



# Resource allocation and rationing in nursing care: A discussion paper

Nursing Ethics

1–12

© The Author(s) 2018

Reprints and permission:

[sagepub.co.uk/journalsPermissions.nav](http://sagepub.co.uk/journalsPermissions.nav)

10.1177/0969733018759831

[journals.sagepub.com/home/nej](http://journals.sagepub.com/home/nej)**P Anne Scott**

National University of Ireland, Ireland

**Clare Harvey** 

Central Queensland University, Australia

**Heike Felzmann**

National University of Ireland, Ireland

**Riitta Suhonen**

University of Turku, Turku University Hospital and City of Turku Welfare Division, Finland

**Monika Habermann**

Hochschule Bremen, City University of Applied Sciences, Germany

**Kristin Halvorsen**

Oslo Metropolitan University, Norway

**Karin Christiansen**

VIA University College, Denmark

**Luisa Toffoli**

University of South Australia, Australia

**Evridiki Papastavrou**

Cyprus University of Technology, Cyprus

On behalf of the RANCARE Consortium COST – CA 15208

**Abstract**

Driven by interests in workforce planning and patient safety, a growing body of literature has begun to identify the reality and the prevalence of missed nursing care, also specified as care left undone, rationed care or unfinished care. Empirical studies and conceptual considerations have focused on structural issues such as staffing, as well as on outcome issues – missed care/unfinished care. Philosophical and ethical aspects of unfinished care are largely unexplored. Thus, while internationally studies highlight instances of covert rationing/missed care/care left undone – suggesting that nurses, in certain contexts, are actively engaged in rationing care – in terms of the nursing and nursing ethics literature, there appears to be a dearth of explicit decision-making frameworks within which to consider rationing of nursing care. In reality, the assumption of policy makers and health service managers is that nurses will continue to provide full care – despite reducing

---

**Corresponding author:** P Anne Scott, National University of Ireland, University Road, Galway H91 TK33, Ireland.Email: [anne.scott@nuigalway.ie](mailto:anne.scott@nuigalway.ie)

staffing levels and increased patient turnover, dependency and complexity of care. Often, it would appear that rationing/missed care/nursing care left undone is a direct response to overwhelming demands on the nursing resource in specific contexts. A discussion of resource allocation and rationing in nursing therefore seems timely. The aim of this discussion paper is to consider the ethical dimension of issues of resource allocation and rationing as they relate to nursing care and the distribution of the nursing resource.

### **Keywords**

Care left undone, missed nursing care, nursing care, rationing, resource allocation

### **Introduction**

Discussion of resource allocation and rationing as discrete topics is still relatively uncommon in the nursing literature. However, there is an emerging body of literature, largely driven by interest in workforce planning and/or patient safety, which has begun to identify the reality and prevalence of nursing care left undone or missed out. The first study to report care left undone was Aiken et al.<sup>1</sup> in the United States in 2001. A small number of other studies exploring the idea of ‘missed care’<sup>2-4</sup> (United States and Australia), ‘care left undone’<sup>5</sup> (Europe) or what is termed ‘covert rationing’ of nursing care<sup>6</sup> and priority setting<sup>7,8</sup> (Europe) has emerged over the past 10 years or so:

In the midst of multiple demands and inadequate resources, what choices do nurses make to provide the best care possible? There are times when they find it impossible to fulfil all nursing care requirements or choose not to complete all aspects of care for a variety of reasons. In these circumstances, nurses may abbreviate the care, may delay the care..., or may simply omit the care.<sup>3</sup>

In a state of science review of work to date on this area Jones et al. argue that the concepts of missed care, care left undone, covert rationing of care and prioritisation of care all overlap or are addressing the same issues.<sup>9</sup> They coin the term ‘unfinished nursing care’ to encompass work examined using each of these separate terms:

Unfinished nursing care (also known as missed care, implicit rationing of care, and care left undone) is a distinct form of underuse [of the health care services – one of three categories of quality problems in health care] and is a growing healthcare concern internationally. The state of the science on unfinished nursing care has not been formally evaluated.<sup>9</sup>

Unfinished care is conceptualised as a phenomenon with three discreet elements: ‘a problem (resource/time scarcity), a process (clinical decision-making to prioritise and ration care), and an outcome (care left undone)’.<sup>9</sup> This conceptualisation will be revisited below. However, it seems that the only element of the conceptualisation for which there is an emerging evidence base is the third, care left undone.

