



Author



LINDSAY MITCHELL has been researching and commenting on welfare since 2001. Many of her articles have been published in mainstream media and she has appeared on radio, television and before select committees discussing issues relating to welfare.

In 2009 her paper, Māori and Welfare, was published by the New Zealand Business Roundtable. She mentored beneficiary families during the 2000s and more recently worked as a volunteer at Rimutaka prison teaching English

as a second language. She has also kept a blog since 2005 and counts herself as a rarity in blog survival rates.

Lindsay has written six previous reports for Family First NZ:

- Child Poverty & Family Structure: What is the evidence telling us? (2016)
- Child Abuse & Family Structure: What is the evidence telling us? (2016)
- Imprisonment & Family Structure: What is the evidence telling us? (2018)
- Families: Ever Fewer or No Children, How Worried Should We Be? (2019)
- The Challenges Facing Children In Step-Families: What we know, don't know, and how to fill in the gaps. (2020)
- New Zealand's Teenage Birth Rate: Is it time to stop worrying about it? (2021)

When she isn't writing and researching, Lindsay paints and exhibits, specialising in Maori portraiture.

About Family First NZ

Family First NZ is a charitable organisation formed in 2006. Its purposes and aims are:

- to promote and advance research and policy regarding family and marriage
- to participate in social analysis and debate surrounding issues relating to and affecting the family
- FAMILY FIRST NZ
 The Family 'Watchdog'
- to educate the public in their understanding of the institutional, legal and moral framework that makes a just and democratic society possible
- to produce and publish relevant and stimulating material in newspapers, magazines, and other media relating to issues affecting families
- to speak up about issues relating to families that are in the public domain

For more information and copies of this report, go to www.familyfirst.nz



TEL: 09 261 2426 FAX: 09 261 2520

1700, 05 201 2520

EMAIL: admin@familyfirst.org.nz

WEB: www.familyfirst.nz

POST: PO Box 276-133, Manukau City 2241, New Zealand

COPYRIGHT: This report and all information contained herein is © Family First NZ 2022.

Executive summary

In 2020 UNICEF rated New Zealand children **last** of 38 'rich' countries in child mental well-being. Physical health ranked 33rd. This begs the question, why?

The provisional suicide rate for 15–19-year-olds for the year to June 2020 was 18.69 – higher than the 2013-15 rate which heavily influenced the UNICEF ranking.² New Zealand continues to lead the developed world in the incidence of youth suicide.³ The rates of hospital admission for self-harm are about 50–100-fold greater than those for suicide.⁴

In 2018 a government inquiry into mental health, He Ara Oranga, described how "increasing numbers of children and young people are showing signs of mental distress and intentionally self-harming." The panel reported, "Problems of access, wait times and quality were reported all over the country – having to fight and beg for services, not meeting the threshold for treatment, and the cruelty of being encouraged to seek help from unavailable or severely rationed services." ⁵

Increasingly children are exposed *in utero* and postnatally to drugs and alcohol and are at heightened risk of developing a range of mental disorders. According to Oranga Tamariki, "...the alcohol and drug issue is prolific/increasing" among Family Start clients (a flagship home visiting programme for pregnant mothers and whānau with young children). ⁶ Seventy percent of children who entered state care in 2019 had a parent with substance usage treatment recorded. Drug addiction is also the most commonly cited reason why thousands of New Zealand grandparents are raising their grandchildren. ⁷

When rated for social and emotional functioning in 2015/16, eight percent of children aged 3-14 had a 'concerning' score. Children who do not develop age-appropriate social and emotional competencies are more likely to develop mental health problems throughout their lives. 8

Children aged under 15 with *diagnosed* 'emotional and/or behavioural problems' grew from 3.3 percent in 2011/2012 to 5.7 percent in 2020/21.9

Adverse Childhood Experiences (ACEs) are associated with increased risk for a wide range of disorders, from mood and anxiety to psychotic and personality disorders. ¹⁰ACEs include, "exposure to maltreatment, witnessing violence, living with household members with mental illness, who abuse substances, have a history of incarceration, or have experienced parental divorce." ¹¹ The Growing Up in New Zealand (GUINZ) longitudinal data showed 2.6 percent of children had experienced four or more ACEs by 54 months (4.5 years) of age; 6 percent had experienced three or more. ¹² ACEs accumulate with age.

Awareness of links between mental disorder in parents and disturbance in their children is longstanding. Links may operate through genetics, the behaviour of parent towards child e.g., hostility or neglect, change in family structure due to illness, or factors that correlate with disorders such as drug use.¹³ During the antenatal period 16.2 percent of children were exposed to maternal depression in the GUINZ cohort.¹⁴

The percentage of 15–17-year-olds reporting 'psychological distress in the past four weeks' grew from 1.9 percent in 2011/12 to 15.6% in 2020/21; the 18–24-year-old age group showed an increase from 6.5 to 20.7 percent over the same period.¹⁵

The number of children and young people (aged 0-19) seen by Mental Health and Addiction Services grew from 20,800 in 2002/03 to 51,010 in 2020/21 or by 145 percent. ¹⁶ Young Māori are over-represented in treatment for 'schizophrenia' and under-represented in 'depression.' The incidence of 'personality disorders' and 'bipolar disorders' is similar for Māori and non-Māori. ¹⁷

Antidepressant dispensings to 0–19-year-olds grew by 21 percent in the year to 2020/21 compared to 8 percent for the total population; antipsychotics increased by 18 percent compared to six - increases which are believed to have resulted from not only Covid 19-related stress but a lack of non-medical treatment alternatives.¹⁸

While comparable international data shows 35-50 percent of mentally unwell people do not receive treatment, New Zealand lacks similar information. ¹⁹The 2022 Mental Health and Addiction Services Monitoring report explained, "Our most recent comprehensive data on prevalence of mental distress and addiction is … based on data collected in 2003 and 2004. The age of this information makes it difficult to know whether the number of people currently accessing services is an accurate reflection of how many people need support from services. Furthermore [it] excluded children aged under 16 – a priority group experiencing increasing mental distress."²⁰

In 2020/21, only 65% of under twenty-year-olds were seen within three weeks of their referral, and 87% within eight weeks. Wait times have worsened since 2017/18. ²¹ Young people turning up to emergency departments with a mental health crisis increased by 178 percent between 2011/12 and 2020/21. ²² In May 2022 Health Minister Andrew Little acknowledged publicly that "children and adolescent mental health services are in crisis." ²³

Some psychologists have asked, "...if our treatments work shouldn't we have fewer people presenting in crisis, less people on a disability benefit due to mental illness, a reduction in community measures of psychological distress and a decrease in the suicide rate? ... despite access to costly biomedical treatment, something central to recovery appears to be missing in the social fabric of developed countries." ²⁴

Academics in the field of psychiatry made a cautionary assertion: "Our interventions should encourage, not replace or subvert, autonomy, independence and active coping." Similar counsel could apply in other spheres. Advocates and lawmakers should also consider if well-intended social and educational interventions undermine 'autonomy, independence and active coping.' An over-reliance on antidepressants is comparable perhaps to a wider societal dependence on historic non-medical quick fix 'solutions' notable in family law for instance.

Family structure has changed dramatically. From being quite rare, sole parent families have become common. Disproportionately, children in these families experience high levels of material hardship and their mothers are more likely to have depression or anxiety. ²⁶

GUINZ data revealed high levels of change in family structure, even pre-birth. A key finding was, "1095 (17.3%) of mothers were categorised as having experienced 1-4 relationship transitions from pregnancy to the 4.5-year interview." Relationship transitions were characterised as, "...the count of the entrances and exits by biological parents, romantic partners, or spouses." This matters because, "Children raised in families that had experienced relationship transition(s) also reported higher externalising and internalising behaviour, and lower prosocial behaviour ... In usual psychological usage, 'externalising' behaviours refer to expressions of anger such as fighting, yelling at others, and destruction of property, whereas internalising behaviour refers to inward expressions of dysfunction such as anxious and depressive symptoms." 28

Parental engagement – particularly paternal - has been progressively weakened by changing social policy.

Non-maternal day-care is increasingly utilised (and state subsidised) but remains controversial regarding effects on young children. Recent Auckland University GUiNZ analysis found, "...more time in ECE per week was inversely associated with the development of emotional difficulties and peer problems." The finding was not however particularly robust with the following caveat: "It is possible

that the positive association between child behaviour and ECE is in part due to children with behavioural difficulties being excluded from ECE (reverse causation) ... It is also possible that parents with full time childcare responsibilities of two-year children may rate their behaviour as worse than the parents of children in childcare, because they see them all the time ... Given limitations in the data collection noted elsewhere, it is not possible to determine why attendance appears to protect against emotional difficulties and peer problems, and hence why this finding contrasts with previous research."²⁹

In older children, the extensive Youth 2000 surveys show reductions in substance use, sexual experience and risky driving but increases in symptoms of depression, suicide thoughts and attempts. Despite a decline over time, "…levels of adolescent binge drinking remain high by international standards and disparities in tobacco and cannabis use by ethnicity and socioeconomic status are wide." The evidence of a causal link between alcohol and teen suicide is strong. Unfortunately turning to substance use as a coping mechanism tends to "compound psycho-social and mental health problems, rather than alleviating them."

Absenteeism is rife. Skipping school because of anxiety only serves to worsen anxiety creating another vicious cycle.³³ Mental health issues in the home were identified as a cause of chronic absenteeism at a 2022 parliamentary inquiry into poor school attendance. At March 2022, 5,277 beneficiaries with a primary incapacity of a psychological or psychiatric condition had children in their care – up twenty percent on 2014.³⁴

Bullying contributes to absenteeism. Comprehensive PISA 2018 data for 36 countries found New Zealand had the highest percentage of 'frequently bullied students' (15%), tied second for experience of 'any type of bullying act' (32%), and 'other students left me out of things on purpose' (14%) and led in experience of, 'other students made fun of me' (23%).³⁵

1,185 under 20-year-olds accessed mental health services for eating disorders in 2020/21 and 9 percent were male.³⁶ Public referrals have risen 65% in the past five years.³⁷

In 2015 New Zealand children spent an average of around 160 minutes using the internet outside of school – seventh out of OECD countries.³⁸A consensus is forming that either very low or very high internet use leads to heightened depression and anxiety.³⁹

Young people suffering from anxiety will often fixate on 'what if' and worry about matters far off in the future. Today's world presents them with ample material to fret over. But past generations have faced equally frightening doomsday scenarios. The difference now is a highly connected world in which youth are constantly exposed to media-generated hysteria and unprecedented peer pressure to respond in a conformist fashion. This is compounded by the willingness of educators to engage the very young in debates and ideas that might be best avoided until students possess the maturity to think more critically about them.

Unquestionably a mental health crisis is occurring among New Zealand's young. The evidence is stark. It cannot be resolved with medication alone and there is no prospect of other therapies meeting demand any time soon.

A reversal of this upward surge demands a wider appraisal and acknowledgement of societal changes that have lessened the likelihood that children will experience material and emotional security and stability throughout their formative years.

It appears there are two New Zealand stories occurring simultaneously which explain why the country rates so poorly for child mental well-being.

The development of mental disorders due to *in utero* trauma and exposure to substances followed by chaotic lives characterised by transience and family violence affect probably (and

conservatively) 3 - 4 percent of all children. These experiences are by no means confined to Māori children and teens but their over-representation in youth suicide, substance abuse, schizophrenia, experience of maternal depression and parental imprisonment is long-standing. In 1983 the rate of first admission to a psychiatric hospital for Māori aged 10-19 was 168 per 100,000 compared to 102 for non-Māori.⁴⁰

It is probably optimistic to assess this group as shrinking or even static given growth in gangs⁴¹, family harm⁴² and Oranga Tamariki's own 2019 findings: "Across all case study sites, Family Start workers and managers ... have been working with more high needs whānau/families. This includes those affected by insecure and inadequate housing, family violence, alcohol and drug addictions including methamphetamine, mental health issues including high rates of anxiety, incarceration, intergenerational exposure to Oranga Tamariki, immigrant and refugee whānau (some of whom have past trauma) and more whānau in crisis."⁴³

Indigenous people in Australia, Canada, and the United States also experience poorer mental health than non-Indigenous. ⁴⁴As a percentage of the total population, New Zealand's indigenous (16.5%) exceeds others: Australia (3.3%) Canada (4.9%) and the United States (2%). Thus, the *potential* for poorer mental health in New Zealand is greater.

The *existence* of poorer mental health among the young is supported by the available statistics. New Zealand leads the developed world in youth suicide, youth self-harm and bullying. But the statistics that are not available also suggest a strongly negative picture. Those lost to longitudinal studies overwhelmingly comprise the very population of concern. PISA surveys cannot capture the chronically absent.

