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Measures of Cost Containment, Impact of The Economical Crisis, and the Effects Perceived in Nursing Daily Practice: An Italian Crossover Study

Executive Summary

- A qualitative/quantitative study in two phases was undertaken to describe the economical crisis intensity, cost-containment interventions adopted locally, and their effects perceived in daily practice by Italian nurses.
- The main economic crisis effects reported by nurses were (a) the staff stress level has increased, (b) patients with social problems have increased, and (c) the workload has increased.
- Overall, nurses perceived moderate disadvantages due to the economical crisis; several cost-containment measures have been adopted at different levels of the National Health Service.
- Patients in general seem frailer and nurses working in the community centers also seem frailer compared with nurses working at the hospital level.
- Changes in daily nursing practice both at the hospital and community levels are warning signs that should be monitored carefully for both their short and long-term negative impacts on patients, nurses, and the National Health Service.

Nurses are recognized internationally as the main pillar of the health care system (World Health Organization [WHO], 2002). They spend 24 hours a day, 7 days a week caring for patients and their families. Even those nurses who are not involved in clinical practice but have managerial roles pursue the priority mission to preserve patient care and safety (Newbold & Hyrkas, 2010). Nurses care for and monitor patients' needs (Bulecheck & McCloskey, 1999), evaluate the appropriateness of care support at the bedside (WHO, 2002), and play a key role in evaluating the consequences of decisions adopted (or not) at national, regional, and local levels (WHO, 2002).

Despite the important role of nurses, which is internationally recognized, there are no reports documenting the intensity of the economical crisis perceived at the bedside and the effects of the cost-containing measures adopted by health services in nursing daily practice. The huge international financial crisis, deficits, and health care inflation (Newbold & Hyrkas, 2010) are also affecting the Italian National Health Service System (NHS) which is based, like in many other countries (O'Brien-Pallas, Hirschfeld, Islam, & Luba, 1998), largely on nurses. Italian Nurses (around 370,000) work almost exclusively within the NHS (Silvestro, 2010) which is based on several principles such as availability, equity, and solidarity. As per documentation of other NHSs (Houtepen & Meulen, 2010), the citizens (around 60 million) contribute to the collective financial system by paying taxes. In return, it guarantees equal access to health

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care for all members of the society as needed. Considering the increasing ratio of unemployment and the effects of the current economic crisis on industry profits, tax revenues decreased 2.5% in 2009 in comparison to 2008 (from 412 to 402 billion Euro) (Banca d'Italia, 2010). In the first 9 months of 2010, the decreasing trend persisted although at a slower pace (-1.84%) (Banca d'Italia, 2010).

The Italian NHS comprises hospitals (3.8 beds/1,000 inhabitants) and districts and residential/semi-residential care (e.g., nursing houses) with availability of 3.73 beds/1,000 inhabitants (Minister of Health, 2007). Within the NHS, the nursing system is well developed and includes nurse executives (performing at nursing office level and mainly leading resources), chief nurses (performing at a ward/unit/department level and mainly managing daily resources), and clinical nurses with patient care responsibility.

The main purpose of this study was to give Italian nurses the chance to express their concerns about the economic crisis they are experiencing in their daily practice as top managers, unit managers, and clinical nurses. The aim of the study is to describe the economical crisis intensity, cost-containment interventions adopted locally, and their perceived effects in daily practice by Italian nurses.

Method

Study design. A qualitative/quantitative study scheme articulated in two phases was adopted.

First phase. A group of expert nurses was involved via both mail and email with the aim to emerge a comprehensive set of (a) cost-containment measures undertaken by local Health Services in 2009, and (b) economic crisis effects perceived in the daily clinical practice in 2009. A judgmental sampling was adopted (Bruce, Lagley, & Tjale, 2008) and included RNs at different career levels (clinical nurses, chief nurses, executive nurses), who had been working in the NHS since 2007 in different areas (hospital or district/community care) and those who were advanced educated. Students, unemployed nurses, or nurses recruited from other countries during the last 3 years and nurses' aides were excluded. According to the Delphi technique (Hasson, Keeney, & McKenna, 2000), two open questions were sent first to the 51 selected nurses. The questions were (a) Might you list the cost-containment measures implemented in your hospital or district/residential service in 2009? (b) Might you list the economical crisis effects perceived in your daily practice in 2009? The answers obtained (e.g., "one cost containment measure implemented in my hospital was to block nursing recruitment") were transformed into variables (e.g., hiring freeze). Once the list of variables was created, a second consultation round was proposed. To stimulate the discussion (Linston & Turoff, 1975), the participants were invited to express their personal agreement or disagreement on each variable emerged (both on cost-containment measures and on their effects). The agreement by at least 27 nurses out of the 51 involved was considered the cut-off for including or not each variable. Later, researchers transformed the agreed variables into items to include in the questionnaire. A third round was undertaken which involved sending to the involved expert nurses the emerged list of items. This process was developed from December 2009 to February 2010. At the end, a questionnaire comprising four sections was created.