The philosophical or ethical basis for decision-making regarding leaving care undone or unfinished, or for engaging formally or informally in prioritisation or other forms of rationing of nursing care is largely unexplored. This is an important deficit given the evidence that the prevalence of unfinished care is high: ‘... estimates based on the mean number of activities left undone per nurse ... indicated a high overall prevalence. Most (55-98%) nursing staff left one or more activities unfinished (mean 2-21)’.<sup>9</sup> However, the authors point out that prevalence estimates of care unfinished are influenced by characteristics of the particular data collection tool used.<sup>9</sup> It is also of relevance that in interviews and discussions with nurses, nurses can easily recognise and identify elements of care that are frequently not completed or left undone.<sup>3</sup>

Given the ubiquity of the phenomenon and its subjective salience for nursing staff it is surprising that this is still such an unexplored area from an ethical perspective. This comparative neglect in the literature might be due to the fact that it is a diffusely troubling phenomenon that nurses are hesitant to engage with; there is evidence that the topic of missed care or unfinished care engenders feelings of guilt, a sense of lacking power to provide the care that patients need and fear of victimisation among nursing staff.<sup>3</sup> There is a growing body of literature evidencing the reality of care rationing and its undermining effect on patient care and on the morale of nurses.<sup>5,9,10</sup>

This article sets out to explore issues of resource allocation and rationing in nursing from an ethical perspective. This seems timely given the emerging literature which suggests that unfinished care (care left undone, missed care and prioritisation of nursing care) is widespread and has detrimental effects on both patient and nurse outcomes. Unfinished care is thus an emerging significant ethical concern in healthcare. It requires both empirical research, and engagement with ethical reflection, on resource allocation and rationing in healthcare, – applied to the nursing context – to identify the most significant conceptual and ethical considerations related to this phenomenon.

## **Resource allocation and rationing: conceptual considerations**

Resource allocation refers to the allocation of resources to a service, department or project. Rationing suggests that the resources to be allocated are scarce, and thus, there will not be enough to provide everything that is required. Resource allocation and rationing are related but nonetheless distinct concepts (although in some of the ethics and economics literature, these concepts tend to be used as if they are interchangeable). In both cases, specific criteria regarding how to distribute available resources are being applied, generally with the goal of optimising outcomes or meeting demands of procedural fairness. However, from an ethical perspective, resource allocation is a concept that is neutral with regard to the moral implications of the allocation decision; it could refer to any approach to the distribution of resources, whether resources are abundant or scarce and whether the distribution is ethically commendable or problematic. In contrast, rationing implies that necessary trade-offs due to resource scarcity are inbuilt into the decision-making process, with the implication that rationing will of necessity result in exclusion from resources, or less than optimal benefits for some potential resource recipients. In this vein, Caplan defines rationing as follows:

In the health care setting, rationing can be defined as a conscious, reasoned decision by a health care provider faced with irremediable scarcity to deny access to life-extending medical interventions or to interventions that can help restore or ameliorate serious dysfunction for some patients or for a group of patients. Rationing presumes that the health care interventions are both desired and known to be effective.<sup>11</sup>

Rationing implies that the restriction raises moral problems with regard to their impact on some individuals, while being potentially justifiable if achieving an ethically acceptable overall allocation (i.e. if the restrictive allocation decisions have been made in a way that can be morally justified, even though the overall outcome is not satisfactory in itself). This has implications for the use of rationing policies. As Caplan highlights

... in health care, rationing refers to a very well-defined subset of allocation policies - those which require a conscious decision or the adoption of an explicit policy wherein certain persons of known medical need are excluded from treatment that might save, prolong, or significantly enhance the quality of their lives.<sup>11</sup>

In considering the particular shape that such exclusions can take in nursing care, it is important to take account of three distinctions:

- The distinction between rationing as implemented by an institution (through their policies or operational practices) or rationing as implemented by individuals (through their actions in their context of practice);
- The distinction between rationing as based on explicit principles or policies or rationing as based on implicit practices, which may be shared in particular practice contexts or be performed by single individuals without making explicit its normative basis;
- The distinction between rationing of the nursing resource per se (i.e. rationing the number of nurses available to provide the required care) and the rationing of actual nursing care at the bedside.

Caplan's reflections on rationing assume that decisions on rationing principles are made at the institutional level in the shape of explicit policies. Rationing in medical care, for example, is often presented in the literature in terms of institutions demanding the use of explicit gatekeeping requirements from practitioners at the bedside to regulate access to scarce resources.<sup>12</sup> Often these rationing decisions are based on cost-effectiveness assessments with regard to health impacts, following largely utilitarian frameworks. However, there is now ample evidence available of additional covert (implicit) rationing of medical care at the bedside, that is not necessarily dependent on explicit institutional policies but nevertheless shows certain patterns that are indicative of the application of implicit rationing criteria by clinicians.<sup>13</sup> These criteria are partly in convergence with utilitarian effectiveness considerations, but also in light of other ethical considerations such as need principles and egalitarian principles.<sup>14</sup> At the same time, while staff shortages in medicine due to recruitment pressures are a matter of concern internationally, deliberate rationing of the medical staff resource does not appear to be a prominent topic of the discussion on rationing.

