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LETTERS TO THE EDITOR

Dear Editor,

HIGHER RATES OF HOSPITAL TREATMENT FOR PARASUICIDE ARE TEMPORALLY ASSOCIATED WITH COVID-19 LOCKDOWNS IN NEW ZEALAND CHILDREN

During the New Zealand COVID-19 lockdowns, paediatricians reported an increase in parasuicides in children under their care. Such an adverse trend in mental health of children has been noted overseas, with reports of increased childhood eating disorders in Victoria (Australia) that filled hospital wards and emergency departments during lockdowns.[1] The most restrictive lockdowns in New Zealand started on 25 March for 6 weeks, then they recommenced in Auckland during 12–31 August 2020. This resulted in children being confined to their homes with consequent increases in screen time.

To investigate trends in mental health, we requested the last 5 years of monthly counts of hospital diagnoses for children aged 10–14 years from the Ministry of Health, with the International Classification of Disease discharge codes for parasuicide (version 9 codes E950–E958) for all of New Zealand. The data included counts from mid-2015 to the end of 2020.

Trends in the rate of hospital admissions for parasuicides were investigated using seasonal trend decomposition, a descriptive technique, which decomposes a time series into long-term trend and seasonal components. R (version 4.0.4 (R core team, R Foundation for Statistical Computing, Vienna, Austria)) software was used.

The results are portrayed in Figure 1 and show a clear upward trend in the latter half of 2020 from a stable baseline. The raw data are found in the uppermost plot with a sharp increase from base rates observed in August 2020 from a baseline of about 40 children per month to a peak of 90 cases. Rates have remained high, but have subsequently declined, but not back to baseline. The raw counts are decomposed into a long-term 'trend' (second plot), which reinforces the impression gained from the raw data. The 'seasonal' component shows peaks of parasuicide occurring in October of each year, with a gradually increasing magnitude of seasonal fluctuation. The 'irregular'

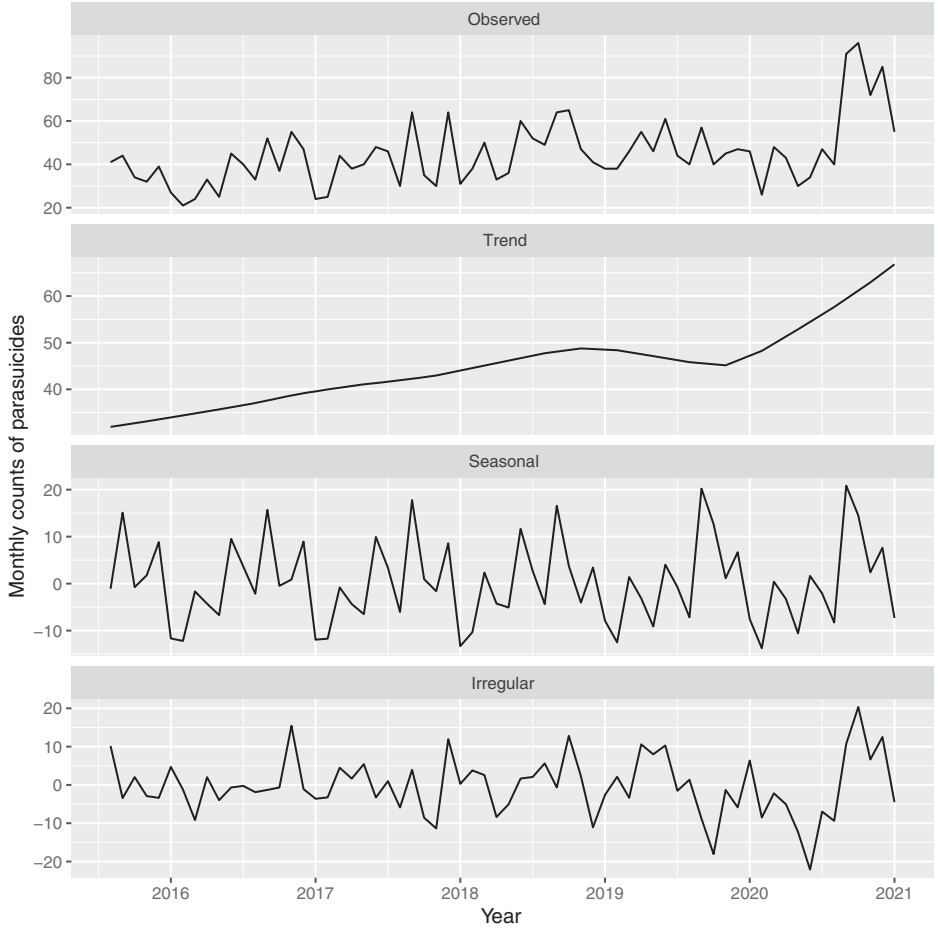

Fig. 1 Seasonal trend decomposition for monthly counts of children aged 10–14 years with a hospital discharge diagnosis of parasuicide (see text for explanation).

plot shows the difference between the observed and the sum of seasonal and trend components, and represents a measure of model fit. The fit is worst for the peak observed in September 2020.

