report any cost data or potential adverse effects, which are crucial for informing policy and practice decisions.

Notwithstanding the noted limitations, STRIP is a valuable scientific resource and makes a seminal contribution to improving child public health nutrition. The study provides high-quality evidence of the sustained benefit of infant-onset dietary counselling on dietary intake and some cardiometabolic risk markers and supports the life-course approach of providing age-appropriate dietary advice consistent with public health recommendations.

We declare no competing interests.

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## Global prevalence of institutional care for children: a call for change



Institutionalisation is the most common societal intervention for orphaned, abandoned, or maltreated children throughout the world. Nevertheless, this form of care has been documented to be associated with negative effects on children's development including cognitive skills, attentional processes, physical growth, mental health, and socioemotional development.<sup>1,2</sup> Effects of institutional rearing seem to be especially harmful for children in the earliest years of life, including alterations in brain structure and function, as well as poorer adaptive functioning. Removing children from institutions and placing them in families leads to improvements, but gains that children make after removal from institutions and placement in families vary on the basis of characteristics of the sample, length of exposure to institutional rearing, and quality of care provided within institutions. 1,2

Many of the harmful effects of institutional rearing seem to be long lasting.<sup>3</sup> For example, two longitudinal studies of children who were abandoned at birth and then placed in institutions in Romania have documented deleterious

effects in cognitive, socioemotional, and mental health domains that continued from early childhood into adolescence for those placed in Romanian foster homes<sup>4</sup> and into adulthood for those placed in British adoptive families,<sup>5</sup> especially if exposure to institutional care was long lasting. For children who are placed in institutional care after the first 6 months of life, inattention or overactivity, indiscriminate social behaviour, compromised intelligence quotient and executive function, and psychopathology are all persistent and impairing.<sup>5,6</sup> These same studies have also documented that removing young children from institutions and placing them in families leads to substantial improvements in many domains of development.

With this well established background of risk, Chris Desmond and colleagues<sup>7</sup> did an extensive review of official and unofficial sources of data from 136 countries between 2001 and 2018 and reported global, regional, and national estimates of the number of children in institutional care in 2015 for 191 countries



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in The Lancet Child & Adolescent Health. The authors deserve great credit for their painstaking, multisource, and multimethod approach, generating 98 sets of estimates for each dataset with possible combinations of imputation methods for countries with different available data points. Noting that global estimates were highly sensitive to the detection methods used, Desmond and colleagues found that global prevalence ranged from 3.18 million to 9.42 million children, with a median estimate of 5.37 million. Bearing in mind the authors' cautions about the uncertainty of estimates, these estimates are two to three times higher than the most recent estimate of UNICEF from 2012,8 and they underscore the high prevalence of a form of care that involves challenges to child well being and the violation of children's right to be raised in a family.

We applaud the efforts of Desmond and colleagues to obtain an account of the prevalence of institutionalised children, but the daunting challenges that these researchers faced cannot be minimised. Many countries have incomplete or absent data and poorly developed monitoring mechanisms. Another challenge is that there is no agreed upon definition of what is meant by an institution.9 The absence of consistent approaches to determining what is and is not institutional care hampers progress and renders comparisons of one set of data to another questionable. As Desmond and colleagues point out, using different definitions affects the ultimate count of the number of children in these settings. These limitations raise an obvious question: why is there no official international authority overseeing this vulnerable group? The deleterious health effects and economic costs of this form of care would seem to demand that.

The findings of Desmond and colleagues also underscore that institutional care is well entrenched in many settings. One of their most surprising findings was that higher-income countries reported the highest prevalence of institutional care, and low-income countries the lowest prevalence. The sheer magnitude of the problem has led some to suggest that we should accept the fact that eliminating institutions will not occur in the foreseeable future, and we should work instead on reforming the care provided within institutions. For example, efforts to train staff and reduce the numbers of caregivers who are involved in children's care have been shown to be effective

enhancements.<sup>10</sup> However, these efforts might serve to prolong support for and perpetuate a form of care that has inherent insufficiencies for meeting children's needs. As a result, some have called for children to be cared for in institutions only when they require treatment that cannot be provided in a family setting.<sup>11</sup>

Some might use the magnitude of the challenge documented by Desmond and colleagues to argue for the slower, more pragmatic approach to improving the lives of children in institutional settings. However, the urgency for finding family-based placements for these children cannot be overstated. Great improvements for the lives of these estimated 5 million children await if we can provide such placement alternatives.

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