Safe Nurse Staffing Standards in Hospitals
Saves Lives and Lowers Costs

Philadelphia and Santiago – A new study published in The Lancet Global Health showed that establishing safe nurse staffing standards in hospitals in Chile could save lives, prevent readmissions, shorten hospital stays, and reduce costs.

The study, by the Center for Health Outcomes and Policy Research (CHOPR) at the University of Pennsylvania School of Nursing, and the Universidad de los Andes - Chile School of Nursing, found very large variations in patient to nurse staffing across 40 hospitals located throughout Chile. Nurse staffing was significantly better in private compared to public hospitals. Differences in nurse staffing across public hospitals were found to be associated with avoidable deaths and higher than necessary costs, “Nursing has been overlooked in Chile as a solution to healthcare quality and access problems; this study shows investments in improving hospital nurse staffing would result in higher quality of care and greater productivity which could improve access to public hospitals,” said lead-author Linda H. Aiken, PhD, RN, Professor and Founding Director of the Center for Health Outcomes and Policy Research at the University of Pennsylvania School of Nursing.

The researchers collected extensive data from 1652 nurses practicing in 40 Chilean complex general acute hospitals and analyzed outcomes for more than 761,948 patients. They found that:

- **Nurse staffing in Chilean hospitals is much worse than international standards.** On average, nurses in hospitals in Chile care for 14 patients each compared to 5 patients each in the US and Australia where legislation sets safe nurse staffing standards. Variation in nurse staffing is great across Chilean public complex hospitals with patient to nurse ratios as high as 24 patients per nurse.

- **Variation in hospital nurse staffing results in avoidable deaths.** Patients in hospitals where nurses were responsible for 18 patients each had 41 percent higher risk of death compared to patients in hospitals where nurses cared for 8 patients each.

- **Better hospital nurse staffing would reduce costs of care enough to fund additional needed nurses.** Researchers estimated that in poorly nurse staffed hospitals the average length of stay was significantly longer and more patients had to be readmitted after discharge because of complications. Improving nurse staffing to 10 patients per nurse could save over $29 million USD a year from avoided hospital days which would more than pay for the costs of employing the 1,118 additional nurses needed.

- **Study revealed that the availability of hospital beds was adversely affected by poor nurse staffing.** Research revealed that if Chilean public hospitals staffed at levels where nurses cared for no more than 10 patients each, more than 100,000 days of inpatient care could be avoided annually from shorter stays and reduced readmissions which would contribute to reducing hospital admission waiting lists.
• Chile has a sufficiency large supply of nurses to staff hospitals at much improved levels. Chile has an excellent nurse education system which graduates more than 6,000 nurses a year all with bachelor’s degrees.

“The findings from this study suggest that Chile has the resources and the means to improve nurse staffing in public hospitals to enhance access to high quality hospital care in the country,” said Marta Simonetti, PhD, RN, the lead researcher at Universidad de los Andes – Chile.

The state of Queensland in Australia recently successfully implemented safe hospital nurse staffing standards that research shows saved lives and money and which could serve as a model for consideration in Chile.

The study was carried out by the Universidad de los Andes - Chile School of Nursing and Clínica Universidad de los Andes in partnership with the Center for Health Outcomes and Policy Research at the University of Pennsylvania School of Nursing and the Population Research Center at the University of Pennsylvania.

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