1. Demographic and professional data of the respondents (9 items).
2. Cost-containment interventions adopted by the hospitals and district/community centers (13 items).
3. The overall intensity of the economical crisis perceived (1 item).
4. Effects of the economical crisis perceived in daily practice (24 items) was approved by researchers and sent to the community of nursing experts.

Item measures were arranged by the researchers. Demographic data were based on open questions (e.g., age, educational background). For each cost containment item (e.g., ward closure), the expected answers were "yes," "no," or "I don't know;" moreover, the participants were allowed to fill a gap with a different cost measure not included in the list. To measure the intensity of the economic crisis perceived by nurses, a numerical rating scale from 0 (none) to 10 (maximum) was adopted. Finally, the agreement on the economic crisis effects perceived in daily practice (0 [none] to 10 [maximum]) was requested. Also in this case, participants were left free to include other effects of their experience. A preliminary pilot phase with 20 nurses not included in this final report was realized.

Second phase. A national cross-over study design was adopted. Nurses working in different NHS areas (hospital or district/community care, now referred to as hospital or community [Bortoluzzi & Palese, 2010]) since 2007 were considered eligible. A double strategy based on snowballing and purposeful sampling (Polit & Hungler, 1999) was adopted. The first 200 nurses working in different Italian regions using researchers' personal email lists and searching emails in Google blogs debating nursing care were used. Each nurse involved was asked to answer the questionnaire sent via email and also to involve at least one (or more) nurse preferably not working in the same ward/unit/department. To this second nurse, researchers sent the questionnaire and asked him or her to involve another nurse. This process was done as many times as possible. Researchers participated in nursing meetings, congresses,

and courses offered in different Italian regions where the questionnaire was distributed. Both recruitment strategies were adopted from March 1 through April 1, 2010. Nurses who answered after the deadline were excluded. This deadline was decided first in order to reduce the variability both of the economical austerity data received by participants from the media (e.g., newspapers, television) and the cost-containment measures implemented by the NHS which might influence their perceptions.

Economic scenario. Participants were exposed to economical crisis reports made by media. The most popular national newspapers (*Corriere della Sera, La Repubblica, Il Sole 24 ore, La Stampa* [Anonymous, 2010]) reported with daily frequency positive reports (e.g., "Arrival of a new round of anti-crisis incentives" in *La Repubblica,* March 15) and negative ones (e.g., "Bankitalia, sat debt, declining revenue" in *Corriere della Sera,* March 12; "Salaries for many workers are still an emergency" in *La Stampa,* March 13). There were also reported concerns on the Greek economic crisis ("Social protests in Athens towards Ministry of Finance" in *Il Sole 24,* March 4).

On March 2010, regional governments were managing the impact of the national financial law and were defining Regional Health Service priorities according to the financial law where the main objective of the NHS was to block health care workers' recruitment.

At the end of 2009, which was the reference year of each item included in the questionnaire, the national GDP was falling by 3% in comparison to 2008 (ISTAT, 2009) and the debt/GDP ratio overcame the 115% threshold (Banca d'Italia, 2010). This outcome generated worries on the overall sustainability of the debt in the long term and about the financial markets reactions to the emission of new bonds in the short term. Unemployment was constantly rising and reached 8.6% at the end of the fourth quarter of 2008. However, the overall outlook did not differ significantly from other developed economies such as France (where the GDP's fall was -2.2%), German (-5.0%), and the United States (-2.4%) even if these countries showed a better debt/GDP ratio (ISTAT, 2009).