In contrast, the discussion of rationing in nursing care does not usually address the explicit exclusion of patients from receiving specific healthcare services. To the contrary, even in the face of staff reductions or increased demands by the institution, the individual nurses' role is still understood to include the provision of the full range of nursing care activities, but simply becomes less realisable with increasing demands on the individual nurse. Unlike doctors, nurses are not explicitly asked to apply specific cost-effectiveness considerations, and continue to be expected to meet patients' needs fully. While frequently having to prioritise patients' needs in the face of time scarcity.

Rationing decisions with regard to the allocation of nursing care, accordingly, appear to be primarily left to practitioners; without explicit normative frameworks, rationing principles or specific instructions provided by institutions to guide individual practitioners' decision-making. The very fact that substantive ethical decision-making regarding rationing is required from nursing staff becomes obscured by this lack of explicitness. It is telling that in the nursing literature on the issue, it is the *outcome* of 'missed care' or 'care left undone' that provides the impetus to work back to rationing as an underlying ethical problem, rather than *beginning* with an acknowledgement that constraints regarding the availability of resources (in this case nursing staff time) might at times imply the provision of less than optimal care for patients, as is generally the case in the discussion on rationing in medicine.

The focus on individual bedside rationing in the rationing discussion in nursing also contributes to obscuring the nature of the ethical problem of rationing in nursing, insofar as it does not appear to conceive a reduced allocation of nursing staff as itself being rationing of a crucial resource. An ethical justification of rationing the resource of nursing staff, in light of its likely consequences, needs to be provided, rather than effectively rationing the staff resource, but passing on the responsibility for specific rationing decisions in care to individual nurses. Both problems of rationing, the institutional and the individual, need to be recognised as such, and ethical reflection needs to be applied to both.

## **Individual and institutional rationing of nursing care: the importance of explicitness**

### *Individual rationing decisions*

With regard to the case of individual bedside rationing, the debate in nursing care contexts conceives of rationing frequently as an implicit response to overwhelming demands at the bedside. The nurses' response is informed by an assessment of patient needs and corresponding, often intuitive and implicit, prioritisation of care giving across a group of patients, for whom the nurse has responsibility during a particular nursing shift.

In these situations, individual nurses may frequently make decisions on how to allocate their time implicitly, that is, without recourse to an explicit decision-making framework where care priorities are agreed, without a set of principles which underpin the decision-making process, and sometimes also without the involvement of other nursing team members. This makes the process not only burdensome on the individual nurse, but it also makes such decision-making potentially dangerous and discriminatory, as it may be driven by a single perspective on care needs and priorities, and be significantly influenced by biases of the individual practitioner.

The absence of explicit rationing principles may also be considered problematic because it puts the burden of making intrinsically morally problematic, and thereby particularly burdensome, rationing decisions on the individual nurse, without properly recognising those burdens. The burden of the personal confrontation with rationing for healthcare professionals needs to be taken seriously; it is probably not coincidental that confrontation with resource constraints and rationing-related practices is mentioned in the literature as linked to the experience of moral distress in healthcare.<sup>9,15</sup>

The lack of explicit engagement with rationing decisions may also mean that nurses are rationing care at the bedside without recognising that this is in fact what they are doing. They may not distinguish between rationing decisions, where the explicit choice is made to give some patients significantly less than optimal care, and stressful, but less ethically troubling situations where allocation decisions are made without the need to limit appropriate care for individual patients. Explicitly identifying the specific ethical characteristics of rationing versus non-rationing decisions, would be an important step to disaggregating different kinds of pressures on professionals; both for themselves and in relation to the institution that requires them to make such decisions. It is inappropriate to consider all allocation decisions to be equally required as part of nurses' professional competence. When rationing decisions are required, but not acknowledged as particularly ethically burdensome, and staff is not supported in reflecting on these requirements and developing and honing their skills for coping with them, we want to argue that the institution is putting an undue burden on staff and failing in their duty of care.

### *Institutional rationing*

Particular responsibilities accrue to the institutions with regard to addressing the management of rationing of nursing care. First, institutions may make decisions on rationing nursing care when reducing staff levels. A reduced nurse staffing resource suggests reduced nursing time available for the delivery of nursing care, and unless such reductions are based on evidence that the deployment of the nursing resource can be optimised without affecting appropriate patient care, such decisions are likely to involve rationing. The nursing resource has seen significant reductions across Europe in recent years, due to the recession and subsequent imposition of austerity measures across the public sector, with direct impact on front line staffing in the health service. For example, the Irish health system has experienced the loss of 5000 nursing

and midwifery posts from the sector between the years 2009 and 2014,<sup>16</sup> while in Germany 52,200 full-time equivalent nursing positions have been lost between 1995 and 2006 due to budget cuts.<sup>17</sup>

Changes to models of care, work load, work practices or even architectural design (such as the move to single rooms in many new acute hospitals) may also lead to unintended and/or unrecognised effects on the nursing resource allocated to the bedside. These changes may lead to an intensification of nursing work which in effect requires some form of rationing of nursing time and thus nursing care provision,<sup>18</sup> forcing a less visible, covert and unarticulated form of rationing that may be difficult to identify and justify.

