



## Commentary

## Lights and shadows in the assistance to digestive diseases: Lessons learned finally?

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The gastroenterologists of the Italian Association of Hospital Gastroenterologists and Endoscopists (AIGO) in cooperation with the Ministry of Health carried out an analysis on Hospital Discharge Records (HDRs) concerning diagnoses related to digestive diseases (DDs, gastrointestinal, hepatic and pancreatic) belonging to major diagnostic categories (MDCs) 6 and 7, from all the 21 Italian regions, for the years 2010–2014 [1].

Since a previous similar evaluation, carried out in 2011 on the basis of nationwide data from the Ministry of Health for the years 2003–2009 [2] had the potential bias of a non-homogeneous data flow from Italian regions, the present report was planned to give a reliable evaluation of medical assistance to DDs on the basis of the satisfactory homogeneity of HDRs flow reached in recent years from all Italian regions.

The report aimed to evaluate the burden of DDs on the National Healthcare System (NHS) in terms of hospitalizations, and the outcomes of medical assistance to DDs in specialized GE units as compared to other types of units.

The analysis included 4,823,830 HDRs with a mean of 940,830 HDRs/year, which represent the first or second cause of hospitalization, with a stable 10% of all hospital admissions; this is a clear-cut evidence of a substantial burden of DDs for NHS, in line with the epidemiological data from other European countries [3,4].

In line with the general trend, also the standardized rate of hospitalization for DDs decreased from 17.3/1000 in 2010 to 14.5/1000 in 2014. As far as the admitting units are concerned, DDs were correctly allocated to specialized GE units in only 7.4% of cases, whereas the remaining were admitted to non-specialized units, mainly to surgery (49.8%) and internal medicine (24%). However, if the decrease of hospitalization rate is appreciable, the unchanged and unacceptably low rate of appropriate allocation of DDs to spe-

cialized GE units represents a critical issue in the management of DDs, which is related to the limited resources available, either in terms of beds (3.4/100,000) or workforce [5].

As far as outcomes of assistance to DDs are concerned, data regarding length of stay (LOS) and mortality rate deserve some considerations.

In fact, LOS resulted significantly shorter in GE units than in other Units (7.2 vs 8.0 days respectively) independently of the age ranges considered. Remarkably the present study gives sound data regarding mortality in urgent admissions for DDs: in fact, in 276,246 urgent admissions over the quinquennium, the observed mortality rate was of 1.7% in patients admitted to GE units versus 3.9% in patients admitted to other units; a similarly substantial difference in mortality rate was observed in patients with urgent admission for GE bleeding (2.2% versus 3.5% in other units). Of note, these striking differences were maintained in all age ranges considered.

A further point of interest is represented by the appropriateness of hospital admissions which is 81.3% in GE Units versus 66.6% (range 53.4–71.8) in other units. This report deserves great attention, as surveys of comparable size regarding assistance to DDs are really scant in the literature; particularly valuable in the present report is the evaluation of outcomes in different settings of medical assistance to DDs, which highlights the impact of specialized care.

Moreover, the present study evaluated data prospectively recorded by the Ministry of Health, regarding hospital admissions for DDs in different units and allowing a comparison of different cohorts of patients (allocated to GE units vs. other types of units); even though this allocation could clearly be biased by many factors (recruitment, selection, comorbidities, etc. . .), it confirms the strengths of specialized management of DDs in real-life. Even if some differences in data coming from different regions can be noted, this does not reduce the importance of this nationwide portrait of medical assistance, further strengthened by time frame considered (2010–2014).

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Overall, this very interesting paper casts shadows and lights on medical assistance to DDs that clearly need careful consideration by regulatory authorities, gastroenterologists and academic institutions as well.

As already reported in the similar previous national analysis [2] a substantial weakness in medical assistance to DDs is the scarcity of resources, unfortunately stable or even worsening over the last decade, which entails the inappropriate allocation of the vast majority of DDs patients to non-specialized units. On the other hand, the present study confirms clearly that substantial outcomes such as LOS and in-hospital mortality rate in emergent admissions are considerably better in GE than in other units.

Considering the advantages offered by specialized care for DDs, the current unacceptable weaknesses of medical assistance to these conditions must be faced with appropriate planning, which should increase resources for specialized assistance. Such planning, aiming at training a sufficient number of Gastroenterologists and at increasing availability of specialized GE beds, should involve the Ministry of Health, academic institutions and training hospitals.

A fundamental role in improving the quality of medical care for DDs should be played by . . . gastroenterologists! They are the ones who should know in depth the data from the present study, which

are the sound basis for interacting with regulatory institutions, to build up together a future for clinical care to DDs patients with as little shadows as possible and much more lights.

#### **Conflict of interest**

None declared.

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