The second scenario is of a more pervasive depression and anxiety problem exacerbated less by mayhem and material deprivation, and more by recent developments such as social media-driven poor self-image, heightened sensitivity to parental and/or peer pressure, fear of failure⁴⁵, climate change anxiety⁴⁶ and confusion over sexual and gender identity. The second group may also be dealing with separated parents, torn loyalties, school and home-life upheaval and adapting to stepsiblings. These stresses are occurring in similar countries. According to paediatrician and government advisor, Sir Peter Gluckman, "The real pandemic that is emerging is this pandemic of loss of subjective wellbeing in that critical stage of life, adolescence, which is affecting 25 to 40 per cent of Western populations." ⁴⁷

The surprisingly shallow socio-economic gradient for the incidence of diagnosed mental disorders also points to differing pathways to illness. Compared to the least deprived neighbourhoods, disorders are only one and a half times more common in the most deprived. (Further research would seek to establish if disorder types correlate by quintile.)

There will doubtless be overlapping characteristics between the two groups but the second is expanding faster than the first.

The first group enjoys very little positive parental control at any age whereas the second may struggle under intense parental protectiveness and expectation, especially as one child families become more common.

In both groups though, it is parents who hold the key – not governments. Enduring change begins at an individual level. If children were genuinely placed at the centre of the family, given time, given unconditional love, given space to explore but surety to return to ... there may still be no guarantees. But the odds of that child growing into a secure and stable individual will massively increase.

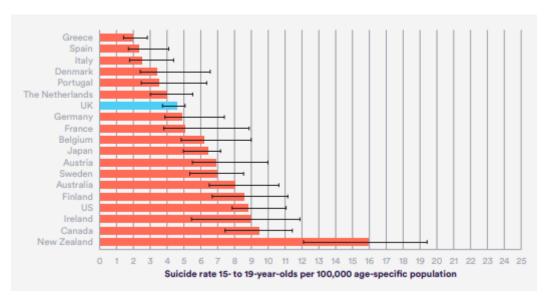
Contents

Author	2
About Family First NZ	2
Executive summary	3
Youth Suicide	8
Intentional self harm	9
The beginning	10
Exposure to drugs and alcohol	10
Genetic influence	14
Other prenatal factors	14
Distress in early childhood	14
Incidence of child mental health disorders	16
ACEs and Self-control	19
Maternal Depression	19
Antidepressant use in pregnancy	21
Distress in young people	21
Mental Health and Addiction Service Clients	22
Medication	27
Antidepressants	27
Anxiolytics	29
Antipsychotics	30
ADHD medicines	30
Unmet need	32
Wait times	32
Support for at-risk family and whanau of patients	34
What next?	35
An emerging question	35
Over reliance on medication?	35
Historic non-medical quick fix solutions	37
Family Structure	37
Parental engagement	40
Adolescent years	41
Absenteeism	42
Bullying	43
Body image	44
Social Media	45
Conclusion	47
Bibliography	49
Endnotes	54

Youth Suicide

When UNICEF ranked New Zealand's child mental-wellbeing as last of 38 countries, our high youth suicide rate (14.9 in 2013-15)⁴⁸ appears to have been a strong influence.

By 2016 New Zealand had the highest youth suicide rate among comparable countries.

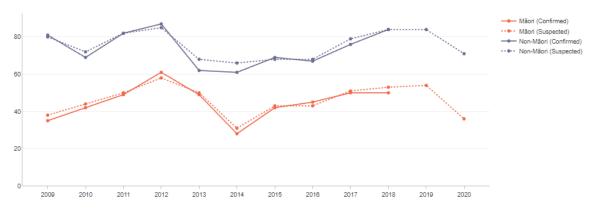


Source: International comparisons of health and wellbeing in adolescence and early adulthood, 2019 (95% confidence intervals displayed)

The Prime Minister, Jacinda Ardern, took issue with UNICEF rating because the suicide data was out-dated. She said, "...the New Zealand statistics used for this report are based on average rates for 15-19 years olds between 2013 and 2015. The June 2020 provisional statistics have shown a drop for this age group, down from 73 to 59, with the overall suicide rate at its lowest rate in three years." The provisional rate for 15–19-year-olds for the year to June 2020 was 18.69 – higher than 2013-15.

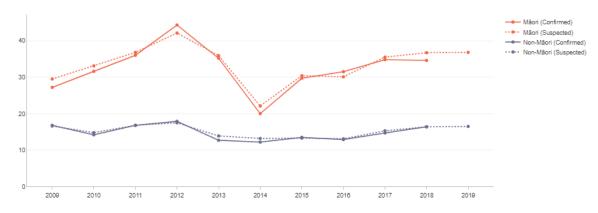
The most recently available age data for suicide deaths/rates is grouped by Māori/non-Māori and classified into 0-14/15-24-year age groups. The 0-14 data is 'S' (suppressed due to small numbers) and 15-19 is not separately identified.

Number of suicide deaths among Māori and non-Māori in the 15–24 years life-stage group, 2009–2020



Source: Suicide webtool Chief Coroner/ Ministry of Health (accessed August 10, 2022)

Rate of suicide deaths among Māori and non-Māori in the 15–24 years life-stage group, 2009–2019



Source: Suicide webtool Chief Coroner/ Ministry of Health (accessed August 10, 2022)

A media statement from the Chief Coroner (October 2021) reported a small decrease in the all-age suicide rate from 11.8 to 11.6 per 100,000 for the year to June 2021, covered ethnicity and gender but not age.⁵¹

In 2019 22% of surveyed youth who'd had contact with Oranga Tamariki (OT) reported a suicide attempt in the past 12 months, rising to 29 percent for Māori.⁵²

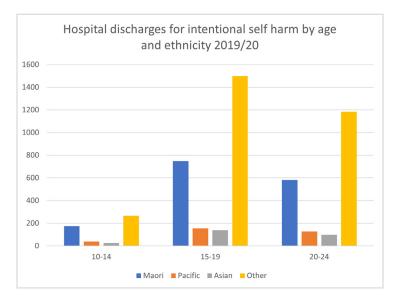
The 2018 government inquiry into mental health, He Ara Oranga stated, "Every year, 20,000 people attempt to take their own life." That is 35-40 times higher than actual deaths.

Intentional self harm

In 2013 the Ministry of Health (MOH) reported,

"The highest rate of intentional self-harm hospitalisations for females was in the 15–19 years age group (912.6 per 100,000), and for males, the highest rate was in the 20–24 years age group (229.8 per 100,000). There were 2866 hospitalisations for youth (15–24 years) in 2013 (456.0 per 100,000). Three-quarters of youth hospitalisations were female."

The numbers have increased since, with 4,534 discharges for intentional self-harm recorded in the year to June 2020:



Data source: Publicly funded hospital discharges with an intentional self-harm external cause code, 2019/20

He Ara Oranga noted, "Increasing numbers of children and young people are showing signs of mental distress and intentionally self-harming.... resulting in cutting, other forms of self-harm and eating disorders, which can be devastating and life threatening." ⁵⁵

According to Sir Peter Gluckman, paediatrician and advisor to both National and Labour governments, in a 2017 youth suicide discussion paper, the rates of hospital admission for self-harm are about 50–100-fold greater than those for suicide.⁵⁶

Victoria University psychology professor Marc Wilson conducted studies of non-suicidal self-harm among young people and found that, "between a third and a half of our young people hurt themselves before they leave school. In the international context, this is a lot – on average, about 20% of young people around the world hurt themselves."⁵⁷

This paper opened with the most extreme expression of mental distress – suicide and self-harm - because it marks New Zealand as different, if only by degree. Why?

If suicide is the tip of the iceberg, what does the underwater mass look like; why is it so large and seemingly growing?

The beginning

The child begins before birth. His time in the womb affects the rest of his life.

Exposure to drugs and alcohol

Alcohol, cannabis, meth and opiates cross the placenta and impact fetal development.

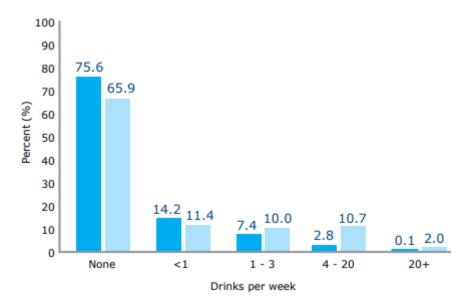
Auckland University researchers claim effects, "... range from mild to severe and may depend on the timing of exposure during the pregnancy, and duration and level of exposure or dose, as well as genetics, the health of the mother and the fetal environment." ⁵⁸

Fetal alcohol syndrome disorder (FASD) affects an unknown number of children.

For children diagnosed with FASD there is a higher prevalence of mental disorders including intellectual disability, ADHD, oppositional defiant disorder, reactive attachment disorder, conduct disorder, psychotic disorder, anxiety and depression. ⁵⁹

New Zealand estimates for FASD range from between 1,800 and 3,000 babies each year. 60 Or 3-5% of all births. These estimates are based on international data.

Growing Up in New Zealand (GUiNZ) is a longitudinal study tracking children born in the Auckland, Counties Manukau and Waikato DHB regions during 2009/10 and will crop up frequently throughout the paper. In the following chart, GUiNZ data is recorded for drinking alcohol any time during pregnancy with the first column representing 'planned' pregnancy and the second, 'unplanned'⁶¹.



Source: Before we are born, Growing Up in New Zealand, 2010

Of the 4,091 mothers who had a planned pregnancy, 115 drank 4 - 20 drinks weekly and 4 drank 20+ drinks per week; of the 2,700 who had an unplanned pregnancy 289 drank 4 - 20 drinks and 54 drank 20+ drinks per week. (These data may not be population representative as only two thirds of the 10,315 mothers referred for the longitudinal study committed to the long-term participation required.)

Suffice to say 462 or 6.8 percent of mothers drank four or more drinks weekly.

Neurobehavioural Disorder Associated with Pre-natal Alcohol Exposure (ND-PAE) – a form of FASD – was first included as a recognized condition by the American Psychiatric Association and includes:

"(1) thinking and memory, where the child may have trouble planning or may forget material he or she has already learned, (2) behavior problems, such as severe tantrums, mood issues (for example, irritability), and difficulty shifting attention from one task to another, and (3) trouble with day-to-day living, which can include problems with bathing, dressing for the weather, and playing with other children." 62

To be diagnosed with ND-PAE, the mother of the child must have consumed more than 13 alcoholic drinks per month of pregnancy or more than 2 alcoholic drinks in one sitting.

These thresholds would encompass those New Zealand mothers drinking 4 or more drinks a week.

A recent evidence brief prepared for the Well Child Tamariki Ora programme claims around a quarter of expectant mothers drink at levels likely to be harmful to the developing embryo before realising they are pregnant. ⁶³

Additionally, "Fathers' preconceptual drinking can have direct effects on pregnancy outcomes and increase the risk of their partner's use of alcohol during pregnancy." ⁶⁴

Drug use in general is rising among women as genders become more equal.

As cannabis becomes more accepted, its use is also growing among pregnant and breastfeeding women.⁶⁵ As with alcohol, studies are mixed regarding the fetal effects of cannabis. Auckland University researchers note: "For instance, one meta-analysis found no detectable effects after

controlling for tobacco and other environmental factors." However, "There are some well-designed longitudinal studies that found a range of long-term cognitive and neurobehavioural consequences associated with maternal use." ⁶⁶

An important caveat is added:

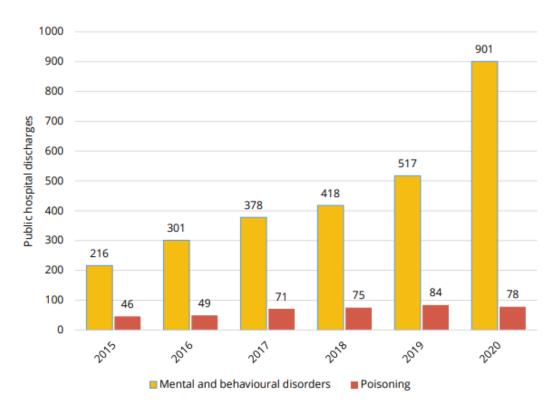
"...since the prenatal data in these studies was collected, the quantity of delta-9-tetrahydrocannibinol (THC), the psychoactive ingredient in cannabis, has increased and cannabis is being consumed more frequently in a variety of ways that may increase the level and frequency of exposure to the fetus." ⁶⁷

United States and New Zealand studies are following children who have been exposed to methamphetamine *in utero*. To date they have found, "atypical reflexes and behaviour at birth, delayed motor development over the first 3 years of age, an increase in externalising and internalising problems, poorer cognitive outcomes and structural brain changes at 6-7 years." ⁶⁸

Methamphetamine use is growing in New Zealand. Advice to parliament describes how, "Between 2014/15 and 2019/20, the number of discharges from publicly funded hospitals with a primary diagnosis of mental or behavioural disorders indicating methamphetamine increased from 216 to 901."

While the absolute numbers are not large in the scheme of things, the increase is.

