Policy Brief

Improving staff and health outcomes by addressing care left undone

Nursing care left undone is a global issue affecting not only patients, irrespective of gender or age, but also the staff caring for them. Missed care risks patient safety, impacting on health outcomes and increasing inpatient mortality. The issue remains under the radar of the media and outside the policy agenda. It is time to promote a public debate, aid and encourage research, and develop European-wide initiatives to tackle care left undone. Policymakers and health stakeholders need to act now – and act fast – to safeguard both patient outcomes and staff.

What is the issue?

Care left undone refers to nursing care that has been delayed or 'missed', partially completed, or not completed at all. These missed care episodes are a global issue and – like any medical error – pose a threat to patient safety in hospitals, nursing homes and elsewhere in the community: resulting inevitably in increased healthcare costs. However, unlike other issues affecting healthcare – and even though it is a serious public health issue – care left undone has, so far, been left out of the policy agenda and away from public debate.

'Care left undone refers to nursing care that has been delayed or 'missed', partially completed, or not completed at all'

As well as the immediate impact on patient safety, care left undone can also negatively affect patient outcomes. The evidence shows that failure to ambulate and turn patients may result in sudden onset delirium; pneumonia; increased length of stay and delayed discharge; increased pain and discomfort; and physical disability.[1] More seriously, research studies have established a link between these missed care episodes and increased inpatient mortality.

What are the nursing care activities most frequently left undone?

At the top of the list are activities relating to emotional and psychological support – such as having the time to talk with patients – and ambulation of patients. In a cross-sectional study, 41 per cent of nurses in Switzerland reported that, over the preceding seven days of their shift, they had not been able to give any emotional support to patients.[2] Lack of mobility and ambulation of patients, in particular, can lead to severe consequences and extended length of stay. In the US, 76 per cent of nurses that participated in a related study reported missing patient ambulation.[3] Numbers in Italy are even more alarming: 91 per cent of nurses reported failure to ambulate patients as often as clinically recommended.[4]

Other nursing tasks that are not as frequently missed have the potential to be more detrimental to patient outcomes than those most often omitted, especially those relating to clinical care. For instance, wound dressing management, glucose and vital signs monitoring, patient assessment and surveillance, or administration of medication on time, as well as assessing the effectiveness of medications, can have a serious impact on patients when clinical procedures are not carried out correctly.[5]

Keywords: care left undone, improve patient safety, quality of nursing care

What causes care to be left undone?

One of the most documented causes of care left undone is staffing levels. In the US, hours worked per patient day were found to be a significant (inverse) predictor of care left undone, and an increase in one hour per patient day was found to reduce instances of it.[6] The same evidence was also found in paediatric hospitals,[7] which implies that this issue affects all patients irrespective of age. Evidence points to missed care episodes occurring more frequently when nurses are caring for more patients. In one study, it increased by 26 per cent when nurses were caring for more than 11.5 patients, compared with nurses looking after six or fewer patients.[8]

Overtime work has also been linked to care activities left undone, along with poor and failing patient safety levels.[9] This evidence was reflected in the EU-funded Nurse Forecasting in Europe (RN4CAST) study, which collected evidence from 12 European countries: Belgium, England, Germany, Finland, Greece, Ireland, the Netherlands, Norway, Poland, Spain, Sweden and Switzerland. Although there is still an ongoing debate over the causal link between staffing levels and outcomes, there is mounting evidence that care left undone negatively affects patient outcomes and can compromise their safety.

'In the US, hours per patient day were found to be a significant predictor of care left undone'

Staff composition, or skill mix, also has an impact. Although empirical evidence is not as ample, the few existing studies are concordant: adding support workers to the workforce does not necessarily lower care left undone and may even increase it.[10]

However, care left undone cannot be attributed to one single factor; it is dependent on multiple causes. The impact of work pressure deriving from patient acuity was found to be a relevant driver, which escalates further as populations age and the demand for healthcare services increases.

In addition, staffing issues related to high patient-to-nurse ratios; inadequate skill mixes in nursing teams; communication tensions between health professionals; changing workloads across shifts; and poor support from colleagues have all been highlighted as factors impacting on care left undone.

