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Conflict of Interest

Roger Watson is a Visiting Professor at the University of Genoa.

JAN Editorial

The general results of the RN4CAST survey in Italy

The issue of health workforce shortage and in particular of nurses, has been debated globally for almost three decades (Aiken & Mullinix 1987, Aiken *et al.* 1996, 2001, 2010), and has been exacerbated by the recent global financial crisis. The European RN4CAST project has

shifted focus from considering only nursing workforce planning and workforce volumes to considering the impact of adequate nurse-patient ratios and work environment on patient safety and the quality of care (Sermeus *et al.* 2011). The common RN4CAST international protocol (Sermeus *et al.* 2011) enables data to be analysed and compared with those of other 13 countries European countries.

Italy became a partner of the RN4CAST European Consortium in 2013 (Sasso *et al.* 2016), thus becoming the 14th country to participate in this study. Data collection took place from September - December 2015 across Italy, involving 13 Regions, 40 hospitals, 292 units of general medicine and surgery, 3716 patients, and 3667 nurses. It is important to note that in Italy, the three-year baccalaureate degree has been the entry-level requirement for nursing practice since 1999.

Italy's hospital patient-nurse staffing ratio was shown to be 9.5 patients per nurse, which was higher than the average of approximately eight patients per nurse reported by other European countries (Aiken 2012, Ausserhoffer *et al.* 2014). This is significant if we consider that each additional surgical patient per nurse results in a 7% increase in the likelihood of dying within 30 days of admission, a 23% increase in burnout, and a 15% increase of job dissatisfaction (Aiken *et al.* 2002, Aiken *et al.* 2014). This implies that in Italian hospitals where each nurse cares for an average of nine surgical patients, the risk of mortality is 21% higher than those where nurses care for six patients. However, data collection needs to be finalized before this can be definitely confirmed.

Linked to patient safety and the quality of care is also the concept of 'care left undone'. Care left undone or missed nursing care refers to 'any aspect of required patient care that is omitted (either in part or in whole) or delayed. Missed care is an error of omission' (Kalish *et al.* 2009). Care left undone has been identified as a factor that mediates the relationship

between nurse staffing and patient outcomes, and the chances of care being left undone are halved when nurses care for six patients compared with when they care for ten patients (Ball *et al.* 2016). In the Italian RN4CAST study, the patient care activities mostly left undone (mean 41%) included oral hygiene, frequently change patient's position, comfort/dialogue with patients, patient and family education, developing or updating care plan, appropriate patient surveillance, and planning care. This result also shows that Italian nurses mainly tend to leave undone relational, communication, educational and planning activities, which instead are the ones that mostly distinguish nursing competencies from those of other health professionals, and are obliged to conduct purely practical activities such as administering painkillers, treatment and procedures, and documentation of nursing care.

In the Italian RN4CAST study, 36% of the nurses reported that, if they had the opportunity, they would abandon their profession within the next 12 months and the mean age of these nurses was 41 years, and not those who were close to retirement. Considering Italy's high patient-nurse staffing ratio, this confirmed the findings of Aiken *et al.* (2014), whereby each additional surgical patient per nurse results in a 15% increase in job dissatisfaction. Job dissatisfaction is also influenced by the work environment, which leads to burnout in 38.5% of the Italian nurses, mostly caused by poor professional autonomy, the lack of educational and career opportunities, and low salaries.

These factors negatively influenced way Italian nurses perceived their roles and their professional identity, but did not greatly affect the way patients perceived the quality of care they received. In fact, 65% of the patients reported that they would definitely recommend the hospital they were admitted to friends and relatives, and 78% of declared that they were listened and respected by nurses. This shows that, notwithstanding the great difficulties,

Italian nurses on a daily basis work make an enormous effort to ensure the best possible care but at their own expense in terms of burnout and dissatisfaction.

The RN4CAST@IT study has demonstrated that in Italy there are high patient to nurse workloads in hospitals that are posing risks for patient safety, and negatively impacting on the quality of care and on nurse retention, particularly due to excessive workloads, burnout, and job dissatisfaction. This was also confirmed by the fact that nurses missed more than 40% of the care required for patients during their stay in hospital. Moreover, missed care mostly involved activities that reinforce nurses' professional identity, based on autonomy, decision-making, accountability, and leadership (Sandström *et al.* 2011).

Better patient-nurses ratios could significantly improve patient safety and the organization and the quality of care in hospitals. In 1999, California passed legislation mandating that hospitals must have at least one nurse for every six medical and surgical patients (Aiken *et al.* 2002), and the first state to implement minimum patient to nurse staffing ratios in acute hospitals (Coffman *et al.* 2002, Spetz 2004). Today, due to high patient to nurse ratios in Italy nurses often do not have the time to implement appropriate discharge plans. This leads to higher readmission rates that increase healthcare workload and costs.

Nevertheless, due to the global financial crisis, in the attempt to abide by strict spending review policies hospital managers expected to save money by freezing the hiring of new nurses and increased the patient to nurse ratios. The RN4CAST study on the contrary has confirmed that nurses are not the problem of health systems, but the solution, and this was also reinforced by the patients' perceptions of the care they received from the nurses.

Thanks to the evidence provided by the RN4CAST study also in Italy, nursing leaders now have the evidence and the means necessary to play a stronger role in implementing strategies to improve patient to nurse ratios, and create better working environments to ensure high quality care, improve

patient safety and job satisfaction. Job satisfaction is very important to reduce burnout and improve retention. In Wales, the Nurse Staffing Levels Act became law on 21 March 2016, and recently, Nicola Sturgeon, First Minister of Scotland announced that ‘Scotland will be next to introduce nurse staffing legislation’ (*Nursing Times* 19 June 2016). Now, also thanks to the RN4CAST@IT study, we hope that the positive wave of change that started in Wales and Scotland for nurses will soon reach also Italy.

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Conflict of Interest

The authors declare that there is no conflict of interest.

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