Publicly funded hospital discharges with a primary diagnosis indicating methamphetamine, years ending 30 June 2015 to 2020



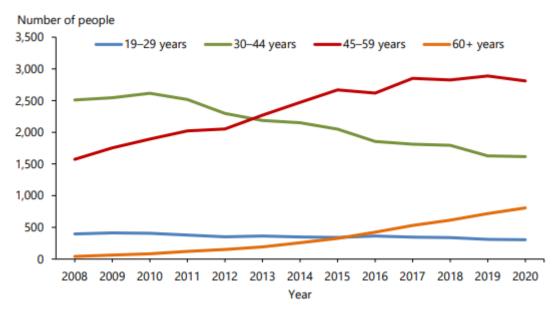
Source: Methamphetamine in New Zealand: A snapshot of recent trends

Of course, not all meth users are parents, but according to an Oranga Tamariki 2020 evidence brief, 'Methamphetamine and care' "...the alcohol and drug issue is prolific/increasing" among Family Start clients (a flagship home visiting programme for pregnant mothers and whānau with young children). ⁷⁰ One Family Start provider, "is developing a map of local methamphetamine or 'P' labs to help keep their workers informed of safety risks."⁷¹

Meth-related referrals to the Alcohol Drug and Pregnancy Team at National Women's Hospital increased from 10% of total referrals in 2001 to 59% in 2003.⁷²

New Zealand runs a nationwide methadone maintenance (MM) programme for heroin addicts. An unknown number of patients are female, and are either parents or of child-bearing age:

Number of opioid substitution treatment clients, by age group, 2008–2020



Source: Office of the Director of Mental Health and Addictions Services, 2020 Regulatory Report

United States research found, "MM women had complex reproductive histories, chronic health problems, and were subject to high rates of socioeconomic adversity and comorbid mental health problems. During pregnancy, more than half continued to use licit and illicit drugs, although there was a general trend for drug use to reduce over time."¹³

Anecdotally individuals on the methadone programme often form romantic partnerships.

A New Zealand study of 86 babies born to mothers on methadone maintenance discovered, "... methadone-exposed infants showed poorer attention, suboptimal reflexes, poorer motor control, tighter muscles, and more fussing, crying and irritability..." ⁷⁴

In addition to exposure to substances *in utero*, associated behaviours of substance-using mothers also pose risks:

"Important, also, is the added stressors often associated with illegal substance use which includes abuse of a range of legal and illegal drugs prenatally, and other maternal characteristics that can result in fetal harm, including high stress, lack of prenatal care, sexually transmitted infections and infections as a result of needle sharing through intravenous (IV) drug use, and high-risk behaviours such as drug seeking and drug trading activities that expose mothers to violence." 75

Exposure to high levels of maternal cortisol in the context of domestic violence pre-birth can render babies irritable, over-sensitive to touch and difficult to settle.⁷⁶

Additional attention has been drawn to Māori with the following observations:

"...the likelihood of heavy or high risk drinking is higher for Māori women ... Māori women are more likely to use Meth intravenously, which predicts poorer neurobehavioural outcomes for infants at 24 months of age ... Māori boys are more at risk for motor and cognitive delay over the first 3 years of age, and Māori boys and girls exposed to methamphetamine in combination with alcohol do more poorly on measures of general and verbal IQ at 4.5 years of age (unpublished data, from NZ IDEAL Study). Meth and cannabis use are both higher in Māori populations than other New Zealanders and Māori women make up more than half of women accessing pregnancy and parenting services at the Waitemata District Health Board Community Alcohol and Drug Service. Some evidence suggests that Māori may be less likely to seek help for substance use problems due to normalisation of use within whānau, but it is not clear from existing research whether this includes use during pregnancy."

Genetic influence

Another influence at work pre-birth is genetics.

Substance abuse and poor mental health is strongly associated. Over 50% of mental health service users are estimated to have co-existing substance abuse problems.⁷⁸

A strong genetic factor exists in the incidence of substance abuse: "Evidence is clear from twin, family and adoption studies that there is a major genetic component in alcohol, stimulant and opioid abuse with heritability estimates ranging from 39% to 72%." 9

Other prenatal factors

Prenatal determinants of childhood depression have also emerged from the GUiNZ study. Reported in 2022:

"We found that the most significant predictors of depression in childhood, after controlling for multiple sociodemographic covariates, were the following maternal factors during pregnancy: perceived stress; smoking; body mass index in the overweight/obese range; and paracetamol intake."80

A meta-analysis of other relevant studies found that maternal prenatal stress in particular, "is associated with offspring socioemotional development (eg, difficult temperament, behavioral dysregulation) with the effect size for prenatal depression being more robust than for anxiety."81

In summary, even before they are born some thousands of New Zealand children have heightened likelihoods of developing mental health problems working through either maternal, paternal or both pathways.

Distress in early childhood

In the case of substance abusers:

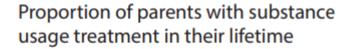
"Once the child is born, influences that may hinder development include low maternal IQ and verbal abilities, maternal mental illness, a chaotic lifestyle which may include ongoing drug seeking and involvement with child protective services." 82

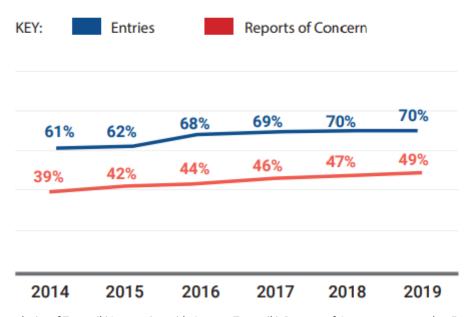
At June 2022 there were 243 children dependent on caregivers receiving benefits for the *primary* incapacity of substance abuse.⁸³

According to Oranga Tamariki however:

"Methamphetamine, in combination with alcohol and mental health issues, was a frequent cause of parents not being able to care for their children."84

In 2019, seventy percent of parents whose children entered state care had substance usage treatment in their lifetime; for parents whose children received a report of concern to Oranga Tamariki the proportion was 49 percent.⁸⁵



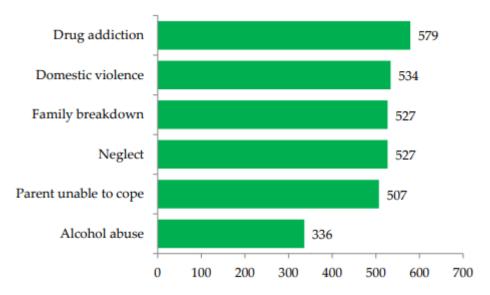


Source: Complexity of Tamariki Interacting with Oranga Tamariki: Reports of Concern compared to Entries to care

Drug addiction is also the most commonly cited reason why thousands of New Zealand grandparents are raising their grandchildren.

In 2016 a survey showed:

Top six reasons given for child coming into grandparent care, multiple reasons allowed

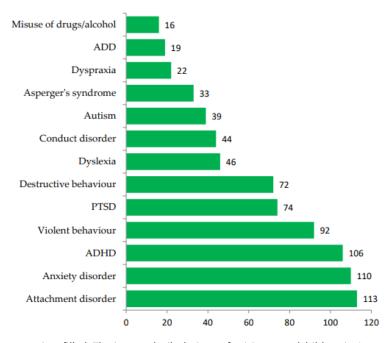


Source: The empty nest is refilled: The joys and tribulations of raising grandchildren in Aotearoa (p80)

The next most cited reason, at 299 positive responses, was "Mental illness of the parent".86

The incidence of psychological problems among the children (1,162) was relatively high with anxiety disorder diagnosed in 9.5 percent compared to 2.7% in the general 2-14 year-old population 2016.⁸⁷ Most of the study children were however aged between 6 and 14 and the likelihood of a diagnoses increases with age (see P17).

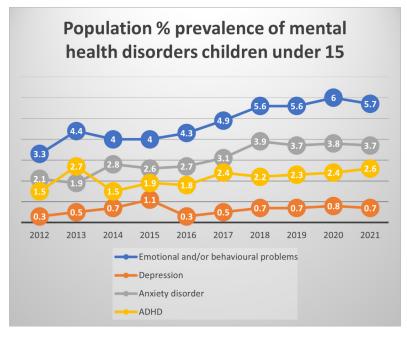
Incidence of diagnosed psychological problems (no. children =481)



The empty nest is refilled: The joys and tribulations of raising grandchildren in Aotearoa (p64)

Incidence of child mental health disorders

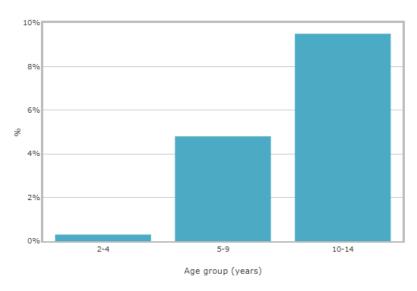
Moving to the general child population, the New Zealand Health Survey (NZHS), administered by MOH reports responses from parents/caregivers of over 4,000 children. The following chart presents the incidence of doctor-diagnosed disorders in children aged under 15 years. The prevalence of 5.7 percent represents approximately 48,000 children in the general population.



Data Source: New Zealand Health Survey 2020/21, Annual Data Explorer, Topic: Mental health

Within the under-15 age group, diagnosed disorders vary significantly with age. Of 10–14-year-olds 9.5 percent had a diagnosed problem. For 5–9-year-olds the percentage was 4.8 and for 2–4-year-olds, just 0.3 percent.

Age distribution of children with diagnosed emotional and/or behavioural problems (diagnosed depression, anxiety disorder and/or ADHD) (2-14 years)



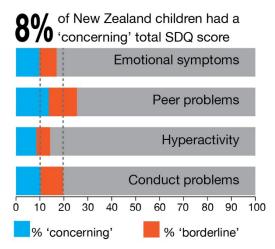
Source: New Zealand Health Survey 2020/21, Annual Data Explorer, Indicator: Mental health

Another method of measuring the incidence of mental ill health among children was unfortunately discontinued by the NZHS after results were last published in 2018.

The utility of the data is described by MOH:

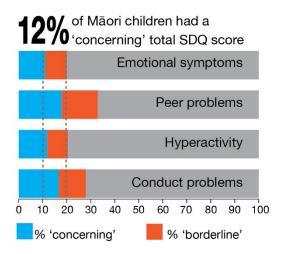
"Mental disorders, such as anxiety disorder or attention deficit hyperactivity disorder (ADHD), are the largest contributor to disability in young people aged 10–24 years. In 2013 they accounted for 35% of all health loss in those aged 15–24 years. The findings based on the Health Survey highlight that by using the SDQ it is possible to detect social, emotional and behavioural difficulties at an early age, which may be indicative of an underlying mental health problem."88

Across 2012/13, 2014/15 and 2015/16, using a Strengths and Difficulties Questionnaire (SDQ) the NZHS questioned parents and caregivers about their child's (aged 3-14 years) behaviour with respect to social and emotional functioning. Eight percent of total children (representing approximately 57,000) had a 'concerning' score; a further seven percent were 'borderline'.



Source: Social, Emotional and Behavioural Difficulties in New Zealand Children, New Zealand Health Survey, 2018

Māori children had a 'concerning' score of 12% and a 'borderline' score of 10 percent.

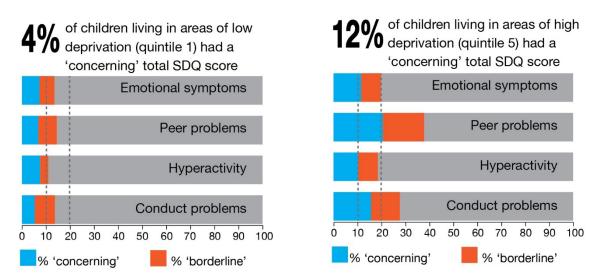


Source: Social, Emotional and Behavioural Difficulties in New Zealand Children, New Zealand Health Survey, 2018

'Concerning' scores for other ethnicities were Pacific 10%; Asian 4.9% and European/other 7.5 percent.89

Boys scored higher than girls at 9.5 compared to 6.6 percent. The split across the age groups was 10.2% for the youngest (3-4 years); 8.4% for the oldest (10-14 years) and 6.9% for those aged 5-9 years.

Other marked differences between children were associated with deprivation quintile.



Source: Social, Emotional and Behavioural Difficulties in New Zealand Children, New Zealand Health Survey, 2018

In a 2019 study using the SDQ, behaviour was assessed in 5,896 children aged 2 and 4.5 years:

"The majority of children who showed abnormal behaviour at 2 years improved at 4.5 years (57.9% for total difficulties). However, a notable proportion persisted in their difficulties from 2 to 4.5 years (42.1% for total difficulties). There was a small percentage of children who were categorised as abnormal only at 4.5 years. Children with difficulties at one or both time points had a greater proportion who were the result of an unplanned pregnancy, lived in highly deprived urban areas, and had mothers who were younger, of Māori and Pacific ethnicity and were less educated."90

Report seven from GUiNZ, Now We Are Four, states:

"Children who develop age-appropriate social and emotional competencies are more likely to develop healthy relationships with peers and adults, achieve academic success and are more likely to display resilience in the face of adversity. They are also less likely to develop mental health problems throughout their lives." ⁹¹

The same report also touches on the issue of ACEs and self-control.