Overall, evidence suggests missed care episodes arise out of structural issues, such as organisational, societal and political ones, as well as out-of-agency issues: poor communication and prioritisation, inadequate decision-making skills and lack of motivation all have an impact. Therefore, a transdisciplinary approach is needed.[11]

'Studies show that there is a connection between care left undone and patient falls, nosocomial infections, pressure ulcers, critical incidents and medication errors'

What is the impact of care left undone?

There are two groups who are vulnerable to the dangers of care left undone: both patients and nurses. In the case of patients, studies show that there is a connection between care left undone and patient falls, nosocomial infections, pressure ulcers, critical incidents and medication errors.[12]

As mentioned earlier, there is evidence of a link between care left undone and inpatient mortality. One study showed that an increase in a nurse's workload by one patient was associated with a 7 per cent increase in the odds of a patient dying within 30 days of admission, while a 10 per cent increase in missed nursing care would lead to a 16 per cent increase in mortality.[13] A similar study conducted in Switzerland corroborated these findings: patients treated in hospitals with higher levels of care left undone were 51 per cent more likely to die compared to those treated in hospitals with lower levels of missed care episodes. The odds of dying also correlated strongly with patient-to-nurse ratios, with hospitals that have a high patient-to-nurse ratio registering a 37 per cent higher risk of death,[14] controlling for the case

mix. In short, care left undone diminishes patient safety significantly and has a strong and negative impact on patient outcomes[15] and patient satisfaction.[16]

However, patients are not the only ones affected by care left undone. Health professionals – nurses, in particular – are affected, too. Besides being a predictor of job (dis)satisfaction,[17] missed care episodes also contribute to a higher desire to leave posts and, therefore, to high levels of job turnover; posing significant challenges to healthcare managers and health institutions. This issue is not gender neutral: feminised workforces registered lower turnover rates, meaning that men are the first to leave.[18]

What tools can be used to monitor care left undone?

Several tools have been developed in the last decade to measure and study care left undone, although most of these collect data retrospectively and are based on perceptions of health professionals rather than clinical data. Tools such as the Basel Extent of Rationing of Nursing Care,[19] the Missed Nursing Care Survey[20] or the RN4CAST study[21] collect information typically reported by nurses, patients or both that can be used to speculate on the level of care left undone. Real-time tools and indicators, based on smart devices, the internet of things (IoT) and beds with monitoring capabilities would facilitate and improve the monitoring of indicators of care left undone, and allow for immediate action for the most urgent cases.

Why is it important to put care left undone at the top of the policy agenda?

Ensuring that all the necessary healthcare is provided to those in need improves health outcomes, but also increases the efficiency of health spending and the wellbeing of the population. It contributes to reduced absenteeism and longer working lives, resulting in higher lifetime incomes.

Almost all European countries are facing ageing populations, whose future health needs will soon exert even more pressure on healthcare systems. Care left undone is, therefore, particularly worrying in the European context. If inpatients do not receive the care they need, the probability of a readmission or an extended hospital stay increases; further aggravating the pressure on healthcare providers.

Having its roots in structural and agency factors, care left undone can be mitigated by those working in the system and by stakeholders, provided everyone is aware of the problem, the right policies are put in place and the issue is discussed openly.

'If inpatients do not receive the care they need, the probability of a readmission or an extended hospital stay increases'

What has the European Union done so far?

Research studies indicate that care left undone is prevalent across European countries and some initiatives have been pursued to improve our understanding of these missed care episodes. The H2020 project RN4CAST has provided important data for studying care left undone and has highlighted the link between the level of the education of nurses and patient mortality in hospitals. At the same time, RANCARE, a research project funded by the COST Action, has also been making significant advances, including in making healthcare managers, policy makers, other health stakeholders and the public aware of the importance of this issue.

Notwithstanding these efforts, a policy window now needs to be created to address these challenges to safeguard both patients and nurses.

References

1 Recio-Saucedo A, Dall'Ora C, Maruotti A, et al 2018. 'What impact does nursing care left undone have on patient outcomes?' Review of the literature. *J Clin Nurs*, 27: 2248– 59.

