## **Improving the End-of-Life Experience in Singapore: Building Capacity in Palliative Care Education and Research**

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Singapore is ageing rapidly. Whereas ageing symbolises advancements that the country has made in public health and medicine over the past few decades, it has brought new concerns regarding care for the elderly, and especially in the last years or months of life. A report commissioned by the Lien foundation in 2010 ranked Singapore 18th out of 40 countries included on a "quality of death index" that compared standards of end-of-life (EOL) care across countries.<sup>1</sup> This, in turn, motivated the formulation of the National Strategy for Palliative Care in Singapore. The report recognised palliative care services to be an essential part of the healthcare system that should be provided to all patients with life limiting illnesses. The report also recommended adequate education and training of health care professionals and investments in research to improve quality of palliative care and to inform policy making.<sup>2</sup>

Although advancements have been made, as with many countries, Singapore still comes up short in the delivery of palliative care services. Many patients at the EOL die in pain<sup>3</sup> and not at the place of their choice (which tends to be at home),<sup>4</sup> and after a carousel of visits to the emergency department and other healthcare providers. There are simply not enough clinicians and other healthcare staff trained in providing palliative care to meet the increasing demand for EOL services. In fact, an Educational Needs Assessment conducted by the Lien Centre for Palliative Care (LCPC) showed that non-palliative care clinicians do not have the confidence or skills required to deliver basic palliative care services. This is partly because palliative care is either under-represented or non-existent in undergraduate and postgraduate curriculums of medical, nursing and allied health disciplines. This needs to change as both general practitioners and specialists will see a larger proportion of patients at the EOL in the coming decades. While education and training activities, such as the Singapore Hospice Council Post Graduate Doctors' course in Palliative Medicine and specialist and advanced diplomas in Palliative Care Nursing, have equipped some doctors and nurses with

palliative care skills and knowledge, these opportunities need to be expanded to include other cadres of healthcare professionals such as social workers and pharmacists. The latter groups, in particular, have clear lack of training opportunities in this field. In addition, having clinical guidelines to ensure consistent standards of care across institutions and individual practices will also improve the quality of EOL care being provided. At present, Singapore has no national clinical practice guidelines for palliative care, though talks are underway with the Ministry of Health to address this gap.

EOL care can also be improved through high quality research efforts. This research needs to be methodologically rigorous, outcomes based and with clear implications for patient care and policy making. For instance, there is a lack of comprehensive data regarding cost and utilisation of services across the various entities that provide care to dying patients. World Innovation Summit for Health (WISH) EOL Report 2013,<sup>5</sup> authored by luminaries in health policy and palliative care, highlighted the importance of quantifying the cost of dying and determining ways to lower costs while improving quality of care. Availability of such data in Singapore could be useful for identifying inappropriate use of services, quality improvement initiatives, resource allocation and budgeting, and for policy analysis, including analyses of upcoming changes to Medishield, which are expected to increase coverage (and likely expenditures) for EOL services. More formative research is also needed in several areas, including pain management, understanding patient preferences, improving financing models, and in health and risk communication, among others.

Patient care can be seriously compromised if interventions are accepted into routine practice without high quality evidence of effectiveness in the local context; the type of evidence that typically only comes via randomised controlled trials (RCTs), which are the gold standard in building an evidence base. Take, for example, the Liverpool EOL care pathway. This pathway was widely implemented

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in the UK and in other countries in Europe. Unfortunately, it was implemented on a wide scale without the benefit of a trial and was later shown to be widely misused, which resulted in poor outcomes that led to it quickly being phased out.<sup>6</sup> A rigorous evaluation through a RCT could have identified the shortcomings and avoided this failure. More recently, a high quality RCT showed that a common communication skills-building workshop did not improve the quality of communication but instead increased depressive symptoms among patients.<sup>7</sup> Even Advanced Care Planning, something that is widely recommended to be integrated into standard practice in Singapore, needs further study given the limited evidence for its effectiveness locally and internationally.<sup>8</sup>

There are many barriers to expanding education and research in palliative care. Yet, the benefits to patient care for our most vulnerable patients require us to work to overcome these barriers. There is hope for the future. Efforts are being made to expand palliative care education and training activities to allied healthcare workers. LCPC has also established a research incubator that provides funding and research support for investigator-initiated research in palliative care.<sup>9</sup> Through greater education and training to increase service capacity, and high quality research, we can work to improve the EOL experience for all Singaporeans.

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