Table 1.
Participants

Demographic Variables	N (%)
Age (average years)	39.1±8.1 (median 39)
25%	> 33 years
50%	> 39 years
75%	> 45 years
Gender	
Female	793 (79.2)
Male	196 (19.6)
Missing	12 (1.2)
Nursing Education	
Bachelor nursing science	452 (45.2)
Nursing diploma (college)	549 (54.8)
Nurses with	
Basic education (bachelor and/or nursing diploma)	730 (72.9)
Advanced education	271 (27.1)
Advanced Education	
Master's in nursing administration	120 (44.3)
Master's in nursing and midwifery science	112 (41.3)
Master's in clinical area	39 (14.4)
Experience as a Nurse (average years)†	16.1 ± 8.7 (median 16)
Experience in the Role Occupied (average years)†	9.6 ± 7.4 (median 8)
Nursing Roles†	
Clinical nurses	754 (75.3)
Charge nurses	185 (18.5)
Nurse executives	35 (3.5)
Missing	27 (2.7)
Working†	
Hospital level	753 (75.2)
Community/level	248 (24.8)

† At the time of the interview

Ethical issues. Questionnaires were accompanied with a declaration on the study aims and on the confidentiality of the data collected. Each questionnaire received by email or mail was anonymous before data analysis. When distributed at nursing meetings, conferences, or courses, a preliminary formal authorization was requested and obtained by the directors of these initiatives.

Data analysis. SPSS Statistical Package Version 18 was used. Frequencies, percentages, average, standard deviation (±), medians,

Table 2.
Cost-Containment Measurements Adopted in 2009 by Hospitals and Community Centers from the Nurses' Point of View (n=1,001)

Order of Cost-Containment Measures		Yes (%)	No (%)	I Don't Know (%)
1. Hiring freeze	¥	619 (61.8)	336 (33.6)	46 (4.6)
2. Rationing resources at unit level (e.g., human, materials)	‡	618 (61.7)	339 (33.9)	44 (4.4)
3. Using cheaper materials and devices at the expense of quality	†	596 (59.5)	359 (35.9)	46 (4.6)
4. Outsourcing of support services activities (e.g., housekeepers, intra-hospital patient transfer)	‡	505 (50.4)	419 (41.9)	77 (7.7)
5. Logistic redesign of departments and services to use resources more efficiently	‡	501 (50)	456 (45.6)	44 (4.4)
6. Forced staff reallocation (for short time, e.g., one shift) to compensate the lack of nurses in other units	¥	496 (49.6)	451 (45.1)	54 (5.4)
7. Model redesign of delivery nursing care (e.g., from primary nursing to functional nursing) to improve efficiency	‡	449 (44.9)	485 (48.5)	67 (6.7)
8. Increased standardization of care processes to contain the nursing time	¥	398 (39.1)	512 (51.1)	91 (9.1)
9. Hiring specialized nurses' aides in place of RN positions	¥	387 (38.7)	556 (55.5)	58 (5.8)
10. Reduced nurse access to continuing training and education opportunities	¥	355 (35.5)	585 (58.4)	61 (6.1)
11. Development projects suspended or slowed to focus on streamlining	¥	323 (32.3)	575 (57.4)	103 (10.3)
12. Services/departments/units suspended in their activity for shorter or longer period	¥	295 (29.5)	639 (63.8)	67 (6.7)
13. Services/departments/units closure	¥	277 (27.4)	660 (65.9)	64 (6.4)

¥ Homogeneous within hospital and community nurses (p = ns)
‡ More often reported by community nurses ($p <$ 0.01)
† More often reported by hospital nurses ($p <$ 0.01)

ranges, and interquartile range were calculated according with the nature of the variables. Perception of economic crisis rank order was searched at both the individual and sample levels: a total score obtained in the questionnaire by each participant (ranging from 0-240) and in each item by the participants (ranging from 0-1,001) were calculated. ANOVA test or Mann-Whitney test was adopted to explore differences in the averages or medians when appropriate. Correlations were explored with Pearson (r) test. The significant level was fixed at $p \geq 0.05$.