ACEs and Self-control

ACEs are Adverse Childhood Experiences. These include, "exposure to maltreatment, witnessing violence, living with household members with mental illness, who abuse substances, have a history of incarceration, or have experienced parental divorce."92

ACEs are associated with increased risk for a wide range of disorders, from mood and anxiety to psychotic and personality disorders.⁹³

The GUiNZ longitudinal data showed 2.6 percent of children had experienced four or more ACEs by 54 months (4.5 years) of age; 6 percent had experienced three or more.⁹⁴

A study encompassing 2,887 participants (1,464 female, 1,423 male) from the 2019 New Zealand Family Violence Survey found 11.6 % reported at least four ACEs before the age of 18 with those younger, having lower socioeconomic status, and identifying as Māori reporting higher prevalence.⁹⁵

As adults 15% of individuals from the Dunedin Study cohort (born 1972-73) reported experiencing 4 or more ACES. ⁹⁶ Unsurprisingly ACEs accumulate with age.

Regarding how ACEs cause harm:

"One of the pathways between ACEs and health is hypothesised to be harmful biological responses to stress. These physiological effects include a range of changes in the nervous system that have behavioural implications..."

97

GUINZ researchers have also established an association between total ACEs experienced and the inability to delay gratification.

From the perspective of this paper the link is important. The ability to delay gratification, "has been associated with fewer developmental and mental health issues, conduct disorders, addictive and antisocial behaviours, and increase in scholastic achievement." ⁹⁸

The "tendency to being impulsive" is a risk factor for youth suicide.⁹⁹ An associated risk between early puberty and "behavioural, psychological, and emotional disorder" is raised by Professor Gluckman who stresses, "… the importance of efforts to enhance self-control in children so as to reduce the risks for morbidity in their transition to adulthood."¹⁰⁰

Self-control is also associated with greater resilience; fewer conduct, addiction and antisocial problems; and greater educational achievement.¹⁰¹

Maternal Depression

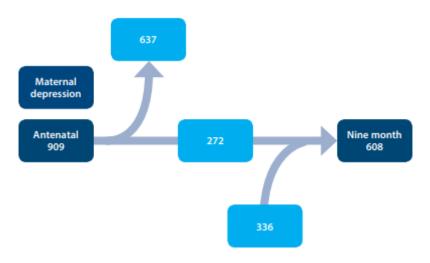
One of the identified ACEs is 'living with household members with mental illness.' Awareness of links between mental disorder in parents and disturbance in their children is longstanding. Links may operate through genetics, the behaviour of parent towards child e.g., hostility or neglect, change

in family structure due to illness, or factors that correlate with disorders such as drug use. 102 The pathways may be bi-directional and compounding:

"...maternal depression may contribute to the start of difficulties in the relationship between mother and child, these difficulties may gather their own momentum and persist even when circumstances improve. This has implications for the mental state of both mother and child." 103

GUINZ researchers include maternal depression as a risk factor for child vulnerability. During the antenatal period 16.2 percent of children were exposed to maternal depression.¹⁰⁴ At age nine months the percentage had dropped to 10.8% but only 272 mothers were depressed at both points.

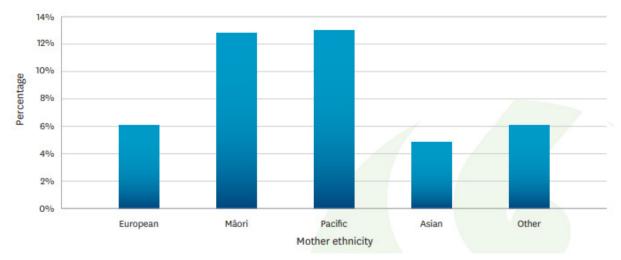
Change in exposure to symptoms of maternal depression between pregnancy and when their child was nine months old



Source: Vulnerability Report 1: Exploring the Definition of Vulnerability for Children in their First 1000 Days 2014, Growing Up in New Zealand

At later data collection points – when the children were 4 and 8 years old – the overall percentage of mothers experiencing depression was approximately 8 percent. Māori and Pacific mothers were significantly more likely to experience symptoms.

Percentage of mothers experiencing depressive symptoms when their child was eight years of age by mother ethnicity

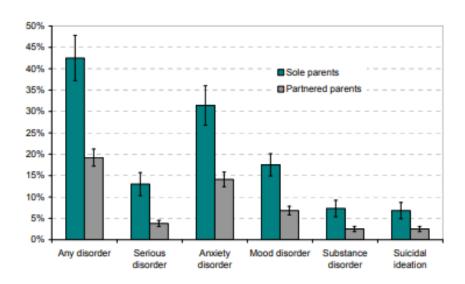


Source: Now we are eight: Life in middle childhood, Growing Up in New Zealand, MSD, 2020

Single mothers, particularly young mothers and Māori mothers, have the highest rates of depression among family types.

"Both international and New Zealand research shows that sole parents, particularly those receiving social assistance benefits, have elevated rates of mental health difficulty." ¹⁰⁵

Proportion (%) with a diagnosed mental disorder in the last 12 months



Source: Sole parenting in New Zealand: An update on key trends and what helps reduce disadvantage, MSD, 2010

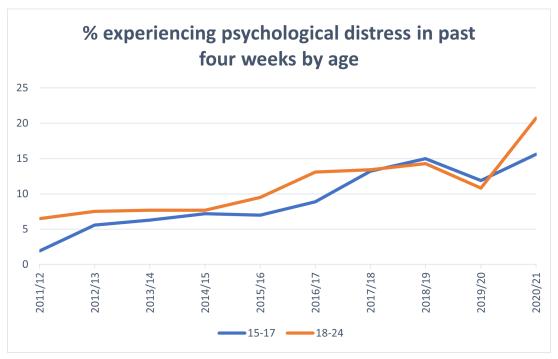
Antidepressant use in pregnancy

As an indicator of maternal depression prevalence GUiNZ analysis finds:

"Antidepressant prevalence across pregnancy was 3.2%, with a 2.7% prevalence in trimester one and 2.6% following the first trimester. There was no significant difference in usage within age bands and area-level deprivation quintiles. Ethnicity-specific data revealed that Pasifika and Asian ethnicities had the lowest antidepressant use, and New Zealand Europeans the highest. The rate of unmedicated depression, where women met the Edinburgh Postnatal Depression Scale criteria for significant depressive symptoms but did not receive antidepressants during pregnancy, was 11.8%, indicating that antenatal depression treatment may be inadequate. Greater rates of unmedicated depression were seen for younger women (≤24 years), those living in high deprivation areas and mothers of Pasifika, Asian and Māori ethnicities."

Distress in young people

In 2020/21 the percentage of 15–17-year-olds reporting 'psychological distress in the past four weeks' was 15.6% – up from 1.9 percent in 2011/12; the 18–24-year-old age group showed an increase from 6.5 to 20.7 percent over the same period.

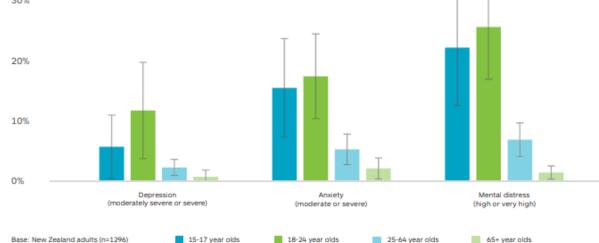


Data Source: Ministry of Health, NZ Health Survey 2020/21, Annual Data Explorer, Indicator: Mental health

Depression, anxiety and mental distress are consistently more prevalent among young people than the 25+ population.

40% 30% 20%

Depression, anxiety and mental distress measures by age group in 2018

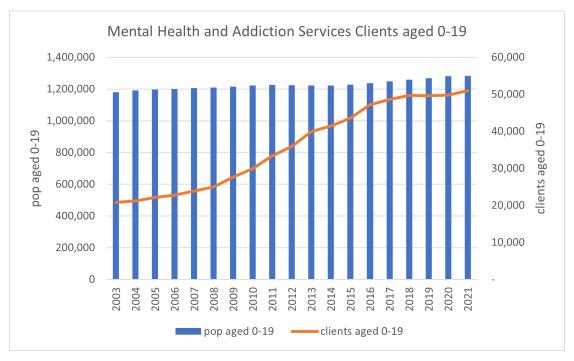


Source: Mental Health in Aotearoa 2018 Mental Health Monitor and the 2018/19 New Zealand Health Survey

Mental Health and Addiction Service Clients

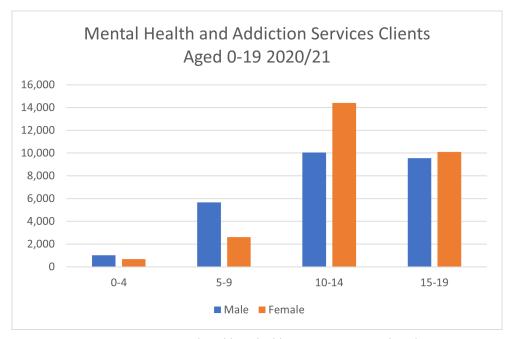
The number of children and young people (aged 0-19) seen by Mental Health and Addiction Services has grown from 20,800 in 2002/03 to 51,010 in 2020/21 or by 145 percent. 107.

The following data does not cover the provision of primary mental health care, for example by general practitioners; secondary mental health services funded by other government departments e.g., the Ministry of Social Development; problem gambling services or those with a mental illness who don't access services.



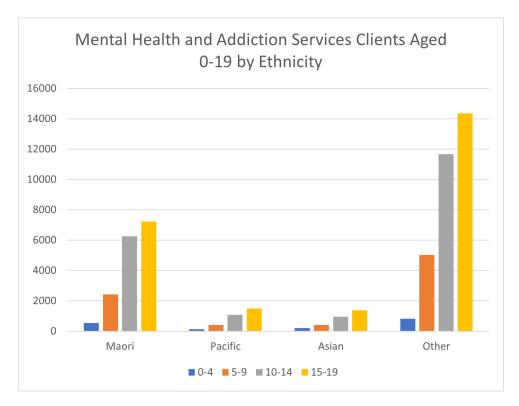
Data sources: Infoshare population estimates; Mental Health, Alcohol and Drug Addiction Sector Performance Monitoring and Improvement, Performance Measures

Males are more likely to be clients until age 9 when the pattern reverses and females become more likely from ages 10-19. This pattern is consistent across ethnicities.



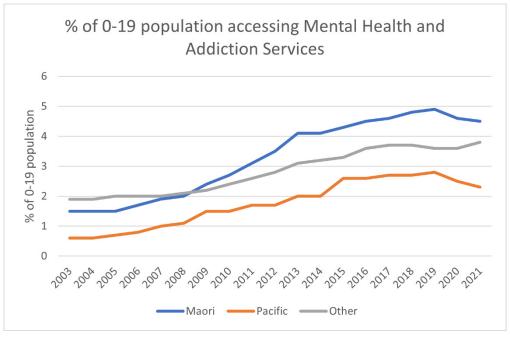
Data source: Mental Health and Addiction: Service Use web tool

Across every age group Māori are over-represented as clients of Mental Health and Addiction services.



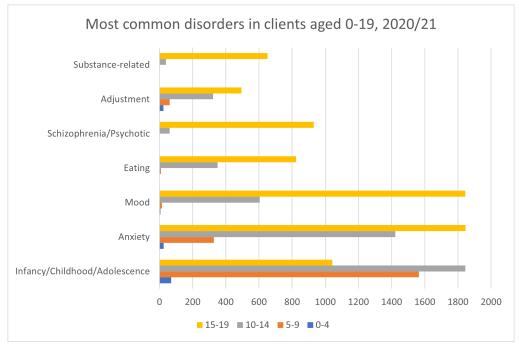
Data source: Mental Health and Addiction: Service Use web tool

In 2020/21, 4.5% of the Māori population aged 0-19 were Mental Health and Addiction Services clients compared to 2.3% of Pacific and 3.8% of 'other' ethnicities.



Data Source: Mental Health, Alcohol and Drug Addiction Sector Performance Monitoring and Improvement, Performance Measures

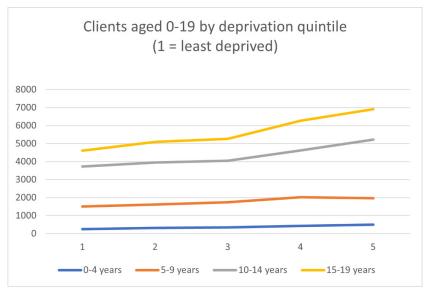
The most common disorders up to age 14 related to infancy/childhood/adolescence. These abate somewhat in 15- to 19-year-olds when anxiety and mood disorders become more prevalent.



Data source: Mental Health and Addiction: Service Use web tool

7 most common disorders	0-4	5-9	10-14	15-19
Infancy/Childhood/Adolescence	71	1564	1845	1043
Anxiety	25	328	1422	1846
Mood	5	14	605	1845
Eating	1	9	351	824
Schizophrenia/Psychotic	0	0	61	931
Adjustment	23	62	323	494
Substance-related	1	0	39	652

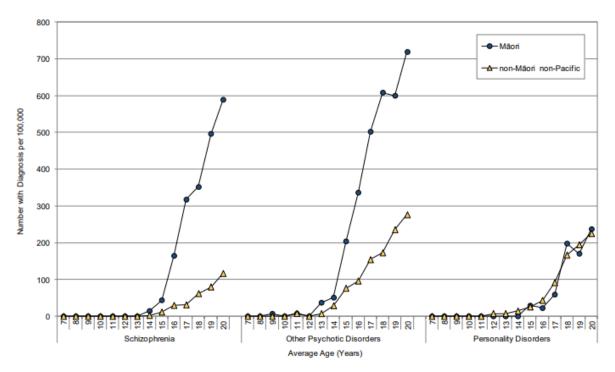
Among 15- to 19-year-olds 4,606 live in the least deprived quintile; 6,907 in the most deprived. Those residing in the poorest quintile are 1.5 times more likely to be treated for a disorder than those in the wealthiest.



