HEALTHCARE PATHWAYS AND BURDEN OF DISEASE OF PATIENTS WITH INFLAMMATORY BOWEL DISEASE (IBD)

Martini Nello *
Cinconze Elisa #,
Calabria Silvia °,
Esposito Immacolata *,
De Rosa Marisa #

On the behalf of the ARNO Observatory *

arnojournal@cineca.it
www.coreteam.it
www.cineca.it

*Accademia Nazionale di Medicina, Roma, Italy
CINECA - Interuniversity Consortium, Bologna, Italy
° CORE – Collaborative Outcome Research, Bologna, Italy

* ARNO Observatory network (LHUs):

R.Roni (Trento), A. De Marco (Belluno), M.Cecchetto (Bassano), MP Cariolato (Ovest Vicentino), A.Maroni (Vicenza), D.Maccari (Pieve di Soligo), R.Callegari (Asolo), M.Ferrari (San Donà di Piave), S.Zardo (Venezia) L.Cordella (Mirano), B.Pari (Chioggia), A.Pedrini (Alta Padovana), A.Grion (Padova), MG Zogno (Monselice), A.Ferrarese (Rovigo), V.Lolli (Adria), L.Mezzalira (Verona), S.Brasola (Legnago), L.Castellani (Bussolengo), D.Garibaldi (Lucca), P.Batacchi (Firenze), M.Rais (Viareggio), G.Riccioni (Roma A), R.Di Turi (Roma D), C. De Matthaeis (Roma F), A. Orsini (Teramo), G. La Bella (Napoli1), E.Nava (Napoli 3), R.Moscogiuri (Taranto)

Background and Aim

Inflammatory Bowel Diseases (IBD), which include Crohn's disease and Ulcerative Colitis, are chronic and life-long conditions. Only symptomatic reliefs exist, because the exact cause is not entirely understood. The aim of this study was to analyze the healthcare profile and the overall cost of patients with IBD in the real clinical practice.

Methods

Starting from ARNO Observatory database (11 million citizens), a record linkage analysis of disease exemptions, specific drug prescriptions and hospital discharges was carried out. A cohort of patients was selected from a subset of Local Health Units with available, complete and good quality data on pharmaceutical prescriptions, specialist/diagnostic procedures and hospital discharges. The accrual period lasted from January 1st 2009 to December 31st 2009. Hospitalizations and specialist services of every single patient with IBD were followed up to 3 years from the index date, while pharmaceutical data were observed up to 4 years. All pharmaceutical prescriptions, hospital care (re-hospitalizations, gastro-intestinal surgery, in-hospital mortality), diagnostic procedures and their costs (in charge to NHS estimated using reimbursement tariffs, as mean patient/year) were analysed.

Results

From a population of 2,664,778 citizens, a cohort of 25,427 (0.95%) patients with IBD, on average aged 55±18 years, was selected. **Fig. 1** shows ***prevalence rate by age groups and gender distribution***.

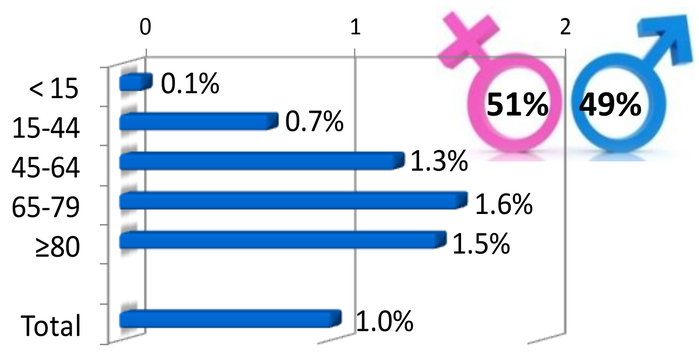


Fig. 3 - % patients discharged after ordinary hospitalizations during the 3-year follow-up, by main diagnosis