In these situations, nurses must make decisions about how best to manage care within a perceived resource poor environment.<sup>9</sup> The resource poor context includes limited time to complete the work, reduced material resources to support care provision, not having enough human resource, or not enough qualified human resource, to manage all the care that is required.

Resource reductions of either kind (whether through straightforward reduction of nursing staff or indirectly through changes in work practices that lead to increased demands on nurses) mean that care must be rationed in one way or another at the point of service provision<sup>19</sup> unless it can be shown that there was unnecessary waste and inbuilt, unused capacity in the system prior to resource reduction – a topic not infrequently addressed in discussions around rationing in medicine.<sup>20,21</sup> This, of course, is often the crux of the matter – a disagreement between hospital/unit managers and the professional view of nurses, working at the sharp end of care provision, regarding the resource required in order to provide adequate care for the particular patient or group of patients. In the absence of evidence-based means of identifying the required nursing resource, to provide care safely to specified particular groups of patients, it is relatively easy for hospital managers to deal with immediate budget pressures by reducing the nursing resource available; while at the same time assuming and expecting that full nursing care will be provided to the patients as required. In other words that the reduced nursing staff group will simply ‘absorb’ the additional nursing work required to provide full nursing care to the specified group of patients.

However, this assumption is flawed, and it is the responsibility of institutions to address the impact of their resource decisions explicitly and based on evidence. While not all resource reductions or work intensification may lead to rationing, it is incumbent on institutions to assess carefully whether they are likely to do so.

## Confronting rationing in nursing care

In one of the early papers in the nursing literature examining the issue of rationing in the clinical environment, rationing of nursing care is defined as ‘... the withholding or failure to carry out necessary nursing tasks due to inadequate time, staffing level and skill mix’.<sup>22</sup> Papastavrou in a 2016 COST Action project on rationing in nursing further defined this as follows:

Rationing of nursing care occurs when resources are not sufficient to provide necessary care to all patients. The reasons for this phenomenon include staff reductions, increased demands for care... Rationing of nursing care may also occur due to particular approaches of nurses’ clinical judgement and knowledge in allocating the resources and the wider value basis of society on care. As a result, fundamental patient needs may not be fulfilled and human rights linked to discrimination may be affected.<sup>23</sup>

Rationing results in nurses not being able to carry out their core work, that is the provision of effective and safe care appropriate to patient need, based on a skilled clinical (as distinct from a financial) assessment.<sup>24,25</sup>

As Teutsch and Rechel<sup>26</sup> contend,

At some level, all resources are scarce and that is certainly true for health care. In the face of scarcity, resources are either explicitly or implicitly rationed. Rationing of health care limits access to beneficial health care

services. The central question, then is not whether health care is rationed, but how, by whom and to what degree. The ethical dilemma is how to balance the precepts of autonomy, beneficence and distributive justice.

A key issue for health professionals, that makes rationing so difficult to deal with, is the position they find themselves in. Health professionals are placed in the invidious position of carrying all the responsibility for clinical decision-making, based upon financial mandates, with no authority to change or challenge either the financial assumptions underpinning the allocated budget, or the overall budget allocation within which they are required to work. In this context approaches emerging in the organisation ethics literature, which highlight the importance of stakeholder involvement, may be worth exploring in an attempt to resolve some of these issues in the future.

While nurse researchers are now highlighting the impact that rationing care has on patient outcomes including patients' experience of care, little is being done to seek solutions or new models of care that could alleviate the problem.<sup>9</sup>

Health services are reluctant to trial new models of care because they cannot show efficiencies in an annualised budget scenario, even though there is growing awareness of the fact that in order to survive, health services will be forced to change current practices.<sup>27</sup> Moreover, the recent global financial crisis has seen austerity measures focusing directly on issues of health service cost and sustainability.<sup>28,29</sup>

Confounding the problem is the traditional thinking that perpetuates nurses' ways of coping and behaving in the contemporary healthcare environment: nurses completing care beyond allocated working hours, even when it is detrimental to their health and well-being.<sup>30,31</sup> Nursing resource requirements for the changing patient population demographic are largely ignored. In many OECD countries, until very recently, little attempt had been made to adjust the historical nursing staff compliment in hospital wards and units in recognition of increased demands for care; due to population growth, changing demographic to an older people population with consequent increases in chronic illness, increased acuity and dependency of patients, or the increased patient turnover that has resulted from decreased length of hospital stay.<sup>32,33</sup> Yet these changing patterns of demand impact on the numbers of nursing staff required to organise and provide adequate care.<sup>34</sup>