Results

One thousand and one nurses participated (see Table 1). They were from 10 of 20 regions located in the north, central, and southern regions of Italy. At the moment of the interview, nurses were working in 103 hospitals and community settings: on average, 9.7 (range 1-57) nurses were from the same hospital or community setting.

Cost-containment interventions. Participants reported an average of 6.1±2.6 cost-containment measures (median 6, range 0-13) out of the 13 listed (see Table 2). No statistical difference emerged in the average of cost-containment measurements perceived between clinical nurses (6.05±2.74), charge nurses (6.09±2.44), and nurse executives (6.24±1.74) [F=0.072, p=0.93] and between nurses with basic nursing education (5.9±2.74) and advanced education (6.2±2.48) [p=0.191]. The number of cost-containment interventions perceived is correlated both with the number of years of experience as a nurse (r=0.189, p=0.01) and in the role occupied by the participants at the time of interview (r=0.162, p=0.01). Nurses working at the hospital level perceived less interventions (5.91±2.70) compared with those working at the community level (6.39±2.52) [p=0.05].

The intensity of the economical crisis perceived. The average intensity of the economical crisis on a 0-10 scale reported by the participants was 6.06 (median 6±2.4, IQR 3). No significant differences emerged in the intensity perceived between clinical nurses (6.04±2.41), charge nurses (6.27±2.36), and nurse executives (5.68±2.31) [F=0.193, p=0.04]. The perception does not correlate with the years of experience as a nurse (r=0.044, p=0.17) and with the years of expe-

Table 3.
Economical Crisis Effects on Daily Nursing Practice Perceived by Nurses (N = 1,001)

Rank Order of Items	Nurses Answered (%)	Average (±, median) NRS 0-10		∑ (0-1,001)
1. The staff stress level has increased.	985 (98.4)	7.99 (2.6, 9)	¥	7,873
2. Patients with social problems are increased.	966 (96.5)	7.85 (2.5, 9)	‡	7,586
3. The workload has increased.	987 (98.6)	7.25 (3.1, 8)	‡	7,160
4. Patients are admitted in the hospital/district with more complex clinical conditions.	959 (95.8)	7.01 (3.0, 8)	¥	6,724
5. It is difficult to obtain the hospital authorization to leave my own unit to go to another unit for professional development reasons.	950 (94.9)	6.75 (3.2, 8)	¥	6,417
6. Patients have more emotional problems (anxiety, depression, etc.).	965 (96.4)	6.70 (2.8, 8)	¥	6,470
7. It became difficult to meet the needs of each patient.	980 (97.9)	6.68 (3.1, 8)	‡	6,543
8. Nurse shortage has increased in my unit.	985 (98.4)	6.65 (3.5, 8)	¥	6,548
9. Caregivers willing to take charge of patients are decreased.	943 (94.2)	6.49 (2.9, 7)	¥	6,121
10. Devices and materials used in nursing care are deteriorated in quality.	981 (98.0)	6.29 (3.3, 7)	†	6,168
11. Relationships between health care workers are getting worse.	972 (97.1)	6.21 (3.2, 7)	¥	6,038
12. Patient discharge is more difficult than before.	952 (95.1)	6.20 (3.2, 7)	¥	5,906
13. It is difficult to have time to follow the nursing students.	957 (95.6)	5.96 (3.2, 7)	¥	5,703
14. Resources for professional development and education are declining.	976 (97.5)	5.93 (3.4, 7)	¥	5,784
15. There is a scarcity of materials, devices, and aids.	982 (98.1)	5.91 (3.2, 6)	‡	5,805
16. It is more difficult for nurses to be hired as a permanent nurse.	965 (96.4)	5.90 (3.5, 7)	¥	5,697
17. It is more difficult to mentor new nurses.	968 (96.7)	5.79 (3.3, 6)	¥	5,602
18. Patients withdrawn from the purchase of drugs payment for economic reasons.	944 (94.3)	5.48 (3.0, 6)	‡	5,171
19. Patients do not adhere to prescriptions involving medications subject to ticket payment.	940 (93.9)	5.20 (3.2, 5)	‡	4,889
20. On a monthly basis, it is needed to do overtime.	975 (97.4)	4.95 (3.5, 5)	¥	5,831
21. Summer holidays are not easily guaranteed.	925 (92.4)	4.52 (3.7, 5)	¥	4,181
22. Part-time nurses have requested to increase working hours.	934 (93.3)	3.84 (3.3, 3)	¥	3,587
23. Part-time option requests are decreased.	938 (93.7)	3.71 (3.4, 3)	¥	3,476
24. Nursing and nurses' aide student placements in my unit are decreased.	939 (93.8)	3.62 (3.4, 3)	‡	3,402