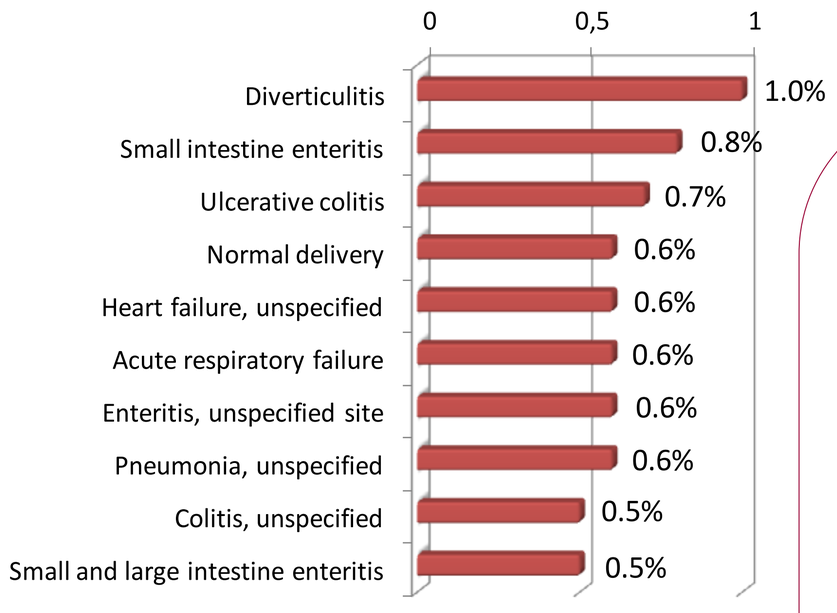


Fig. 4 - % patients discharged during the 3-year follow-up, by comorbidity

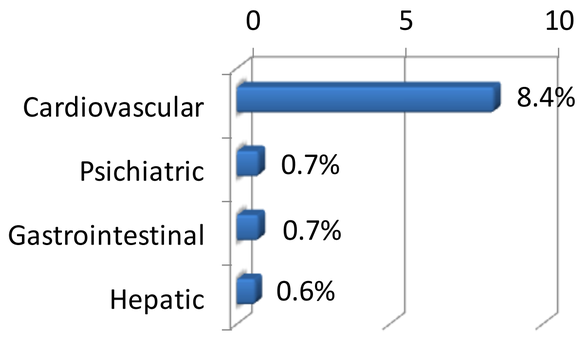
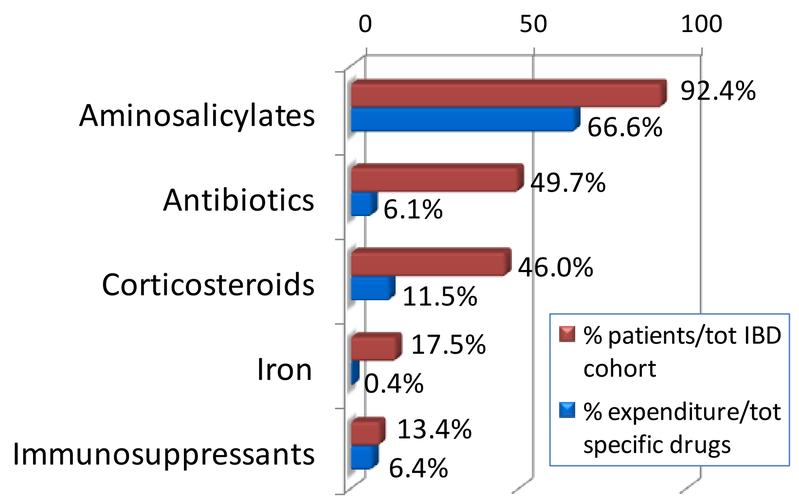


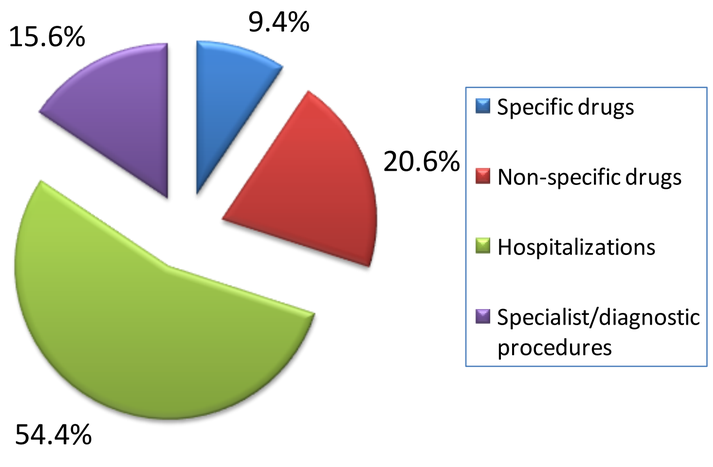
Fig. 5 shows the ***1-year follow-up costs analysis, by administrative flow*** (for 2012): the mean yearly pro capite expenditure was 2,148€. Day-hospital/specialist services include the biologicals delivery.

Prescription rate of specific non-biological drugs and related expenditure composition is shown in **Fig. 2:** immunosoppressants were the most expensive as mean yearly cost/patient (583€). The most prescribed non-specific therapies were Protonic Pomp Inhibitors (62,3%) and antibacterials for systemic use (Penicillins – 58%, Macrolides – 39%, Quinolones – 35,8%).



Focusing on hospitalizations:

- IBD diseases related the main causes of ordinary admissions, acute respiratory failure the most expensive – **Fig. 3**;
- cancer chemotherapy the first cause of daily hospitalizations and the most expensive one;
- cardiovascular diseases were the most common (8.4%) comorbidities an the most expensive – **Fig. 4**;
- early re-hospitalizations (30 days after previous discharge): 37 patients, mostly aged 15-44 years and men (59%);
- in-hospital mortality: 2% of the cohort, mostly aged ≥ 80 years and men (51%);
- Small intestine removal/demolition was the surgery that most accounted for expenditure (35,994 €/patient) and for days of hospitalization (60.7).



Conclusions

In-hospital cares are the main cost driver for patients with IBD. This must be considered by LHUs Authorities and Physicians when evaluating patient healthcare pathways with chronic disease and estimating costs of illness. ARNO Observatory represents an important tool to support clinical governance.

ISPOR 18th Annual European Congress
November 8-11, 2015
Milano, Italy