The first national survey of nurses working in medical and surgical wards across the Irish acute hospital sector was carried out in 2009/2010.<sup>32</sup> Findings from this survey provide insight into both the level and type of nursing work reported as 'left undone' due to time constraints. Findings from studies in the United Kingdom and mainland Europe provide similar information on the types of nursing care activities that nurses report as regularly left undone due to time pressures/shortages of nursing staff.<sup>5,35</sup> What these three studies suggest is that nurses are either implicitly or explicitly rationing care to patients because, from the nurses' perspective, there is not enough time to provide the amount of nursing care required. This has also been reflected in other studies, where nurses identified lack of time to carry out their work.<sup>25,36</sup> These findings suggest that we need to engage in discussion regarding allocation of the nursing resource (i.e. the number of nursing staff required at institutional and unit level, based on the dominant models of care delivery is use) and rationing in nursing. We need to explore how best to manage this resource allocation and rationing within the context of current demands for care and existing cost constraints. Of potential relevance to this discussion, for example, is cross-national research in which large differences in registered nurse-to-patient ratios have been documented: on average, in Finland 8.3 patients had been assigned per nurse on a shift, in Germany 13 patients, Ireland 6.9 and Greece 10.2.<sup>37</sup>

This discussion must be informed by the growing evidence that suggests the need to be cognisant of the impact of factors such as the work environment, nurse characteristics and leadership on the quality of nursing care provided to patients. Nurses in countries with distinctly different healthcare systems report similar shortcomings in their work environments associated with deficits in the quality of hospital care.<sup>37,38</sup> Research suggests that some of the more detrimental effects of nurse staffing shortages can be ameliorated,

to some extent, by a positive work environment, inclusive of supportive nursing leadership.<sup>39</sup> Recent work also indicates that staffing wards with nurses who have degree-level education, or above, can have an impact on 30-day mortality rates of surgical patients.<sup>40</sup> Team working and nursing leadership impact on the covert rationing of nursing care, and increasing the effectiveness of team working reduces implicit rationing of nursing care, as does increasing nursing leadership.<sup>39,41</sup>

These studies appear to provide support for Caplan's demand that instead of focusing on devising fair rules for rationing as our starting point, we should begin by identifying when we are making implicit or explicit decisions to ration and make sure that there is no alternative – no better way of distributing our limited resources – that would avoid or minimise rationing.

The potential impact of enhanced team working, nurse education levels and nursing leadership on the effective use of the nursing resource, seems important issues to explore in enhancing patient care and avoiding what may be unrecognised, unmonitored, implicit rationing of nursing care. These factors should feed into a framework to determine the appropriate nurse staffing allocation at institutional and at unit level, articulating direct links between this nursing resource and the amount of nursing time required to provide safe, humane, nursing care at the bedside.

When the nurse staffing resource, for whatever reason, is not sufficient to meet all the patient care demands, it is the responsibility of institutions to identify and address the resulting challenges (both ethical and clinical); instead of passing on the full responsibility of making rationing decisions to individual nurses at the bedside. Decisions affecting staffing levels need to be made on the basis of reliable evidence with regard to likely impact. If resource changes make rationing of nursing care likely, the particular moral burden that this poses on staff needs to be acknowledged and staff need to be supported in making those decisions. The acknowledgement of this moral burden should be addressed at a wider organisational level, by focusing on a collaborative, positive ethical climate that provides ethical supports to individuals and units, either informally or formalised (such as clinical ethics consultancy or clinical ethics committees), and facilitates open organisational communication channels within the organisation with regard to ethical concerns.<sup>42–44</sup> Guidance on rationing needs to be provided, including explicit rationing principles endorsed by the institution. In light of the increasing international prominence of the issue of rationing, it is also incumbent on professional bodies nationally and internationally to address the issue in a way that supports professionals effectively.

Consideration of the different positions presented above, including the different factors that may impact on the appropriate use (or rationing) of the nursing resource and how it is most effectively led, managed and allocated, is important from financial, ethical and accountably perspectives. This links us back to Caplan's distinction between resource allocation and rationing. We appear to be in a position internationally that if a better way of identifying and allocating the required nursing resource cannot be found, either overtly (explicitly) or covertly (implicitly) we end up in a situation where the nursing resource will continue to be rationed. Evidence to date suggests that this rationing of nursing care is largely covert. This raises concerns about lack of transparency, lack of peer review, and thus the additional risk of the existence of potential discriminatory influences in the covert decision making process.

## Conclusion

Care rationing seems to be both an increasingly recognised and relatively common practice in nursing care and work. Each decision made may include rationing between patients' differing needs, between time allocated to direct versus indirect patient care, and to physical versus psychological and comfort care. Rationing is related to both economic and ethical dimensions of healthcare and service provision. Understanding the mechanisms of care rationing is important.