¥ Homogeneous within hospital and community nurses (p = ns)
‡ More often reported by community nurses ($p <$ 0.01)
† More often reported by hospital nurses ($p <$ 0.01)

rience in the specific role occupied by the participants at the time of the interview (r=0.037, p=0.39). The intensity of the economical crisis perceived is not different between nurses with basic education (6.06±2.43) and advanced education (6.05±2.3, p=0.952). Nurses working at the hospital level perceived less intensity (5.97±2.45) compared with those working in the community setting (6.35±2.18, p=0.031]. Moreover, the intensity of the economic crisis perceived is correlated with the amounts of the cost-containment measures reported by nurses (r=0.323, p=0.00).

Economic crisis impact perceived in clinical practice. The participants reported an overall score average of 137.54±44.67 (median 145, range 0-239, IQR 58) out of 240. No significant difference emerged on overall scores between clinical nurses (138.17 ±45.38), charge nurses (140.12± 40.51), and nurse executives (121.0±45.78) (F=2.767, p=0.06). The same overall effects were perceived by nurses with basic

(138.42±44.82) and advanced education (135.51±44.32, p=0.34). The effects perceived are not correlated with the years of experience as a nurse (r=0.006, p=0.85) and with the years of experience in the specific role occupied by the participants at the time of the interview (r=0.044, p=0.35). Nurses working at the hospital level reported the same overall scores (136.46±45.8) of those working at the community level (140.81±40.86, p=0.184]. The average, median, and the total of the rating given by participants to each item is shown in Table 3.

Discussion

Female nurses, close to 40 years, with a nursing diploma and 16 years of clinical experience (in line with national documented trends, Ipasvi, 2009) participated in this study. The amount of nurses involved in the study in short time (average 32 per day), demonstrates the high attention given to this topic. Perhaps nurses in this age range are particularly sensitive about how to meet the needs of the present without compromising the ability of future generations to meet their own needs. This concern, called sustainability, is also the NHS's concern (Bruntland Report, 1987). Participants' background confirms Italian nurses' trend: the nursing colleges were closed in 1996 and university education is now mandatory to become a RN. In the last 5 years, several opportunities for advanced education at the university level emerged. In our sample, managerial careers in particular emerged. The stratification retrieved in the nurses' career roles is also similar to that documented in national reports. There are few nurse executives (one per hospital/community setting), a relevant number of chief nurses (around 1 per 21 nurses (Palese, Regattin, Bertolano, & Brusaferro, 2006) and a large number of clinical nurses, more concentrated in the hospitals which are downsizing progressively the number of beds to improve care at the community level (Minister of Health, 2010).

Cost-Containment Measures

The economic crisis intensity perceived by participants was moderate, and significantly higher within nurses working in the community centers where they also perceived more cost-containment measures. Expert nurses involved in the first phase individuated 13 cost-containment measures, which were confirmed by participants of the second phase. Some of these measures derive from national policies (e.g., hiring freeze [DM no. 78, 1 July 2009; Law no. 191, December 2009]), others from regional policies (e.g., devices and materials procurement at the regional level by reducing their quality, outsourcing services), while other measures were decided locally (by hospital/community headquarters). Participants were given the opportunity to describe a comprehensive picture on the cost-containment measurement implemented and perceived at the point of care which has not been documented; moreover, because decisions are taken at different levels, they sometimes remain unknown. Some measures are transversal to the NHS, while others seem to characterize hospitals or community settings. These measures also seem to pervade extensively in the nursing system. No differences emerged between clinical nurses and chief executives. This finding was unexpected because some measures taken by the headquarters of a hospital or community center need time to be implemented and then perceived at the unit level. Also, considering responses in which participants said they did not know (ranging from 4.4%-10.3%), nurses seem to be well informed of the effects of cost-containment measures in their practice.