2 Schubert M, Ausserhofer D, Desmedt M, Schwendimann R, Lesaffre E, Li B and De Geest S 2013. 'Levels and correlates of implicit rationing of nursing care in Swiss acute care hospitals – a cross Sectional Study'. *International Journal of Nursing Studies*, 50(2): 230–39. doi:10.1016/j.ijnurstu.2012.09.016.

3 Kalisch BJ, Tschannen D, Lee H and Friese CR 2011. 'Hospital variation in missed nursing care'. *American Journal of Medical Quality*, 26 (4): 291–9. doi:10.1177/1062860610395929.

4 Palese A, Ambrosi E, Prosperi L, Guarnier A, Barelli P, Zambiasi P, Allegrini E, et al 2015. 'Missed nursing care and predicting factors in the Italian medical care setting'. *Internal and Emergency Medicine*, 10(6). Springer Milan: 693–702. doi:10.1007/s11739-015-1232-6.

5 Griffiths P, Recio-Saucedo A, Dall'Ora C, Briggs J, Maruotti A, Meredith P, Smith GB and Ball J 2018. 'The association between nurse staffing and omissions in nursing care: a systematic review'. *Journal of Advanced Nursing*, 74 (7): 1474–87. doi:10.1111/jan.13564.

6 Kalisch BJ, Tschannen D and Hee Lee K 2011. 'Do staffing levels predict missed nursing care?' *International Journal for Quality in Health Care*, 23 (3): 302–8.

7 Lake ET, de Cordova PB, Barton S, Singh S, D Agosto P, Ely B, Roberts KE and Aiken LH 2017. 'Missed nursing care in pediatrics'. *Hospital Pediatrics*, 7(7): 378–84. doi:10.1542/hpeds.2016-0141.

8 Griffiths P, Ball J, Drennan J, James L, Jones J, Recio A and Simon M 2014. 'The association between patient safety outcomes and nurse/healthcare assistant skill mix and staffing levels and factors that may influence staffing requirements'. University of Southampton.

9 Griffiths P, Dall'Ora C, Simon M, Ball J, Lindqvist R, Rafferty AM, Schoonhoven L, Tishelman C, Aiken LH and For the RN4CAST Consortium 2014. 'Nurses' shift length and overtime working in 12 European countries: the association with perceived quality of care and patient safety'. *Medical Care*, 52(11): 975–81. doi:10.1097/MLR.0000000000000233.

10 Ball JE, Griffiths P, Rafferty AM, Lindqvist R, Murrells T and Tishelman C 2016. 'A cross-sectional study of 'care left undone' on nursing shifts in hospitals'. *Journal of Advanced Nursing*, 72(9): 2086–97. doi:10.1111/jan.12976.

11 Jones T, Willis E, Amorim-Lopes M and Drach-Zahavy A 2019. 'Advancing the science of unfinished nursing care: exploring the benefits of cross-disciplinary knowledge exchange, knowledge integration and transdisciplinarity'. *Journal of Advanced Nursing*, 75(4): 905–17. doi:10.1111/jan.13948.

12 Schubert M, Glass TR, Clarke SP, Aiken LH, Schaffert-Witvliet B, Sloane DM and De Geest S 2008. 'Rationing of nursing care and its relationship to patient outcomes: the Swiss extension of the International Hospital Outcomes Study'. *International Journal for Quality in Health Care*, 20(4): 227–37. doi:10.1093/intqhc/mzn017.

13 Ball E, Bruyneel L, Aiken LH, Sermeus W, Sloane DM, Rafferty AM, Lindqvist R, Tishelman C and Griffiths P 2018. 'Post-operative mortality, missed care and nurse staffing in nine countries: a cross-sectional study'. *International Journal of Nursing Studies*, 78: 10–15. doi:10.1016/j.ijnurstu.2017.08.004.

14 Schubert M, Clarke SP, Aiken LH, and De Geest S 2012. 'Associations between rationing of nursing care and inpatient mortality in Swiss hospitals'. *International Journal for Quality in Health Care*, 24 (3): 230–8. doi:10.1093/intqhc/mzs009.

15 Papastavrou E, Andreou P and Efstathiou G 2014. 'Rationing of nursing care and nurse–patient outcomes: a systematic review of quantitative studies'. *International Journal of Health Planning and Management*, 29(1): 3–25. doi:10.1002/hpm.2160.

