



## **Do nursing interventions improve the process and outcomes of patients with Inflammatory Bowel Disease?**

Hernández-Sampelayo P<sup>1</sup>, Lázaro P<sup>2</sup>, Torrejón A<sup>3</sup>, Marín L<sup>4</sup>, Oltra L<sup>5</sup>, Seoane M<sup>6</sup>, Casellas F<sup>3</sup>, García V<sup>7</sup>, Vera MI<sup>8</sup>, by the ENFEII group.

<sup>1</sup>Hospital Universitario Gregorio Marañón, Madrid. <sup>2</sup>Técnicas Avanzadas de Investigación en Servicios de Salud (TAISS), Madrid. <sup>3</sup>Hospital Universitari General Vall d'Hebron-CIBEREHD, Barcelona. <sup>4</sup>Hospital Germans Trias i Pujol, Barcelona. <sup>5</sup>Hospital de Manises, Valencia. <sup>6</sup>Hospital Universitario de Santiago de Compostela. <sup>7</sup>Hospital Universitario Reina Sofía, Córdoba. <sup>8</sup>Hospital Universitario Puerta de Hierro, Madrid.

**Aim:** To know the improvement in clinical outcomes, quality of life, and process of care in patients with Inflammatory Bowel Disease (IBD) attributable to the role of nurses, according to the available scientific evidence.

**Materials and Methods:** Systematic search about clinical outcomes, quality of life, and process of care of IBD patients related to specialist nurses interventions in bibliographic databases (Medline, Embase, Spanish Medical Index (SMI), and the Cochrane Library) from 1999 to 2009, and grey literature (e.g., Professional Societies, Quality of care Agencies, Governmental Agencies) in English or Spanish. Inclusion criteria for documents: the document provides some relevant aspect on outcomes, quality of life, or process of care of nursing interventions addressed to IBD patients. If the reference could not be excluded reading the title, the abstract was read. If, after reading the abstract, the reference was not excluded, the full text article or document was obtained and read. To decide whether the article (or document) met the inclusion criteria, two researchers read the document independently. In case of discrepancy, the decision was made by consensus.

**Results:** 232 titles were found in Medline, 33 in Embase, 6 in the SMI, and 1 in the Cochrane Library. Finally, 6 articles met the inclusion criteria. Thirty four national institutions (e.g., professional societies), 3 international institutions, and 10 agencies of quality of care were identified in the grey literature. From these institutions, one document was included. Two studies are systematic reviews and one non-systematic, 3 studies are observational (pre-post analysis), and one is a controlled trial. Included papers refer to various nursing interventions (e.g., nurse advice, including a specialist nurse in the multidisciplinary team) and measure various outcomes in patients. Among these outcomes, authors report: a) improvement in the mental domain of the quality of life (SF-36 questionnaire) in patients with Crohn's disease (but not with ulcerative colitis) at six months but not later, while others found no differences in quality of life; b) reduction in hospital visits and hospital stay; c) increase of patient satisfaction; d) early detection of adverse effects; and e) increasing the number of patients in remission. However, all studies have important methodological limitations (design flaws, lack of statistical analysis, inappropriate analysis, and numerous sources of bias), which means that these findings should be viewed with caution.

**Conclusions:** Some of the findings point out that better outcomes and quality of care are associated with organized nurse care. However, the scientific evidence on the effects on clinical outcomes, quality of life, and quality of care in patients with IBD attributable to nursing activities is scarce and affected by poor methodological quality. Studies with enough methodological robustness should be designed to test the hypothesis that nursing interventions in integrated care units improve process and outcomes on patients with IBD.

*Hernández-Sampelayo P, Lázaro P, Torrejón A, Marín L, Oltra L, Seoane M, Casellas F, García V, Vera MI, by the ENFEII group. Do nursing interventions improve the process and outcomes of patients with Inflammatory Bowel Disease? 5th Congress of ECCO - the European Crohn's and Colitis Organisation. February 25 – 27, 2010, Prague, Czech Republic.*