are aware that a patient's self-evaluation of alcohol consumption is not exempt of minimisations as regards amounts and frequencies, likely due to a cognitive bias more so than the conscious desire to falsify the results of one's progress (Gual et al., 2017). In this sense, we questioned whether it would be correct, from a methodological perspective, to evaluate our patients' progress in relation to the changes in their quality of life as a result of treatment (Baumeister et al., 2014). In addition, we must mention that alcohol users as primary care patients, especially in their dependency patterns, usually present a greater risk of comorbidities, with the resulting impact on their quality of life (Barrio et al., 2016). Our goal was to explore the validity of this variable.

In the EFAR-Spain study (a randomised, controlled, non-inferiority trial of primary care-based facilitated access to an alcohol reduction website) (López-Pelayo et al., 2014) for the validation of a brief, on-line intervention with risky alcohol use patients, the EQ-5D-5L was used to collect quality of life as a secondary variable (Badia, Schiaffino, Alonso & Herdman, 1998). The AUDIT was used to collect sociodemographic data and alcohol consumption patterns (Saunders, Aasland, Babor, de la Fuente & Grant, 1993). The purpose of our study was to explore the relationship between quality of life and alcohol consumption pattern. For this purpose, we use the total quality of life score and its six different dimensions (mobility, self-care, usual activities, pain/discomfort, anxiety/depression, visual analogue scale) as the main dependent variable, and AUDIT score and sociodemographic data as independent variables.

The final sample was comprised of 320 risky drinkers. The mean age was 47.7 years, the majority were male (65%), married (62.5%), with children (65.2%), had a primary school education (42.8%) and were of Spanish nationality (90.1%). At baseline, there was a negative correlation (Pearson's test) between AUDIT and EQ-5D-5L scores, as regards both their global score ($r = -0.223$, $p < .05$) and their visual analogue scale for health ($r = -0.244$; $p < .05$). For the mental health dimension (anxiety/depression) of the EQ-5D-5L, the model was statistically significant ($\chi2(8) = 36.805$; $p < .005$). The remaining subscales were unrelated with AUDIT score. The multivariate analysis (Table 1) confirmed the statistical association of the total score for quality of life (linear regression: b = - 0.25; CI 95%: - .01 to -.004), the anxiety/depression subscale (linear regression: OR = 1.14; CI 95%: 1-08-1.22), and the visual analogue scale (linear regression: b = -0.27; CI 95%: -1,25 to -.500) with

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the AUDIT total score independent of sociodemographic factors.

In conclusion, in a clinical setting that is so key for the treatment of risky alcohol drinkers as is primary care (O'Donell et al., 2014), quality of life, especially in its mental health dimension, is transversally related to the severity of the alcohol consumption pattern, as per AUDIT. The EQ-5D-5L instrument has potential for evaluating the progress of primary care patients with risky alcohol consumption in treatment to reduce their alcohol consumption, though longitudinal studies are necessary to confirm this hypothesis, given that the data available to date only enables establishing a statistical association.

Table 1. *Logistic regression (dependent variable: presence of anxiety/depression in the EQ-5D-5L) and linear regression (dependent variable: total score in the EQ-5D-5L and Visual Analogue Scale of the EQ-5D-5L)*

| **Dependent variable: Total score** | **Beta (CI 95%)** | **p** |
|---|---|---|
| AUDIT score | -0.25 (-0.01; -0.004) | ‹ .001 |
| Sex (male) | 0.05 (-0.20; 0.05) | 0.372 |
| Age | 0.06 (-0.01; 0.02) | 0.466 |
| Studies (university vs. others) | -0.01 (-0.19; 0.85) | 0.847 |
| Marital status (married vs. others) | -0.07 (-0.05; 0.02) | 0.312 |
| Use of technology (high) | -0.03 (-0.03; 0.02) | 0.654 |
| Children (yes) | -0.02 (-0.05; 0.04) | 0.754 |
| Country of origin (Spain) | -0.01 (0.04; 0.30) | 0.838 |
| **Dependent variable: Visual Analogue Scale** | **Beta (CI 95%)** | **p** |
| AUDIT score | -0.27 (-1.25; -0.50) | ‹ .001 |
| Sex (male) | 0.06 (1.82; 5.77) | 0.307 |
| Age | -0.04 (-0.22; 0.14) | 0.657 |
| Studies (university vs. others) | 0.01 (-0.01; 0.02) | 0.810 |
| Marital status (married vs. others) | -0.10 (-5.59; 0.76) | 0.135 |
| Use of technology (high) | 0.64 (-2.67; 1.56) | 0.604 |
| Children (yes) | 0.40 (-6.50; 2.57) | 0.395 |
| Country of origin (Spain) | 0.01 (-3.14; 3.83) | 0.847 |
| **Dependent variable: Presence of anxiety/depression (P5 EQ5D5L)** | **OR (CI 95%)** | **p** |
| AUDIT score | 1.14 (1.08; 1.22) | ‹ .001 |
| Sex (male) | 0.78 (0.44; 1.37) | 0.385 |
| Age | 0.99 (0.96; 1.01) | 0.269 |
| Studies (university vs. others) | 1.01 (0.89; 1.15) | 0.874 |
| Marital status (married vs. others) | 1.56 (0.98; 2.49) | 0.062 |
| Use of technology (high) | 1.00 (0.72; 1.40) | 0.996 |
| Children (yes) | 1.04 (0.49; 2.20) | 0.928 |
| Country of origin (Spain) | 1.28 (0.74;2.20) | 0.376 |

*Note*. CI 95% = Confidence Interval of 95%. OR = Odds Ratio

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## Conflict of interests

The authors declare the inexistence of conflicts of interest in relation to this study.

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