However, despite the outlined challenges arising from the absence of established explicit rationing principles in nursing practice, this absence also opens up the possibility of approaching resource allocation



with a view to reconsidering whether there may still be as yet unexplored ways of avoiding the exclusion of patients from needed care, for example, by means of alternative ways of providing care. As Caplan<sup>11</sup> argues

The stakes are high where rationing in health care is concerned. Thus the overriding moral imperative with respect to rationing in the health care system is not to determine what criteria or rules are fair. It is to make sure that, in the face of apparent scarcity, there is no distributional policy which is a viable alternative to rationing.

Caplan's core point is that before assuming that rationing is necessary, and that some recipients will need to be excluded from potential benefits, it is imperative to consider first whether there really is no alternative to such exclusion from benefits. It cannot be left to practitioners alone to ensure that this problem is taken seriously, and addressed adequately. Institutions must take proactive steps to foster evidence-based and ethically aware practice. Avoiding unnecessary exclusion from care would allow practitioners to remain true to their roles as advocates of patients, who aim to meet each patient's needs.

### Acknowledgements

**\*RANCARE Consortium COST Action – CA 15208: Chair:** Papastavrou Evridiki (Cyprus, Cyprus University of Technology); **Vice Chair:** Lemonidou Chryssoula (Greece, University of Athens); **WG Leaders:** Sermeus Walter (Belgium, Leuven Institute for Healthcare) Schubert Maria (Switzerland, University of Basel); Suhonen Riitta (Finland, University of Turku); Riklikiene Olga (Lithuania, Lithuanian University of Health Sciences); Acaroglu Rengin (Istanbul University, Turkey); Andreou Panayiota (Cyprus, Cyprus University of Technology); Antonic Darijana (Bosnia & Herzegovina, Public Health Institute, Banja Luka, Republic of Srpska); Ausserhofer Dietmar (Italy, Landesfachhochschule für Gesundheitsberufe Claudiana); Baret Christophe (France, CNRS, LEST); Bosch-Leertouwer Helen (Netherlands, Windesheim University of Applied Sciences); Bragadottir Helga (Iceland, University of Iceland); Bruyneel Luk (Belgium, Katholieke Universiteit Leuven); Christiansen Karin (Denmark, VIA University College); Čiutienė Rūta (Lithuania, Kaunas University of Technology); Cordeiro Raul (Portugal, Instituto Politecnico de Portalegre) Deklava Liana (Latvia, Riga Stradins University); Dhaini Suzanne (Lebanon, American University of Beirut); Drach-Zahavy Anat (Israel, University of Haifa); Eftathiou Georgios (Cyprus, Cyprus University of Technology); Ezra Sigal (Israel, Sheba Hospital, Sheba Medical Center); Pilan Fuster (Spain, Universitat Internacional de Catalunya); Gotlib Joanna (Poland, Medical University of Warsaw); Gurkova Elena (Slovakia, University of Presov); Habermann Monika (Germany, Hochschule Bremen Neustadtswall); Halovsen Kristin (Norway, Oslo Metropolitan University) Hamilton Patti (USA, Texas Woman's University); Harvey Clare (Australia, CQ University Australia); Hinnio Saima (Estonia, Tartu Health Care College); Hjaltadottir Ingibjorg (Iceland, University of Iceland); Jarosova Darja (Czech Republic, University of Ostrava); Jones Terry (USA, The University of Texas at Austin); Kane Raphaela (UK, Liverpool John Moore University); Kirwan Marcia (Ireland, Dublin City University, School of Nursing and Human Sciences); Leino-Kilpi Helena (Finland, University of Turku); Leppée Marcel (Croatia, Institute for Healthy Ageing, Slovenska); Amorim Lopes Mario (Portugal, INESC-TEC); University of Medicine and Pharmacy Carol Davila); Rengel Diaz Cristobal (Spain, Hospital Universitario Virgen de la Victoria de Malaga, Campus Universitario de Teatinos); Rochefort Christian (Canada, University of Sherbrook); Scott P Anne (Ireland, National University of Ireland, Galway); Simon Michael (Switzerland, University of Basel); Stemmer Renate (Germany, Catholic University of Applied Sciences Mainz); Tichelaar Erna (Netherlands, Windesheim University of Applied Sciences); Toffoli Luisa (Australia, University of South Australia); Tønnessen Siri (Norway, University College of Southeast Norway); Uchmanowicz Izabella (Poland, Wrocław Medical University); Vuckovic Jasminka (Bosnia & Herzegovina, Ministry of Health and Social Welfare Republic of Srpska); Willis Eileen (Australia, Flinders University); Xiao Lily

(Australia, Flinders University); Zeleníková Renáta (Czech Republic, University of Ostrava); Zorcec Tatjana (FYR Macedonia, University Children's Hospital Faculty of Medicine University of Skopje).


### Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This article is based upon work from COST Action RANCARE CA15208, supported by COST (European Cooperation in Science and Technology).

### ORCID iD

Clare Harvey  <http://orcid.org/0000-0001-9016-8840>

### References

1. Aiken LH, Clarke SP and Sloane DM. Hospital restructuring: does it adversely affect care and outcomes? *J Health Hum Serv* 2001; 23(4): 416–442.
2. Kalisch BJ. Missed nursing care: a qualitative study. *J Nurs Care Qual* 2006; 21(4): 306–315.
3. Kalisch BJ, Landstrom GL and Hinshaw AS. Missed nursing care: a concept analysis. *J Adv Nurs* 2009; 67(7): 1509–1517.
4. Willis E, Carryer J, Harvey C, et al. Austerity, new public management and missed nursing care in Australia and New Zealand. *J Adv Nurs* 2017; 73(12): 3102–3110.
5. Ausserhofer D, Zander B, Busse R, et al. Prevalence, patterns and predictors of nursing care left undone in European hospitals: results from the multi-country cross-sectional RN4CAST study. *BMJ Qual Saf* 2014; 2(23): 126–135, <http://qualitysafety.bmj.com/content/23/2/126> (accessed 6 June 2017).
6. Schubert M, Glass TR, Clarke SP, et al. Validation of the Basel extent of rationing of nursing care instrument. *Nurs Res* 2007; 56(6): 416–424.
7. Halvorsen K, Slettebø Å, Nortvedt P, et al. Priority dilemmas in dialysis: the impact of old age. *J Med Ethics* 2008; 34(8): 585–589.
8. Hofmann B. Priority setting in health care: trends and models from Scandinavian experiences. *Med Health Care Philos* 2013; 16: 349–356.
9. Jones TL, Hamilton P and Murry N. Unfinished nursing care, missed care, and implicitly rationed care: State of the science review. *Int J Nurs Stud* 2015; 52(6): 1121–1137.
10. Tønnessen S, Nortvedt P and Førde R. Rationing home-based nursing care: professional and ethical challenges. *Nurs Ethics* 2011; 18(3): 386–396.
11. Caplan AL. *If I were a rich man could I buy a pancreas? And other essays in the ethics of health care*. Bloomington, IN: Indiana University Press, 1992.
12. Pellegrino ED. Rationing health care: the ethics of medical gatekeeping. *J Contemp Health Law Policy* 1986; 2: 23–45.
13. Danis M, Hurst SA, Fleck LM, et al. (eds) *Fair resource allocation and rationing at the bedside*. Oxford: Oxford University Press, 2015.
14. Cookson R and Dolan P. Principles of justice in health care rationing. *J Med Ethics* 2000; 26(5): 323–329.
15. Corley MC. Nurse moral distress: a proposed theory and research agenda. *Nurs Ethics* 2002; 9(6): 636–650.
16. World of Irish Nursing. Call for action on falling numbers. *World of Irish Nursing* 2016; 24(7): 13–14, <https://www.inmo.ie/tempDocs/Full%20Issue%20WIN%20Sept%202016.pdf> (accessed 17 September 2016).