16 Lake ET, Germack HD and Kreider Viscardi HD 2016. 'Missed nursing care is linked to patient satisfaction: a cross-sectional study of US hospitals'. *BMJ Quality & Safety*, 25 (7): 535–43. doi:10.1136/bmjqs-2015-003961.

17 Kalisch B, Tschannen D and Lee H 2011. 'Does missed nursing care predict job satisfaction?' *Journal of Healthcare Management*, 56(2): 117–31–discussion132–3.

18 Tschannen D, Kalisch BJ and Hee Lee K 2010. 'Missed nursing care: the impact on intention to leave and turnover'. *Can J Nurs Res*, 42(4): 22–39.

19 Schubert M, Glass TR, Clarke SP, Schaffert-Witvliet B and De Geest S 2007. 'Validation of the Basel Extent of Rationing of Nursing Care Instrument'. *Nursing Research*, 56(6): 416–24. doi:10.1097/01.NNR.0000299853.52429.62.

20 Kalisch BJ and Williams RA 2009. 'Development and psychometric testing of a tool to measure missed nursing care'. *JONA: Journal of Nursing Administration*, 39(5): 211–19. doi:10.1097/NNA.0b013e3181a23cf5.

21 RN4CAST consortium, Sermeus W, Aiken LH, Van den Heede K, Rafferty AM, Griffiths P, Moreno-Casbas MT, et al 2011. 'Nurse Forecasting in Europe (RN4CAST): rationale, design and methodology'. *BMC Nursing*, 10(1): 1984. doi:10.1186/1472-6955-10-6.

Acknowledgements

This briefing was developed with the help of Paul De Raeve and Mário Amorim Lopes in the context of a Short-Term Scientific Mission of RANCARE – Missed nursing care COST Action 15208, to explore this under-researched topic, and to provide ethical reflection and analysis of the topic. Missed nursing care COST Action aims to engage with policymakers and raise awareness on the topic, its determinants and impact on the welfare of the population. For more information, see www.cost.eu/actions/CA15208.

Recommendations

What should policy makers do?

1. **Act now to promote a public discussion of care left undone** to put it firmly on the policy agenda. Despite research showing the direct implications to patient safety, health outcomes and increased inpatient mortality, this issue has slipped under the radar of the media and policymakers.
2. **Invest in smart devices/IoT in hospitals** to monitor patients and alert health professionals to missed care episodes. This is critical and can help eliminate care left undone by assisting health professionals in monitoring recommended procedures. Self-reporting questionnaires are important but limited and retrospective. Indicators of care left undone should be explicitly collected.
3. **Commission and develop a European-wide framework for studying, monitoring and measuring incidences of care left undone** and proxy indicators - such as staffing levels – across all European countries and health systems: while respecting the principle of subsidiarity and avoiding prescriptive policies and top-down impositions that have been found to be ineffective in the past.
4. **Promote safe staffing levels.** Although not the only predictor of care left undone, it is one of the most important. Lack of human resources or the wrong skill mix can lead to care left undone, leading in turn to negative patient outcomes and staff dissatisfaction.

What should nurse leaders do?

1. **Raise awareness.** Nurse leaders – as well as frontline nurses – must be made more aware of the issue, so that immediate action and pre-emptive measures can be taken.
2. **Challenge the assumption that missed care can be tackled by nurses alone.** Rather, care left undone is rooted in structural and systemic factors, including staffing levels. Nurses also need to be encouraged to report instances of missed care without worrying about reprisals.
3. **Promote and encourage staff workshops** to inform, discuss and mobilise knowledge on how to act when care left undone occurs.
4. Look at and **discuss adapting the nursing curricula to include courses on decision-making**, prioritisation and other management skills that mitigate care left undone.
5. **Keep informed and escalate concerns about the importance of meeting safe staffing levels.** Alert healthcare managers and relevant health stakeholders if safe staffing levels are not being met.

European Federation of Nurses Associations (EFN)

Clos du Parnasse 11A - 1050 Brussels - Belgium
Tel: +32 (0)2 512 74 19
Email: efn@efn.eu
Web: www.efn.eu
Registration number: 476.356.013