Data source: Mental Health and Addiction: Service Use web tool

In 2009-11 the mental disorder profile for Māori and non-Māori/non-Pacific young people was strongly contrasting. The following Mental Health Service data represents those aged 7-20 years:

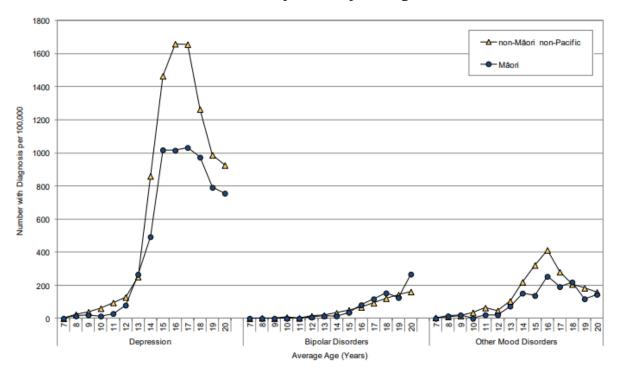
Children and Young People Accessing Mental Health Services with Schizophrenia, Other Psychotic Disorders or Personality Disorders by Ethnicity and Age, New Zealand 2009–2011



Source: Te Ohonga Ake, The Determinants of Health for Māori Children and Young People in New Zealand, MOH, February 2013

Published in mid-2021, an all-age prevalence study of the New Zealand population in 2015 found a Māori rate for schizophrenia of 3.36 versus 0.77 for New Zealand European.¹⁰⁸ It seems unlikely the data will have changed significantly in the interim.

Children and Young People Accessing Mental Health Services with Depression, Bipolar Disorder or Other Mood Disorders by Ethnicity and Age, New Zealand 2009–2011



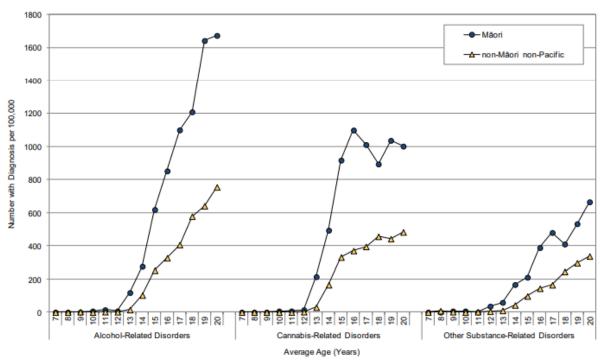
Source: Te Ohonga Ake, The Determinants of Health for Māori Children and Young People in New Zealand, MOH, February 2013

The accompanying text describes the contrast:

"In New Zealand during 2009–2011, the number of Māori young people accessing mental health services with schizophrenia and other psychotic disorders, and bipolar disorder was significantly higher than for non-Māori non-Pacific young people. Similar patterns were seen for mental health service contacts and inpatient bed nights. In contrast, the number of Māori young people accessing mental health services with depression and other mood disorders was significantly lower than for non-Māori non-Pacific young people." 109

The report also provides data for treatment of substance use in the same age group:

Children and Young People Accessing Mental Health Services with Mental Health Issues Associated with Substance Use by Ethnicity and Age, New Zealand 2009–2011



Source: Te Ohonga Ake, The Determinants of Health for Māori Children and Young People in New Zealand, MOH, February 2013

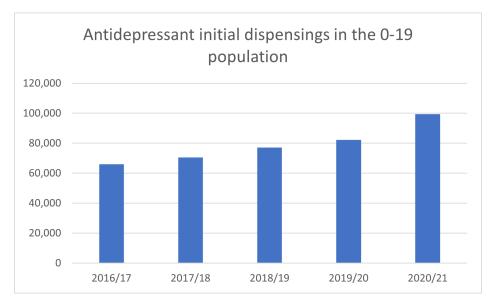
Medication

Post pandemic onset, initial dispensings of antidepressants to 0–19-year-olds grew by 21 percent in the year to 2020/21 compared to 8 percent for the total population; antipsychotics increased by 18 percent compared to six - increases which are believed to have resulted from Covid 19-related stress and a lack of non-medical treatment alternatives.¹¹⁰

Antidepressants

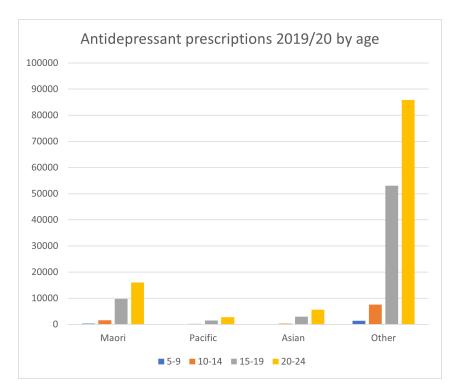
"Antidepressants are medicines used to treat depression, anxiety and related conditions, such as eating disorders, obsessive-compulsive disorder and post-traumatic stress disorder. Antidepressants are also sometimes used to treat people with long-term (chronic) pain."¹¹

One prescription can equal multiple dispensings.



Data source: Te Huringa: Change and Transformation Mental Health and Addiction Services Monitoring Report 2022

Ethnicities other than Māori, Pacific and Asian disproportionately account for antidepressant prescriptions. 'Other' ethnicity is dominated by New Zealand European. There are more prescriptions written for 10–14-year-old 'others' (7,571) than for 20–24-year-old Asians (5,634).



Data source: Number of Pharmaceutical scripts for selected therapeutic groups, 2019/20

antidepressants	5-9	10-14	15-19	20-24
Māori	278	1590	9747	16054
Pacific	51	185	1425	2731
Asian	61	269	2919	5634
Other	1379	7571	53066	85837

Māori make up 26.9% of the 0–19-year-old population¹¹² (344,900/1,282,200) yet only 14.8% of antidepressant use.

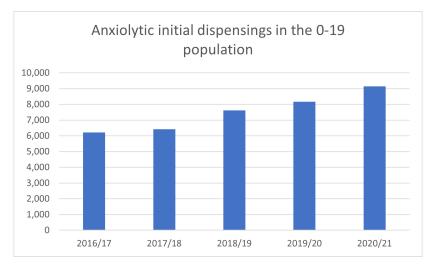
The Mental Health and Addiction Services Monitoring Report 2022 states:

"Māori are [also] less likely to be prescribed antidepressants compared with non-Māori. While it's not clear if this is because clinicians are less likely to prescribe to Māori, or Māori are less likely to want pharmacological treatment, the Health Quality & Safety Commission concludes that lower use of medication for Māori is not being compensated for with non-medical treatment alternatives."

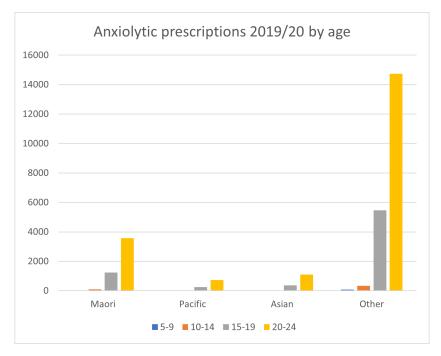
Based on the 2009-11 data (p26) Māori are also less likely to be diagnosed with depression. It's unclear whether the above comment takes account of this.

Anxiolytics

"Anxiolytics ... are medicines that work on the central nervous system to relieve anxiety, aid sleep, or have a calming effect." 114



Data source: Te Huringa: Change and Transformation Mental Health and Addiction Services Monitoring Report 2022



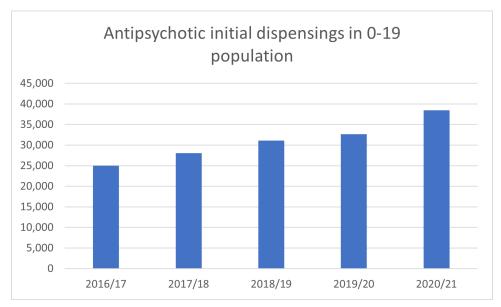
Data source: Number of Pharmaceutical scripts for selected therapeutic groups, 2019/20

anxiolytics	5-9	10-14	15-19	20-24
Māori	22	94	1243	3573
Pacific	8	22	254	732
Asian	14	20	363	1095
Other	72	342	5463	14736

Additionally, 28 antidepressant prescriptions and 24 anxiolytic prescriptions were written for 0–4-year-olds.¹¹⁵

Antipsychotics

"Antipsychotic medicines are used to treat some types of mental illnesses such as schizophrenia, bipolar disorder (previously known as manic depression), or very severe depression." ¹¹⁶

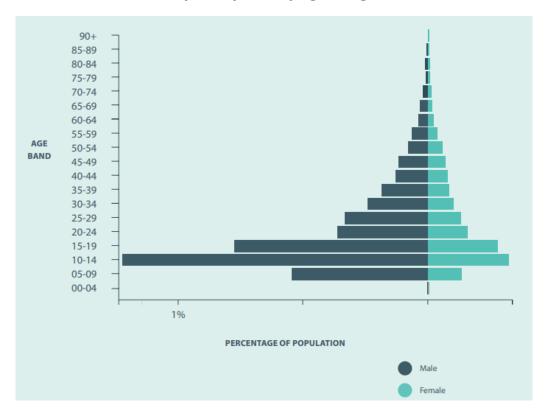


Data source: Te Huringa: Change and Transformation Mental Health and Addiction Services Monitoring Report 2022

ADHD medicines

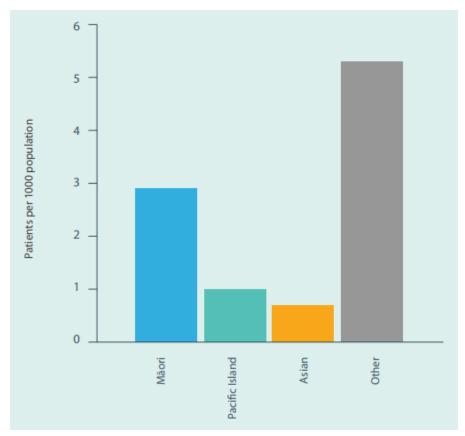
Medicines that treat attention deficit – hyperactive disorder (ADHD) are predominantly dispensed to young males. From 2007/08 to 2016/17 in New Zealand youth aged 1-24 years total dispensing prevalence almost doubled from 516 per 100,000 to 996 per 100,000.¹¹⁷

ADHD prescriptions by age and gender



Source: Going to your head, PHARMAC's analysis of data on psychiatric medicines prescribed in New Zealand 2017 Edition

The following chart depicts ADHD prescriptions by all ages notwithstanding a majority of the patients are young.



Source: Going to your head, PHARMAC's analysis of data on psychiatric medicines prescribed in New Zealand 2017 Edition

A New Zealand study into the prevalence of ADHD published in 2020 found, *"The most deprived quintile had a slightly lower dispensing prevalence relative to other quintiles."* ¹¹⁸

Unmet need

While comparable international data shows 35-50 percent of mentally unwell people do not receive treatment, New Zealand lacks similar information. 119

Assessing the level of unmet need is difficult if not impossible. The 2022 Mental Health and Addiction Services Monitoring report explained:

"Our most recent comprehensive data on prevalence of mental distress and addiction is ... based on data collected in 2003 and 2004. The age of this information makes it difficult to know whether the number of people currently accessing services is an accurate reflection of how many people need support from services. Furthermore[it] excluded children aged under 16 – a priority group experiencing increasing mental distress." ¹²⁰

Relying on the anecdotal the following passage sums up what submitters told the 2018 inquiry into Mental Health and Addiction:

"Problems of access, wait times and quality were reported all over the country – having to fight and beg for services, not meeting the threshold for treatment, and the cruelty of being encouraged to seek help from unavailable or severely rationed services. Gaps in services, limited therapies, a system that is hard to navigate, variable quality and shabby facilities added up to a gloomy picture of a system failing to meet the needs of many people." 121

Three years later the Deputy Director-General, Mental Health and Addiction, Philip Grady could only add:

"We know right now the mental health and addiction system isn't where it needs to be. We know about many of the pressures, the shortages and the inequities." 122

And in May 2022 Health Minister Andrew Little acknowledged to NewstalkZB host Mike Hosking that "children and adolescent mental health services are in crisis." ¹²³

It is a fact that a GP will tell a parent their self-harming child needs to have actually attempted suicide before a referral is available.

Wait times

'Wait times' are only relevant then to those patients who can obtain a referral.