17. Simon M. Beschäftigte und Beschäftigungsstrukturen in Pflegeberufen. Eine Analyse der Jahre 1999 bis 2009. Policy paper für den Deutschen Pflegerate. V, [http://www.hshannover.de/fileadmin/media/doc/pp/Simon\\_2012\\_Studie\\_zur\\_Beschaeftigung\\_in\\_Pflegeberufen.pdf](http://www.hshannover.de/fileadmin/media/doc/pp/Simon_2012_Studie_zur_Beschaeftigung_in_Pflegeberufen.pdf) (2012, accessed 29 May 2017).
18. Willis E, Toffoli L, Henderson J, et al. Rounding, work intensification and new public management. *Nurs Inq* 2015(23): 158–168.
19. Magelssen M, Nortvedt P and Solbakk JH. Rationing at the bedside: immoral or unavoidable? *Clin Ethics* 2016; 11(4): 112–121.
20. Tilburt JC and Cassel CK. Why the ethics of parsimonious medicine is not the ethics of rationing. *JAMA* 2013; 309(8): 773–774.
21. Brody H. From an ethics of rationing to an ethics of waste avoidance. *N Engl J Med* 2012; 366(21): 1949–1950.
22. Schubert M, Glass T, Clarke SP, et al. Rationing of nursing care and its relationship to patient outcomes: the Swiss extension of the International hospital study. *Int J Qual Health Care* 2008; 20(4): 228.
23. Papastavrou EC and the RANCARE Consortium. *Rationing – missed nursing care: an international and multi-dimensional problem (COST Action CA15208)*. RANCARE Technical Annex, Overview Summary, p. 3. Brussels: COST, 2016.
24. Bergh AL, Friberg F, Persson E, et al. Perpetuating ‘New Public Management’ at the expense of nurses’ patient education: a discourse analysis. *Nurs Inq* 2015; 22(3): 190–201.
25. Harvey C, Willis E, Henderson J, et al. Priced to care: factors underpinning missed care. *J Indus Rel* 2016; 58: 510–526.
26. Teutlich S and Rechel B. Ethics of resource allocation and rationing: medical care in a time of fiscal restraint US and Europe. *Pub Health Rev* 2012; 34(1): 2.
27. Barnett DJ, Taylor HA, Hodge JG, et al. Resource allocation on the frontlines of public health preparedness and response: report of a summit on legal and ethical issues. *Pub Health Rep* 2009; 124(2): 295–303.
28. Alonso JM, Clifton J and Díaz-Fuentes D. The impact of new public management on efficiency: an analysis of Madrid’s hospitals. *Health Policy* 2015; 119(3): 333–340.
29. Palese A, Ambrosi E, Prosper L, et al. Missed nursing care and predicting factors in the Italian medical care setting. *Intern Emerg Med* 2015; 10(6): 693–702.
30. Threat CJ. ‘The Hands That Might Save Them’: gender, race and the politics of nursing in the United States during the Second World War. *Gender History* 2012; 24(2): 456–474.
31. Harvey C, Thompson S, Pearson M, et al. Missed nursing care as an ‘art form’: the contradictions of nurses as carers. *Nurs Inq*. Epub ahead of print 18 January 2017. DOI: 10.1111/nin.12180.
32. Scott PA, Kirwan M, Matthews A, et al. *Report of the Irish RN4CAST Study 2009-2011: a nursing workforce under strain*. Dublin: Dublin City University, [http://doras.dcu.ie/19344/1/RN4CAST\\_FINAL\\_report\\_18\\_April\\_2013\\_DORAS.pdf](http://doras.dcu.ie/19344/1/RN4CAST_FINAL_report_18_April_2013_DORAS.pdf) (2013, accessed 5 June 2017)
33. Department of Health (DoH). The interim report and recommendations by the taskforce on staffing and skills mix for nursing on a framework for safe nurse staffing and skills mix in general and specialist medical and surgical care settings in adult hospitals in Ireland, <http://health.gov.ie/wp-content/uploads/2016/02/Interim-Report-and-Recommendations-of-the-Nurse-Staffing-Taskforce-01-02-2016.pdf> (2016, accessed 28 May 2017).
34. Halvorsen K, Førde R and Nortvedt P. Professional challenges of bedside rationing in intensive care. *Nurs Ethics* 2008; 15(6): 715–728.
35. Ball JE, Murrells T, Rafferty AM, et al. ‘Care left undone’ during nursing shifts: associations with workload and perceived quality of care. *BMJ Qual Saf*, <http://qualitysafety.bmj.com/content/qhc/23/2/116.full.pdf> (2013, accessed 5 June 2017).
36. Burke RJ, Ng ESW and Wolpin J. Economic austerity and healthcare restructuring: correlates and consequences of nursing job insecurity. *Int J Human Res Manag* 2015; 26(5): 640–656.
37. Aiken LH, Sermeus W, Van den Heede K, et al. Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *BMJ* 2012; 344: e1717.

38. Papastavrou E, Acaroglu R, Sendir M, et al. The relationship between individualised care and practice environment: an international study. *Int J Nurs Stud* 2015; 52(1): 121–133.
39. Aiken LH, Cimiotti J, Sloane DM, et al. The effects of nurse staffing and nurse education on patient deaths in hospitals with different nurse work environments. *Med Care* 2011; 49: 1047–1053.
40. Aiken LH, Sloan DM, Bruyneel L, et al. Association of Nurse Staffing and Education with hospital mortality in 9 European countries. *Lancet* 2014; 383(9931): 1824–1830.
41. Papastravrou E, Andreou P, Schubert M, et al. Rationing of nursing care within professional, environmental constraints: a correlational study. *Clin Nurs Res* 2014; 23(3): 314–335.
42. Campbell L. Module 8: ethical governance in clinical care and research. In: McCarthy J, Donnelly M, Dooley D, et al. (eds) *End-of-life care: ethics and law*, 2011, pp. 389–458, <http://hospicefoundation.ie/wp-content/uploads/2013/10/Module-8-Ethical-Governance.pdf>
43. Suhonen R, Stolt M, Virtanen H, et al. Organisational ethics: a literature review. *Nurs Ethics* 2011; 18(3): 285–303.
44. Koskenvuori J, Numminen O and Suhonen R. Ethical climate in nursing environment: a scoping review. *Nurs Ethics*. Epub ahead of print 1 January 2017. DOI: 10.1177/0969733017712081.