Some measures will have a short-term negative impact on the health care costs; for example, the freeze on recruitment or the substitution of RNs with nurses' aides might reduce the number of the nurses available at the bedside and thus reduce nursing care. If patients receive less nursing care, their outcomes might be negative (e.g., pressure sores) (Cho, Ketefian, Barkauskas, & Smith, 2003) and the related costs may increase. Also other measures (e.g., increasing standardization) are critical both for patients and for nurses' professional values; it seems patients are losing their right to be considered as individuals and to receive individualized nursing care (Suhonen, Välimäki, & Leino-Kilpi, 2010), which is also a professional value declared in the Nurses' Deontological Code. In some cases, patients might be at risk when cared for by nurses not competent in their specific needs. This can occur, for example, when nurses with competence in caring for vascular patients are forced to assist urological patients because of a nursing shortage in that area. Also, having to do certain nursing tasks more quickly (e.g., administer drugs) might expose patients to errors.

Cuts to professional development (e.g., continuing education reduction) ranked 10th and 11th respectively but affected at least one-quarter of the nurses involved, which might lead to negative long-term effects. Nurses need to be sustained with several strategies to prevent professional stress, burnout, and discontent, which can result in turnover and professional abandonment (Gray, Phillips, & Normand, 1996) and result in negative patient outcomes (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002).

Finally, unit/department suspension or closure (e.g., during the summer to deal with seasonal staffing patterns), begun as an extraordinary management solution during the beginning of the Italian nursing shortage (Palese, 2004), was perceived by one-quarter of participants as a cost-containment measure. Within the lim-

itation of the information available which suggests prudence in the interpretation of these data (e.g., the ward closure might be decided rightly due its inefficiency), the health services suspension or closure may have both short and long-term negative impacts. Patients' waiting times, relationships between patients and nurses, and even between patients and hospitals/community centers, might be threatened. In particular, patients might express complaints because of different service accessibility during the year (Friele, Sluijs, & Legemaate, 2008), which is a core value of the Italian NHS.

Economic Crisis Effects on Practice

Economic crisis effects listed first by expert nurses and later confirmed by the participants involved in the second phase of the project were oriented mainly on the process (Donabedian, 2003) instead of the outcomes probably due to the short time that occurred from the adoption of the cost-containment measures. Eighteen effects out of the 24 listed obtained a median 6 or greater, showing a left skewed distribution. Analyzing the list, effects on patients and on nurses' professional development due to perceived cost-containment measures emerged.

Some effects on staff seem well-connected to each other as documented by the literature. For example, nurses' stress (which was ranked first) is related to increased workload which, in turn, is related to the nursing shortage. When nurses are stressed, it is difficult for them to develop positive relationships with other health care workers. Further, each nurse is requested to work the same hours per week (at least 36 hours in the Italian NHS) but manage more patients each shift. These processes are considered antecedents to negative patient outcomes (Aiken et al., 2002; Irvine, Sidani, Keatings, & Doidge, 2002; Zwarestein, Goldman, & Reeves, 2009). Some part-time nurses are requesting increased work hours while part-time positions seem to have less appeal. This can be considered a weak sign of commitment (Corser, 1998) toward full-time nurse colleagues who are caring for more patients, but also an indication of the need to work more time because a family member may have lost a job.

Economic effects on patients are multiple and well-connected to each other. Some are related to personal and social conditions. Patients seem to suffer from more social problems (e.g., unemployment, casual work, and lack of income) which can reduce the attention given to their own health (WHO, 2009). Patients also seem to enter the health care system with worsened clinical conditions compared to the past. Some may not adhere to physician prescriptions for economic reasons (Censis, 2009). Families are less available to care for family members because they need to follow other priorities such as a job search. Patient discharges occur earlier due the hospital bed downsizing. Linking the effects perceived on nursing staff with those perceived on patients, a troubling picture of the near future emerges. The reduction in time spent on patient education because of the increased nursing workloads, for example, might have severe negative consequences such as recurrent hospitalization in patients with social and emotional problems, not adhering to prescriptions, and lack of family support.

Finally, in terms of professional development, nurses manifest several effects but, in particular, perceive less time for new graduates and nursing students. This last point might have long-term negative effects on bachelor's degree nursing courses. Reducing the clinical placements available might reduce the number of the candidates admissible to bachelor's nursing courses, thus aggravating the Italian nursing shortage.