For those who do, the Mental Health Service and Addiction Service Monitoring Report 2022 records,

"Unlike other age groups, youth mental health services do not meet wait time targets. In 2020 / 21, only 65% of young people aged 19 and under were seen in the first three weeks of their referral, and 87% within eight weeks. Despite the prioritisation of youth in Government policy – including the Child and Youth Wellbeing Strategy, and the focus on increasing access to support for young people – these wait times have gotten worse for young people since 2017/18." 124

Young people wait longer for DHB mental health services

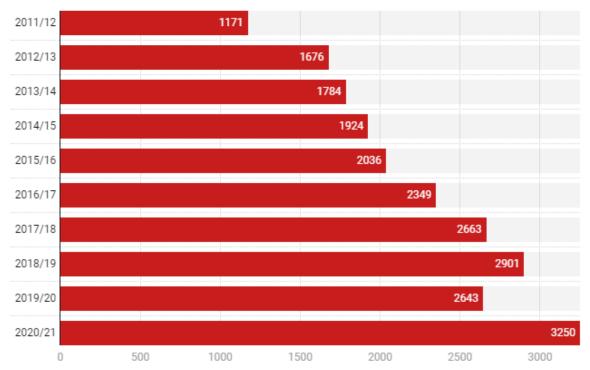


Source: Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022

In addition, national average data can hide outliers. In April 2022, the Taranaki DHB Community Mental Health manager said in a written statement that on average, young people wait 166 days, more than five months, to be seen by a Children's and Adolescent Mental Health Service clinician.¹²⁵

Young people turning up to emergency departments with a mental health crisis increased by 178 percent between 2011/12 and 2020/21. 126

Young people seen in emergency departments for a mental health crisis



Source: Health officials say funding of child mental health services 'has not kept pace' with growing numbers in crisis, New Zealand Herald, May 2022

In July 2022 Health Minister Andrew Little acknowledged that waiting times at emergency departments were only getting longer.¹²⁷

The following excerpt from the He Ara Oranga is lengthy but deserving of inclusion with little abridgement. In 4 years since, the pressure appears only to have built.

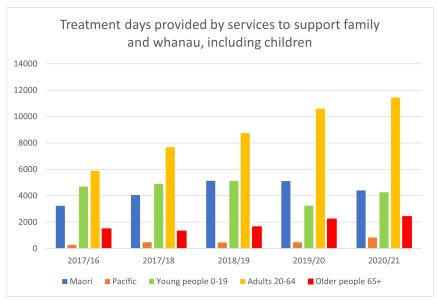
"We heard of a tidal wave of increased referrals to Child and Adolescent Mental Health Services and Behaviour Support Teams, which make it difficult to respond to the early signs of mental distress. Childhood trauma was reported to be a major issue... Sadly in New Zealand childhood exposure to maltreatment and relational trauma is extremely common and along with poverty can most often be found in the narratives of children diagnose[d] with mental health conditions. As a nation it is imperative that we increase our awareness and understanding of childhood trauma and its bio-psychosocial impact as a critical factor in determining child and family functioning and dysfunction. Paediatricians and other professionals working with children and young people described a 'patch-up' mentality in state-funded services, with pressure to record 'outcomes' in terms of case closures. In their view, complex health, developmental and familial challenges meant that engagement throughout a child's early life course, from the womb to early adulthood, is necessary. People said a short-term fix mentality is inappropriate and harmful, and that what is required is an opportunity to resource a long-term, consistent engagement and create a trusting and respectful relationship between a child or young person, their family, and a therapeutic team. Continuity of care is important, but it can be disrupted by setting a rigid age limit that requires moving to an adult service. We also heard about high levels of concern about the impact of poverty, student debt and deprivation on children and young people and about their regular exposure to alcohol and other drug abuse, violence (against themselves or between adults in the household), not having enough food and a warm home, and family turmoil (for example, frequent changes of address leading to disrupted schooling and opportunities for socialisation)."128

Support for at-risk family and whanau of patients

The litany of misery continued:

"Many people expressed anger at the inadequacy of mental health services to act on early indications of suicidality and despair at the ongoing ripple effects of such traumatic loss on families, whānau and friends. Workers reinforced the message that our current responses are inadequate. They said that despite the complexity of the causes of suicidality, we can do better to prevent suicide and support family and friends through the aftermath of suicide, when they are at increased risk themselves." ¹²⁹

The following statistics depict 'Support for family/whanau' and 'Children of Parents with Mental Illness and Addictions' combined. Adult support is trending up whereas for young people aged 0-19 support is tending down:



Data source: Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022

What next?

The overwhelming response to the crisis described is heightened demand from the public and health workers for more treatment resources and greater expenditure.

Emphasis has seemingly and subtly shifted from prevention to containment. The dominant role the state plays in public health is broadly unquestioned therefore the state must hold the answer.

As such, little analysis has been undertaken to examine how public policy may have *contributed* to mental ill-health amongst the young.

Perhaps the state is not the solution. Perhaps it is part of the problem.

In July 2022 Sir Peter Gluckman said, "It's all very well to say we need more psychologists or counsellors – and don't get me wrong, we need them for the kids who are falling off the cliff, of course we do – but we've got to stop people getting to the edge of the cliff. There's not really much thinking going on in New Zealand about preventative mental health for young people. And that's a much more complex and yet more urgent issue."¹³⁰

An emerging question

In 2017 three psychologists from Otago posed a new question:

"Why has increased provision of psychiatric treatment not reduced the prevalence of mental disorder?" ¹³¹

Their lead question was followed by more such as, "...if our treatments work shouldn't we have fewer people presenting in crisis, less people on a disability benefit due to mental illness, a reduction in community measures of psychological distress and a decrease in the suicide rate? ... despite access to costly biomedical treatment, something central to recovery appears to be missing in the social fabric of developed countries." ¹³²

The paradox is not peculiar to New Zealand.

The authors reflected on the scope for prevention through "risk factor modification" but also suggested,

"We need to, at the least, consider whether our current mental health systems might be causing unintentional harm in some areas. It is possible that in order to achieve better outcomes, we need to do less, not more." 133

Over reliance on medication?

Less of what? In 2007 the MOH explored a possible connection between certain antidepressants, and suicide and self-harm. The New Zealand findings were not conclusive but, "... comparable with similar studies reported in the international literature that indicate a slight increase in suicidality for patients taking antidepressants in early treatment for most of the medications, particular for children and adolescents. However, we emphasize that depression and certain other serious psychiatric disorders are themselves the most important causes of suicide – not the drug treatments."¹³⁴

The paper nevertheless urged follow-up by doctors in the early prescribing phase.

The Best Practice Advisory Centre (BPACnz) states: "Active follow-up is important for all patients presenting with distress or depression. Put a plan for review in place, e.g. a phone call from the practice nurse after 24–48 hours and a follow-up appointment in one to two weeks to assess their symptoms." ¹³⁵

In an environment where resources are stretched so thin the ideal practice may be impractical or impossible.

BPACnz also cautions: "Patients who are initiated on an antidepressant at the first consultation may attribute the improvement in their symptoms to the medicine, when it is likely that they would have improved anyway." ¹³⁶

In his youth suicide paper of 2017 Professor Gluckman was more emphatic: "The use of anti-depressant pharmaceuticals appears to be no more effective than CBT [cognitive behavioural therapy] in preventing suicide. Indeed, some antidepressant therapy appears to be associated with greater risks of suicide than using CBT; in general, the use of all anti-depressant therapies requires an appropriate safety plan."¹³⁷

There is an additional school of thought:

"...if people are encouraged to rely heavily on ADM [antidepressant medication] only, and if they consequently reduce spontaneous self-help activity, that the benefits of the ADM may be more than offset by reductions in beneficial effects as a consequence of reduced self-help activity." ¹³⁸

In other words, patients may be less inclined to attend to exercise, diet and avoidance of stress factors in the belief the ADM will 'cure' their illness. This might happen disproportionately when and where patients cannot afford other forms of therapy such as counselling. People in more economically deprived areas may, "have lower coping resources by virtue of educational, status or social capital variables, also greater income stress and other social determinants of depression." ¹³⁹

Reliance on ADM will only be further encouraged by a scarcity of non-pharmaceutical interventions as is currently the case in New Zealand. Regarding the large increase in antipsychotic dispensings to young people, the Mental Health and Addiction Service Monitoring Report 2022 noted the likelihood that, "these increases have resulted from increased stress from COVID-19 and a lack of non-medical treatment alternatives." 140

In Australia, "In many socioeconomically disadvantaged, regional or remote areas, depressed people are more likely to get GP care than specialist, interdisciplinary or multidisciplinary care. Busy GPs in such areas, even if skilled and committed, may not themselves be able to add substantial psychological treatment to ADM prescription while psychology referral may not be available. Pharmaceutical marketing to GPs and medicalised public information both will influence the patient-doctor interaction."¹⁴¹

Compounding all of the above, as medication becomes more prevalent and normalised, more young people – or parents on behalf of children - may consult a physician with a singular expectation of receiving a prescription.

Academics in the field of psychiatry made the following assertion:

"Our interventions should encourage, not replace or subvert, autonomy, independence and active coping." ¹⁴²

Similar counsel could apply in other spheres. Advocates and lawmakers should also consider if well-intended social and educational interventions undermine 'autonomy, independence and active coping.'

An over-reliance on antidepressants is comparable perhaps to a wider societal dependence on historic non-medical quick fix 'solutions' notable in family law for instance.

Historic non-medical quick fix solutions

When Peter Gluckman described the background to youth suicide in New Zealand, he led with family structure:

"The way that young people live their lives has changed greatly over recent decades and this has created a range of poorly understood but probably critical pressures that affect their psyche and behaviour. Family structure has changed; childrearing practices have changed; for many, the level of parental engagement has changed." ¹⁴³

It is the family environment that most heavily influences early development. Early experiences bed in for better or for worse. Most mental health disorders emerge during adolescence.¹⁴⁴ A brief summary of familial change - noting the role played by the state at certain junctures - follows.

Family Structure

Sixty years ago, the average family size peaked at 4.3 children per couple. Offspring experienced high levels of stability. Overwhelmingly parents were married. In 1961, 95.5 percent of children were born to married couples¹⁴⁵; by 2022 the proportion had fallen to 51 percent.¹⁴⁶ Equity between household incomes was greater. ¹⁴⁷Internationally New Zealanders enjoyed a comparatively high standard of living.

But discontent rumbled. Feminism was a wave gathering in velocity and volume across the developed world. A New Zealand woman described the process of discovering feminist writing as, "providing a theory and an explanation for the vague feelings of alienation and dissatisfaction..." ¹⁴⁸

Women's rights crystallised: the right to keep a child out of wedlock; to leave a marriage with property; to state assistance to raise a child alone; to free contraception and ease of access to abortion, etc. Many demands appeared reasonable.

For instance, feminists attacked the practice of adoption which peaked at around 4,000 in the early 1970s. Couched in highly emotional terms, who could argue for a new-born to be ripped out of his mothers' arms? Mothers won the inalienable right to keep their child with support from the state. Today adoption is rare. Abuse and neglect of children by their biological mothers is not.¹⁴⁹

As escalating demands were progressively met, a shift was occurring. Fathers were increasingly replaceable and redundant and as such, children's rights to material and emotional security were diminishing. At each step it was government that ceded to demands which had become more mainstream over time.

The late eighties and early nineties were also years of economic upheaval and uncertainty here and abroad. Unemployment reached 10.3 percent in 1992.¹⁵⁰ Many families experienced considerable economic stress. Jobless fathers either failed to form or were rejected from family units. Male suicide peaked during the latter part of the 1990s.

Broadly speaking, while the economy and employment eventually recovered (bar the GFC 2008-11) the family unit did not. By 2018 single parents made up 24.5 percent (131,829) of families with dependent children under 18.¹⁵¹ In 2020 sole parents had the greatest material hardship rates of all households with children.¹⁵²

Maternal hardship and maternal depression are strongly associated. Cross sectional analysis of the GUiNZ data at 9 months showed mothers without a partner at the time of the interview were:

- more likely to be in material hardship.
- more likely to have depression or anxiety¹⁵³

2014

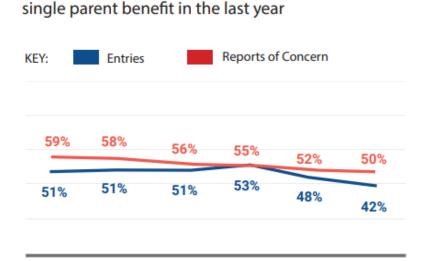
2015

Specifically, "Mothers experiencing high levels of material hardship were 4.8 times more likely to have moderate to severe anxiety compared with mothers with no material hardship. Similarly, mothers experiencing high levels of material hardship were 4 times more likely to have a moderate/high probability of depression compared with mothers with no material hardship. As the level of material hardship increased, the likelihood of poor maternal mental health increased significantly." ¹⁵⁴

As shown previously maternal depression can have negative consequences for children's mental health (P19).

Children known to Oranga Tamariki are a particularly vulnerable group often traumatised by experiencing and/or witnessing family violence, and exposure to drug use. Half of those children entering state care in 2019, and 42 percent of those whose child received a report of concern, had a single parent on a benefit.