Anecdotal clinical experience from paediatricians during the 2020–2021 COVID-19 period suggests not only increases in parasuicides, but also in children with somatic symptoms, which are likely related to anxiety. This has led to an increase in violent and aggressive behaviour on wards and consequent stress for health-care professionals involved in their care.

In a meta-analysis of studies, an adverse association between lockdowns and youth mental health was observed, manifesting as depression and anxiety.[2] In a survey of Chinese primary school students in Hubei province during the lockdown, almost a quarter of respondents reported depressive and anxiety-related symptoms.

Several studies do not support the use of lockdowns to contain cases and fatalities related to COVID-19 overseas.[3,4] Here, we have illustrated the clear detrimental effect of COVID-19 lockdown policies on child mental health, which is consistent with clinical and overseas experience. We suggest that this evidence is considered when contemplating the use of lockdowns in New Zealand and overseas.

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Dr Simon Thornley[1]
Professor Cameron Grant[2]
Dr Gerhard Sundborn[3]
[1]Section of Epidemiology and Biostatistics, School of Population Health, Faculty of Medical and Health Sciences, [2]Department of Paediatrics, Child and Youth Health, School of Medicine, Faculty of Medical and Health Sciences, and [3]Section of Pacific Health, Faculty of Medical and Health Sciences, University of Auckland, Auckland, New Zealand

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Dear Editor,

COMMENT ON: REPORT OF ONE CASE OF MALIGNANCY AMONG 17 AUTONOMOUS THYROID NODULES IN CHILDREN AND ADOLESCENTS

We read with interest the paper by Rosario *et al.* who retrospectively evaluated a series of 17 autonomous thyroid nodules (ATNs) diagnosed in 13 patients aged 9–18 years.[1] All were affected by hyperthyroidism due to thyroid nodule(s) >1 cm in greatest diameter, homogenously 'hot' at thyroid scintigraphy while the remaining thyroid parenchyma was suppressed. All patients underwent both fine-needle aspiration of ATNs and surgery. Indeterminate or non-diagnostic cytology was found in three (17.6%) and two (11.7%) nodules, respectively, and benign histology was reported in all but one nodule (i.e. follicular tumour of uncertain malignant potential). Conversely, suspicious cytology was reported in one nodule with malignant histology (i.e. infiltrative follicular variant of papillary thyroid carcinoma); the nodule measured 3.5 cm and exhibited highly suspicious ultrasonography (US) features according to the 2015 American Thyroid Association (ATA) US score.[2] The authors concluded that the overall incidence of malignancy among ATNs is low in children/adolescents, so subjecting all of them to surgery, as per the ATA guidelines,[2] represented over-treatment. According to their results, they suggest performing fine-needle aspiration only in ATNs with high suspicious features at US, as already proposed for adults.[3] We appreciate the authors' efforts to propose a diagnostic and therapeutic algorithm to be applied in this setting of patients for avoiding unnecessary diagnostic procedures and surgery. However, a critical issue should be highlighted. The aforementioned US criteria for differentiating between benign and malignant nodules are well accepted and applied to 'cold' thyroid nodules in adult patients,[2,3] but there is insufficient evidence to extend these criteria to ATNs in childhood. We previously reported a 15-year-old girl with an ATN of 3.5 cm in greatest diameter, which turned out to be a papillary thyroid carcinoma, follicular variant, at histopathological analysis after surgery.[4] In our case, there were no clues to suspect malignancy pre-operatively. The clinical presentation was dominated by the classic signs and symptoms of hyperthyroidism, and US did not reveal any features suspicious for malignancy (i.e. low-risk score according to the 2015 ATA criteria). In conclusion, adopting US-based criteria for malignancy risk assessment of ATNs could be helpful for decision-making in paediatric patients with ATNs, but further evidence is needed. Although the data reported by Rosario *et al.*[1] are encouraging, we suggest a note of caution until data from larger multicentre series are available.

Prof Alfredo Campenni[1,2]
Dr Rosaria Maddalena Ruggeri[3,4]
Prof Luca Giovanella[2,5,6]
Departments of [1]Biomedical and Dental Sciences and Morpho-Functional Imaging, Nuclear Medicine Unit, [3]Clinical and Experimental Medicine, University of Messina
[4]Endocrine Unit, "G. Martino" University Hospital, Messina, Italy
[2]Thyroid Committee, European Association of Nuclear Medicine, Vienna, Austria
[5]Clinic for Nuclear Medicine and Competence Centre for Thyroid Diseases, Imaging Institute of Southern Switzerland, EOC, Bellinzona