Conclusions

The first picture of the economic crisis perceived by nurses at the bedside emerged through this study. Italian nurses are public employees protected by NHS regulations. Many have experienced, both within their families and in the families of those they are caring for (such as in the community services), the anguish of job loss. This personal and/or professional experience adds to the frustration and difficulties experienced in their daily nursing practice. Overall, nurses perceived a moderate intensity of economic crisis. They also documented several cost-containment measures generated at different levels of the NHS and their effects in daily practice. Patients in general seem more frail, and nurses working in the community centers also seem more frail compared with nurses working at the hospital level. Community-based nurses perceived more cost-containment measures, more economic constraints, and they were more exposed to the frailty of the people living in the community.

From this picture emerged several changes occurring in nursing daily practice at the hospital and community levels. Some of these changes are warning signs to be considered and carefully monitored for their short and long-term negative consequences on patients and nurses, and on the NHS. A limitation of this study was that nurses were selected via a non-random sampling method, which might have introduced selection bias.

Implications for Nurse Leaders

Nursing, as a human caring science, possesses the proficiency to contribute to the advancement of society. As a profession, nursing focuses on the wellness of the society supporting social change. Nurses share with "society the responsibility for initiating and supporting action to meet the health and social needs of the pub-

lic, in particular those of vulnerable populations" (International Council of Nurses, 2006, p. 2). In this context, the point of view of nurses working at different levels in the Italian NHS becomes precious. Data emerged in the study underline specific implications for leaders and other stakeholders.

- Due to the important role of nursing in society, it is important to detect trends that might negatively affect patient care now and in the future. Nursing care outcomes must be measured systematically at the unit, hospital, and system levels. In times of economic crisis, it is important to monitor the impact of economic conditions on nurses and nursing care in order to develop congruent policies (e.g., protecting the nursing system from hiring freezes, reserving this decision to other workers who are not involved in the health care system).
- Nurse clinicians and managers are actively dealing with the effects of the economic crisis in their daily practice. It is recommended to measure nursing workforce morale and stress, which are well-recognized as antecedents of nursing effectiveness, and develop programs to sustain nurses in their hard work.
- It is also crucial to survey the effects perceived by community nurses to determine if their perceptions reflect a negative community system trend. If this trend is confirmed, there is an urgent need to develop strategies to protect the community health settings, and guarantee accessible care for citizens, in particular vulnerable populations. Supporting community care settings is also a good investment for hospitals as they fulfill their specific role for acute care.
- The international comparison between the impact perceived by nurses working under different models of health services in different countries (facing the economic crisis with different strategies) might be important, too. International nursing leaders have the responsibility to protect nursing care and to develop congruent policies. A worldwide debate on the cost-containment strategies adopted around the world and their congruency with nursing and patient outcomes is urgently needed. **$**

REFERENCES

Aiken, L., Clarke, S., Sloane D., Sochalski J., & Silber, J. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *The Journal of the American Medical Association, 288*(16), 1987-1003.

Anonymous. (2010). *Accertamenti diffusione stampa*. Retrieved from http://www.primaonline.it

Banca d'Italia. (2010). *Relazione annuale sul 2009.* Retrieved from http://www.bancaditalia.it/pubblicazioni/relann/rel09

Bortoluzzi, G., & Palese, A. (2010). The Italian economic crisis and its impact on nursing services and education: Hard but challenging times. *Journal of Nursing Management, 18,* 516-519.

Bruce, J.C., Lagley, G.C., & Tjale, A.A. (2008). The use of experts and their judgments in nursing research: An overview. *Curations, 31*(4), 57-61.

Bruntland Report on the World Commission on Environmental and Development. (1987). *Our common future.* Retrieved from http://www.un-documents.net/wced-ocf.htm

Bulecheck, G.M., & McCloskey, J. (1999). *Nursing interventions. Effective nursing treatments.* Philadelphia, PA: W.B. Saunders Company.

Censis. (2009). *Rischio boom della domanda di prestazioni sanitarie pubbliche. Forum per la Ricerca Biomedica.* Retrieved from http://www.forumbm.it/comunicati.php?id=mKWc&pag=noindex

Cho, S.H., Ketefian, S., Barkauskas, V.H., & Smith, D.G. (2003). The effects of nurse staffing on adverse events, morbidity, mortality, and medical costs. *Nursing Research, 52*(2), 71-79.