Proportion where parent was on



Source: Complexity of Tamariki Interacting with Oranga Tamariki: Reports of Concern compared to Entries to care

2017

2018

2019

2016

Sole parents often re-partner. In 2018, GUiNZ data revealed high levels of change in family structure, even pre-birth. A key finding was, "1095 (17.3%) of mothers were categorised as having experienced 1-4 relationship transitions from pregnancy to the 4.5-year interview." Relationship transitions were characterised as, "...the count of the entrances and exits by biological parents, romantic partners, or spouses."

Participants assessed, "...ranged from 6,853 at the antenatal interview to 6,156 at the 4.5-year interview," producing an attrition rate of ten percent. Later analysis of the lost cohort showed those mothers were more likely to be Māori and single, and included the comment that, "those children who were lost to attrition likely represented those who would have also reported lower levels of cognitive and socio-emotional development." 156

Other researchers have described the GUiNZ data as not population representative because "overall population births in New Zealand in 2009 comprised of 29% Māori which compares with 13% Māori in the GUiNZ sample." ¹⁵⁷

These caveats are included to stress that the incidence of 1 in 6 children (17.3% of mothers) experiencing maternal relationship transitions before they were five years old must be considered a bare minimum across the population. This is highly relevant when considering:

"Children raised in families that had experienced relationship transition(s) also reported higher externalising and internalising behaviour, and lower prosocial behaviour ... In usual psychological usage, 'externalising' behaviours refer to expressions of anger such as fighting, yelling at others, and destruction of property, whereas internalising behaviour refers to inward expressions of dysfunction such as anxious and depressive symptoms." ¹⁵⁸

Today family structure is far more fluid. Diversity of families is embraced. But for too many children the 'new normal' is no nirvana.

Whereas marriage was once broadly valued, today it is out of favour. Politically anyway, despite a 2009 headline which announced: "Marriage good news for mental health, though separation and divorce have negative impacts." ¹⁵⁹

It arose from a wide-ranging study out of the University of Otago, Wellington - a first in exploring the mental health outcomes of marriage by gender:

"One of the more important findings is that in recent years it has been asserted that marriage is better for men than for women in terms of mental health. This study does not agree with that position.

"We found that compared to never getting married, getting married is good for both men and women in terms of most mental health disorders."

However,

"What our study points to is that the marital relationship offers a lot of mental health benefits for both men and women, and that the distress and disruption associated with ending marriage can make people vulnerable to developing mental disorders".

Which prompts the question: should law changes have made it easier for people to divorce?

Views will vary. While conceding an overall negative impact for society many still want the freedom to choose in their own personal situation. But the correlation between divorce law liberalisation and divorce incidence is strong. As divorce is a significant contributor to mental ill-health again the state has played an unhelpful role in exacerbating unhappiness in adults *and their children*.

According to United States Professor of Sociology Paul Amato, "The consistency of research findings across settings suggests that the link between divorce and child problems is a general phenomenon..." These include, "...academic failure, conduct disorders, depression, low self-esteem, and difficulties in peer relationships..."

That is not to ignore, "many children in two-parent families are exposed to stressful circumstances that have negative consequences, including poverty, chronic marital discord, domestic violence, inept parenting, substance abuse, and parents' mental illness. Indeed, several studies show that children living with parents who are chronically hostile or violent are better off, in the long run, if their parents divorce." ¹¹⁶⁰

Alternatively, it may also have been better if acrimonious couples had never gotten together and produced children in the first place. But statutory financial support post-separation has made relationships easier to enter and exit. Commitment is dispensable.

Amato reminds us that it is the children who, "are the innocent victims of their parents' inability to maintain a harmonious and stable home."¹⁶¹

As an American, Amato finds solutions to these problems more obvious. Promotion of marriage before and after the event; education in expectations and professional help to resolve conflict; and failing the avoidance of separation, enhancing the ability of parents to maintain good relationships with their estranged children – for instance he suggests automatic shared custody.

Default shared parenting by law has been rejected in New Zealand and regard for the institution of marriage is foundering. In response to a suggestion that the trend away from marriage significantly increased child poverty the Prime Minister flippantly wrote, "...here it was, the silver bullet we have all been looking for. Marriage. Getting hitched. Tying the knot. It turns out that we didn't need an Expert Advisory Group on child poverty, or any OECD analysis for that matter - apparently all we really need is a pastor and a party." ¹⁶²

Parental engagement

The prior section broadly describes an increasing lack of father engagement in children's lives. Maternal absence is less common. Reduced parental engagement occurs at another level though.

Modern parents - often unavoidably - put their very young children in care in order to work. The state encourages this with subsidies despite the desirability of early childhood care remaining contentious.

In 1998 a Calgary University meta-analysis of 101 studies published between 1957 and 1995 found:

"Children in full time daycare as compared to their counterparts in home care, are at increased risk for negative psychological outcomes in four domains: 1) cognitive (7% over baseline), 2) social-emotional (8% over baseline), 3) behavioral (14% over baseline), and 4) attachment to mother (19% over baseline). A number of variables such as quality of daycare, mother's education, family socioeconomic status, and caregivers education, have no impact on moderating the negative outcomes... Accordingly, full-time nonmaternal care for infants and young children is contraindicated, as this would put a substantial proportion of the population at risk for psychological maladaptation." ¹⁶³

In 2019 the Auckland University of Technology (AUT) prepared a paper for MSD which asked, 'Is participation in Early Childhood Education related to child health and development?' 164

It reported numerous studies (American, British, Australian) which found the larger the quantity of time spent in non-maternal care, the greater negative effects were. Of particular relevance, "A Swiss study has also found that the accumulation of time in group-based childcare specifically was associated with greater externalising (aggression, ADHD symptoms, non-aggressive externalising behaviours) and internalising (depression, anxiety) behaviours at 7 years."

AUT noted however, "The Christchurch Health and Development Study found that ECE participation over time was not significantly associated with behavioural outcomes in childhood and adolescence once sociodemographic factors, child-rearing practices and child characteristics were accounted for."

Analysing GUiNZ data AUT then concluded, "...more time in ECE per week was inversely associated with the development of emotional difficulties and peer problems."

This finding is not particularly robust.

Social, emotional and behavioural difficulties (via SDQ) were measured at 24 months. Children in full-time maternal care rated the highest level of 'abnormal' difficulties at 21.2 percent. Children in centre-based care recorded only 13.9 percent.

But the highest levels of abnormal difficulties also occurred in unemployed mothers (22.8%) and benefit recipient mothers (36.9%) – the group most likely to be parenting full-time.

The paper's authors acknowledge, "parents who are employed are more likely to need, afford, and use ECE; this tendency will 'select' a particular group of children, many of whom may have different behavioural and health profiles to the converse group."

Furthermore, in describing the limitations of the paper:

"It is possible that the positive association between child behaviour and ECE is in part due to children with behavioural difficulties being excluded from ECE (reverse causation). Unlike primary school, there is no requirement for early childhood education services to take children who have conduct or peer problems. It is also possible that parents with full time childcare responsibilities of two-year children may rate their behaviour as worse than the parents of children in childcare, because they see them all the time (so may be more aware of their behaviour) and also due to the increased stress of parenting fulltime... Given limitations in the data collection noted elsewhere, it is not possible to determine why attendance appears to protect against emotional difficulties and peer problems, and hence why this finding contrasts with previous research." 165

Adolescent years

As children move into their secondary school years the immediate influence of the family lessens as that of peers' increases. But the early formative experiences are embedded.

Thanks to the Youth 2000 series there is good evidence about the behaviours and emotional life of teens. Since 1999 the survey series has included more than 36,000 individuals. In 2019 over 7,000 young people from a range of circumstances were interviewed. A sample of NEET individuals (not in education, employment, or training) and a group in alternative education were included. Various findings arise from the data. Analysis found:

"... large reductions in substance use (e.g. prevalence of past-month binge drinking declined from 41.5% to 21.8%), sexual experience (31.6% to 20.6%) and past-month risky driving (58.8% to 37.1%). However, from 2012–2019 there were rapid increases in symptoms of depression (13.0% to 22.8%; RADS-SF), suicide thoughts (15.3% to 20.8%) and suicide attempts (3.9% to 6.3%) and declines in emotional wellbeing (76.0% to 69.1%; WHO-5)." WHO-5."

Despite a decline over time, "...levels of adolescent binge drinking remain high by international standards and disparities in tobacco and cannabis use by ethnicity and socioeconomic status are wide."

A direct link between substance use and youth suicide was then considered:

"Because New Zealand has the highest rate of teenage suicide in the OECD, the links between substance use and suicidal behaviour deserve specific attention. Heavy substance use and suicidal behaviour are both 'externalising' behaviours (i.e. they can be ways of expressing distress) with similar underlying risk factors, so it is unsurprising they are associated. However,

there is growing evidence of a causal relationship, with the case strongest for alcohol."¹⁶⁸

But what drives excessive use in some young?

"Risk of substance-related harm is greater in young people who use substances in response to previous or current adverse life experiences, as the dosage and frequency of use tend to be higher in this group." ¹⁶⁹

Experience of 'previous' adverse life experiences – or ACEs – have been measured in the GUINZ cohort and are reported on page 19. Of that cohort 2.6% had experienced 4 or more ACEs by the time they were four and a half; six percent had experienced three or more. The experiences continue to accumulate with age.

Coming full circle, the next finding recalls this paper's opening section about fetal risks:

"Problematic substance use can have intergenerational consequences, since in-utero exposure and parenting affected by substance use may have lifelong physical and psychological consequences for the next generation." ¹⁷⁰

Sadly, the use of substances to ameliorate mental anguish only intensifies the problem:

"Young people may turn to substance use as a coping mechanism but unfortunately it tends to compound psycho-social and mental health problems, rather than alleviating them. The physiological effects of alcohol can cause or exacerbate depression, while nicotine and other stimulants can lead to anxiety and mood disorders. The behavioural aspects of substance use can result in relationship difficulties, disciplinary issues at school, and contact with the justice system. There are also bi-directional associations between substance use and sleep disturbance in young people, with inadequate sleep impacting on health and functioning. Young people can find themselves in a vicious circle of life difficulties leading to heavy substance use, which in turn leads to further life difficulties and mental health issues." 1771

The conundrum presented by the recorded *decline* of substance use and *increase* in mental ill health leads to the following theory:

"The prevalence of clinically significant symptoms of depression among secondary school students approximately doubled between 2012 and 2019 but was not accompanied by an increase in teen suicide overall, or among rangatahi Māori. As discussed above, substance use and suicidal behaviour may be causally linked, with evidence strongest for alcohol. Therefore, lower levels of substance use (particularly binge drinking) may have helped to keep youth suicide rates relatively stable in the face of substantial increases in adolescent mental health problems." 172

This apparent divergence of trends is important and will be revisited in the conclusion of this paper.

Absenteeism

Submitters to a 2022 parliamentary inquiry into worsening school attendance noted that poor mental well-being created another vicious cycle.

"Submitters identified anxiety as a large cause of non-attendance. Some submitters believed the rise in non-attendance is in part driven by students taking mental-health days. Students may get in stuck in a cycle where they skip school due to anxiety, which only serves to worsen their anxiety."

773

Mental health issues in the home were also identified as a cause of chronic absenteeism. At March 2022, 5,277 beneficiaries with a primary incapacity of a psychological or psychiatric condition had children in their care – up twenty percent on 2014.¹⁷⁴

It was also noted by the committee that truancy services had been evaluated back in 2009 due to the "prevalence of mental health issues in students."

In respect of covid the report commented, "Students' wellbeing is suffering due to heightened anxiety and stress. Families are wary of sending children to school." It has also been observed by principals that some parents condone absenteeism¹⁷⁵ and covid had only compounded a failure to ensure their child's attendance which had been declining since 2015. ¹⁷⁶

In response to the inquiry the Associate Minister of Education set new targets for attendance. For example, "Increase the number of students attending school regularly from 60% in 2021 to 70% in 2024." Many believed the targets were pathetically low. By implication, the state's standards were unambitious and yet a further failing of New Zealand's young.

A postgraduate who had attended school in South Auckland questioned the leaving age which was raised to 16 in 1989 (another well-intentioned policy that may have gone awry). As an advocate for Pacific achievement she said her school had aimed for 90 percent attendance but, "compulsory schooling isn't for some learners. Instead, supporting them in alternative learning environments or employment opportunities where they can flourish was the best option." 179

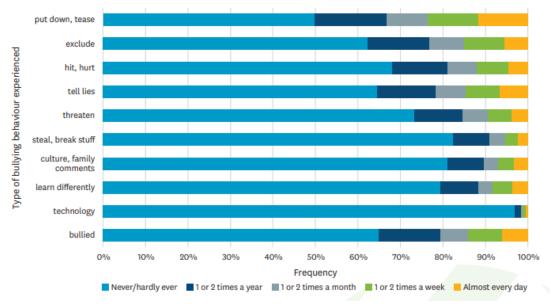
Bullying

Bullying also occurs at a high rate in New Zealand. The Programme for International Student Assessment (PISA) 2018 data for 36 countries found New Zealand (6,173 students) had the highest percentage of 'frequently bullied students' (15%), tied second for experience of 'any type of bullying act' (32%), and 'other students left me out of things on purpose' (14%) and led in experience of, 'Other students made fun of me' (23%). ¹⁸⁰

The PISA data pertains to 15-year-olds. Echoing these findings in younger students, the recent Now We Are Eight GUiNZ report noted, "The extensive Trends in International Mathematics and Science Study (TIMS) of over more than 312,000 ten-year-olds showed that 16% of students internationally reported weekly bullying. However, findings from the New Zealand Year 5 students in the study (n=6,321) showed that 24% reported weekly bullying. These findings placed New Zealand at the bottom of similar OECD nations."¹⁸¹

Gluckman's report confirms, "Bullying in schools occurs in many countries to varying degrees but the reported rates are high in New Zealand. The effects of bullying on social and emotional well-being are well documented: increased anxiety and depression, and more aggression and antisocial behaviour; all of these are also linked to poor educational outcomes." ¹⁸²

Just under 5,000 eight-year-olds answered questions about the range of bullying they'd experienced and lastly, if they felt they were bullied, producing the following results:



Source: Now we are eight: Life in middle childhood, Growing Up in New Zealand, MSD, 2020

Large numbers of children were experiencing bullying behaviours 'almost every day'. It appears over 200 were hit or hurt almost every day.

Bullying was also highlighted during the parliamentary inquiry into causes of school absenteeism. 183

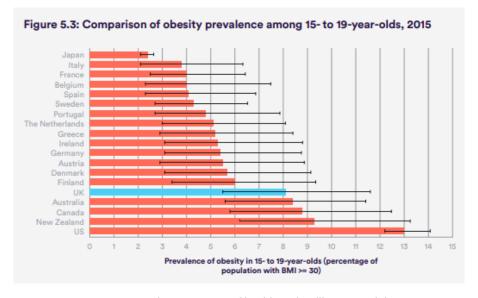
While bullying is nothing new, the opportunities to engage in it have increased with the advent of social media. The ability to film acts of bullying encourage it further. The dissemination of footage creates more victims by proxy.

An OECD paper describes how, "digital technologies and social media are exacerbating feelings of anxiety and depression, disturbing sleep patterns, leading to cyber-bullying and distorting body image." ¹⁸⁴

Body image

According to UNICEF, "How adolescents feel about their bodies has an impact on their well-being. A positive body image is linked to greater self-confidence. A negative body image can lead to shame, anxiety, depression, isolation and low self-confidence." 185

In 2016 New Zealand had the second highest rate of youth (15-19 years) obesity among comparable countries.



Source: International comparisons of health and wellbeing in adolescence and early adulthood, 2019 (95% confidence intervals displayed.)

In 2020/21 12.7 percent of 2–14-year-olds were obese. This is up from 11.1% in 2012/13 and 8.4% in 2006/07. 187

Child obesity differs significantly by ethnicity, with 35.3% of Pacific and 17.8% of Māori obese, followed by 10.3% of European/Other and 6.6% of Asian children.

Body dissatisfaction can lead to the development of eating disorders (though is not a sole factor). The peak onset of eating disorders is during adolescence.¹⁸⁸

1,185 under 20-year-olds accessed mental health services for eating disorders in 2020/21 and 9 percent were male.¹⁸⁹ Over 2009-11, only 20.75 per 100,000 young Māori aged 0-24 accessed services for eating disorders compared to 108.89 non-Māori, non-Pacific of the same age.¹⁹⁰Obesity among Māori and Pacific young may pose more of a physical health risk than mental.

These stats are of course only a count of those able to access help in the public system. Data obtained by Stuff showed the Auckland DHB waitlist for first appointment at their eating disorder clinic was 61 days while, "In Christchurch, the average wait time was 114 days, and in Wellington it was 80 days for a first appointment."¹⁹¹

Given eating disorders can be life-threatening and rate amongst the most dangerous of mental disorders (if not the most dangerous) these wait times seem extraordinary.

A meta-analysis of 42 mortality estimation studies found: "The aggregate annual mortality rate associated with anorexia nervosa is more than 12 times higher than the annual death rate due to all causes of death for females 15-24 years old in the general population (0.00045 deaths per year) and more than 200 times greater than the suicide rate in the general population (0.00002 suicides per year)." ¹⁹²

Eating disorders are on the rise. Internationally,

"Despite the complexity of integrating all ED prevalence data, the most recent studies confirm that EDs are highly prevalent worldwide, especially in women. Moreover, the weighted means of point ED prevalence increased over the study period from 3.5% for the 2000–2006 period to 7.8% for the 2013–2018 period. This highlights a real challenge for public health and healthcare providers." ¹⁹³

This is reflected domestically:

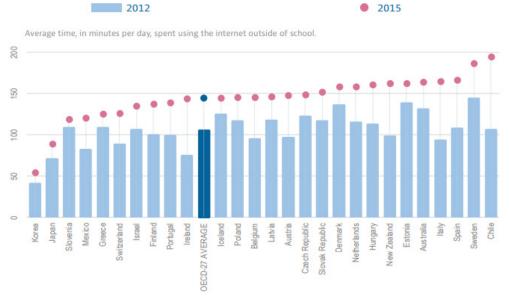
Public referrals in Aotearoa have risen 65% in the past five years, and private clinics are seeing more than twice as many patients as they did before the pandemic. 194

Again, the advent of social media has only heightened the risk with the OECD commenting, "Studies indicate that social media usage is associated with body image concerns among young men and women as well as linked to disordered eating." ¹⁹⁵

Social Media

In 2015 New Zealand children's use of the internet rated relatively high in international terms.

Average time, in minutes per day, spent using the internet outside of school



Source: Children & Young People's Mental Health in the Digital Age, Shaping the future, OECD, 2018

Around 160 minutes is an average.

A consensus is forming that either very low or very high internet use leads to heightened depression and anxiety.¹⁹⁶

Researchers using the Youth 2000 surveys, linking data and contextualising internationally wrote:

"...levels of social media and smartphone use are not uniformly associated with increased mental distress among individuals, a finding repeatedly reported in large-scale studies and analyses. Factors related to internet use for some users, rather than use in itself, may be key here. These include experiences of cyber bullying, negative social comparisons and reduced face-to-face time with family and peers." 197

The type of social media in use and the characteristics of the user matter. According to most studies the axiom 'everything in moderation' certainly applies to internet use. An OECD PISA study found moderate users (1-2 hours per day) had the highest life satisfaction scores and, "A large-scale study of adolescents in England has also found a little bit of online activity was associated with higher levels of wellbeing than no screen time at all." 198

Studies that have established a link between mental problems and social media find, "the direction of the association remains unclear – that is, whether social media is contributing to elevated symptoms or social media is utilised more by those with anxiety and depression." ¹⁹⁹

This confirms the earlier assertion that the user's characteristics have more bearing on a potential negative effect than the usage itself.

New Zealand researchers reflecting on whether the recent decrease in smoking and drinking among adolescents was associated with less time spent physically socialising found, "Rather than having a protective effect, there is consistent individual-level evidence that heavy internet users (particularly social media users) are more likely to drink and smoke than those less active online."²⁰⁰

PISA 2018 insights included, "As is the case internationally, in New Zealand sense of belonging at school has been in decline. This may be related to increasingly high levels of social media use."²⁰¹

Young people suffering from anxiety will often fixate on 'what if' and worry about matters far off

in the future. Today's world presents them with ample material to fret over. But past generations have faced equally frightening doomsday scenarios. The difference now is a highly connected world in which youth are constantly exposed to media-generated hysteria and unprecedented peer pressure to respond in a conformist fashion. This is compounded by the willingness of educators to engage the very young in debates and ideas that might be best avoided until students possess the maturity to think more critically about them.

Conclusion

Unquestionably a mental health crisis is occurring among New Zealand's young. The evidence is stark. It cannot be resolved with medication alone and there is no prospect of other therapies meeting demand any time soon.

A reversal of this upward surge demands a wider appraisal and acknowledgement of societal changes that have lessened the likelihood that children will experience material and emotional security and stability throughout their formative years.

Just as antidepressants may represent no more than a quick-fix – or even worsen the problem - so too have decades-long interventions weakened families and the resilience of their members. Many families are fractured as are their children.

Reflecting on the risk of harm associated with substance use by those who've experienced childhood adversity and/or marginalisation, Youth 2000 researchers commended the basics for "psychosocial and physical wellbeing" as "love, safety, a secure home, food on the table, freedom from discrimination and support to overcome life's challenges."²⁰²

But even those conditions do not unequivocally ensure mental well-being.

Prompted by a UNICEF report, two questions were posed at the outset of this paper. Why does New Zealand lead the developed world in mental distress among the young, and why is the problem growing?

It appears there are two New Zealand stories occurring simultaneously.

Firstly, the development of mental disorders due to *in utero* trauma and exposure to substances followed by chaotic lives characterised by transience and family violence affect probably (and conservatively) 3 - 4 percent of all children. These experiences are by no means confined to Māori children but their over-representation in youth suicide, substance abuse, schizophrenia, experience of maternal depression and parental imprisonment is long-standing. In 1983 the rate of first admission to a psychiatric hospital for Māori aged 10-19 was 168 per 100,000 compared to 102 for non-Māori.²⁰³

It is probably optimistic to assess this group as shrinking or even static given growth in gangs²⁰⁴, family harm²⁰⁵ and Oranga Tamariki's own 2019 findings: "Across all case study sites, Family Start workers and managers ... have been working with more high needs whānau/families. This includes those affected by insecure and inadequate housing, family violence, alcohol and drug addictions including methamphetamine, mental health issues including high rates of anxiety, incarceration, intergenerational exposure to Oranga Tamariki, immigrant and refugee whānau (some of whom have past trauma) and more whānau in crisis."²⁰⁶

Indigenous people in Australia, Canada, and the United States also experience poorer mental

health than non-Indigenous.²⁰⁷As a percentage of the total population, New Zealand's indigenous (16.5%) exceeds others: Australia (3.3%) Canada (4.9%) and the United States (2%). Thus, the *potential* for poorer mental health in New Zealand is greater.

The *existence* of poorer mental health among the young is supported by the available statistics. New Zealand leads the developed world in youth suicide, youth self-harm and bullying. But the statistics that are not available also suggest a strongly negative picture. Those lost to longitudinal studies overwhelmingly comprise the very population of concern. PISA surveys cannot capture the chronically absent.

The second scenario is of a more pervasive depression and anxiety problem exacerbated less by mayhem and material deprivation, and more by recent developments such as social media-driven poor self-image, heightened sensitivity to parental and/or peer pressure, fear of failure²⁰⁸, climate change anxiety²⁰⁹ and confusion over sexual and gender identity. The second group may also be dealing with separated parents, torn loyalties, school and home-life upheaval and adapting to stepsiblings. These stresses are occurring in similar countries. According to Gluckman, "The real pandemic that is emerging is this pandemic of loss of subjective wellbeing in that critical stage of life, adolescence, which is affecting 25 to 40 per cent of Western populations." ²¹⁰

The surprisingly shallow socio-economic gradient for the incidence of diagnosed mental disorders also points to differing pathways to illness. Compared to the least deprived neighbourhoods, disorders are only one and a half times more common in the most deprived. (Further research would seek to establish if disorder types correlate by quintile.)

There will doubtless be overlapping characteristics between the two groups but the second is expanding faster than the first.

The first group enjoys very little positive parental control at any age whereas the second may struggle under intense parental protectiveness and expectation, especially as one child families become more common.

In both groups though, it is parents who hold the key – not governments. Enduring change begins at an individual level. If children were genuinely placed at the centre of the family, given time, given unconditional love, given space to explore but surety to return to ... there may still be no guarantees. But the odds of that child growing into a secure and stable individual will massively increase.

Bibliography

A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf

A Love Letter to The Women's Bookshop, from Deborah Shepard, October 2017 https://booksellersnz.wordpress.com/2017/10/26/a-love-letter-to-the-womens-bookshop-from-deborah-shepard/

A Meta-Analysis of Maternal Prenatal Depression and Anxiety on Child Socioemotional Development, Sheri Madigan, Hannah Oatley, Nicole Racine, R M Pasco Fearon, Lea Schumacher, Emis Akbari, Jessica E Cooke, George M Tarabulsy, September 2018 https://pubmed.ncbi.nlm.nih.gov/30196868/

A Meta-Analysis of Published Research on the Psychological Effects of Nonmaternal Care on Child Development: Social Policy Implications Claudio Violato, PhD and Clare Russell, PhD University of Calgary, 1998 https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.513.5592&rep=rep1&type=pdf

ACEs and Cultural Considerations in Aotearoa New Zealand, Eileen Joy and Liz Beddoe, University of Auckland, Policy Briefing, 1/2021 https://cdn.auckland.ac.nz/assets/auckland/arts/our-research/research-institutes-centres-groups/ppi/policy-briefings/ppi-briefing-joy-and-beddoe.pdf

ACEs and mental health outcomes, Adverse Childhood Experiences, Julia L.Sheffler, Ian Stanley, Natalie Sachs-Ericsson, 2020, https://www.sciencedirect.com/science/article/pii/B9780128160657000045

Adolescent non-suicidal self-injury in Aotearoa New Zealand Today, Marc S.Wilson, Jessica Garisch, