Soc Sci Med. 2015 Nov;144:48-58. doi: 10.1016/j.socscimed.2015.09.009. Epub 2015 Sep 10.

## Are bad health and pain making us grumpy? An empirical evaluation of reporting heterogeneity in rating health system responsiveness.

Fiorentini G, Ragazzi G, Robone S.

## **Abstract**

In recent years, the concept of responsiveness has been put forward as one desirable measure of the performance of health systems. Responsiveness can be defined as a system's ability to respond to the legitimate expectations of potential users regarding non-health enhancing aspects of care. However, since responsiveness is evaluated by patients on a categorical scale, their self-evaluation can be affected by the phenomenon of reporting heterogeneity.

A few studies have investigated how standard socio-demographic characteristics influence the reporting style of patients with regard to responsiveness. However, we are not aware of studies that focus explicitly on the influence that both the patients' state of health and their experiencing of pain have on their reporting style on responsiveness.

This paper tries to bridge this gap by using data regarding a sample of about 2500 patients hospitalized in four Local Health Authorities (LHA) in Italy's Emilia-Romagna region between 2010 and 2012. These patients have evaluated 27 different aspects of the quality of care, concerning five domains of responsiveness (communication, privacy, dignity, waiting times and quality of facilities). Data have been stratified into five sub-samples, according to these domains.

We estimate a generalized ordered probit model, an extension of the standard ordered probit model which permits the reporting behaviour of respondents to be modelled as a function of certain respondents' characteristics, which in our analysis are represented by the variables "state of health" and "pain". Our results suggest that unhealthier patients and patients experiencing pain are more likely to report a lower level of responsiveness, all other things being equal.