Corser, W.D. (1998). The changing nature of organizational commitment in the acute care environment: Implications for nursing leadership. *Journal of Nursing Administration, 28*(6), 32-36.

DM n. 78, 1st July 2009. (2009). *Provvedimenti anticrisi, nonché proroga di termini e della partecipazione italiana a missioni internazionali.* Rome, Italy.

Donabedian, A. (2003). *An introduction to quality assurance in health care.* New York, NY: Oxford University Press.

Friele, R.D., Sluijs, E.M., & Legemaate, J. (2008). Complaints handling in hospitals: An empirical study of discrepancies between patients' expectations and their experience. *BMC Health Service Research, 30*(8), 199.

Gray, A.M., Phillips, V.L., & Normand, C. (1996). *The costs of nursing turnover: Evidence from the British National Health Service. Health Policy, 2,* 117-128.

Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing, 32*(4), 1008-1015.

Houtepen, R., & Meulen, R.T. (2000). New types of solidarity in the European welfare state. *Health Care Analysis, 8,* 329-340.

International Council of Nurses. (2006). *Code of ethics for nurses.* Retrieved from http://www.icn.ch/ethics.htm

Ipasvi. (2009). *XV Congresso Nazionale della Federazione Nazionale dei Collegi Ipasvi.* Roma, Italy: Federazione Nazionale Collegi Pub.

Irvine, D., Sidani, S., Keatings, M., & Doidge, D. (2002). An empirical test of the Nursing Role Effectiveness Model. *Journal of Advanced Nursing, 38*(1), 29-39.

ISTAT. (2009). *Conti economici trimestrali – III trimestre 2009.* Roma: ISTAT Pub.Law n. 191, 23rd December (2009) Disposizioni per la formazione del bilancio annuale e pluriennale dello Stato (Financial Law 2010). Roma, Itals: Gazzetta Ufficiale.

Linstone, H.A., & Turoff, M. (Eds.). (1975). *The Delphi method: Techniques and applications.* Reading, MA: Addison-Wesley.

Minister of Health. (2007). *I dati del servizio sanitario nazionale.* Retrieved http://www.salute.gov.it

Minister of Health. (2010). *Documento preliminare informativo sui contenuti del nuovo piano sanitario nazionale 2010-2012. Documento preliminare.* Roma, Italy: Ministero della Salute.

Newbold, D., & Hyrkas, K. (2010). Managing in economic austerity. *Journal of Nursing Management, 18,* 495-499.

O'Brien-Pallas, L., Hirschfeld, M., Islam, A., & Luba, M. (1998). *Strengthening nursing and midwifery: A global study.* Geneva, Switzerland: World Health Organization.

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Palese, A., Regattin, L., Bertolano, T., & Brusaferro, S. (2006). La dotazione di personale infermieristico nei reparti di chirurgia e ortopedia Italiani: Risultati preliminari di uno studio pilota. *Assistenza Infermieristica e ricerca, 25*(4), 206-213.

Palese, A. (2004). La carenza infermieristica in dieci aziende sanitarie a due anni dalla prima rilevazione. *MECOSAN, 51*(3), 93-100.

Polit, D.F., & Hungler, B.P. (1999). *Nursing research – principles and methods.* Philadelphia, PA: Lippincott.

Silvestro, A. (2010). Crisi, pensioni e carenze. *L'infermiere, 3,* 1.

Suhonen, R., Välimäki, M., & Leino-Kilpi, H. (2010). The driving and restraining forces that promote and impede the implementation of individualised nursing care: A literature review. *International Journal of Nursing Studies, 46*(12), 1637-1649.

World Health Organization (WHO). (2009). *The financial crisis and global health: Report of a high-level consultation.* Geneva, Switzerland: WHO.

World Health Organization (WHO). (2002). *Strategic directions for strengthening nursing and midwifery services.* Geneva, Switzerland: World Health Organization.

Zwarestein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: Effects of practice-based interventions on professional practice and healthcare outcomes. *Cochrane Collaboration Database of Systematic Reviews, Issue 3.*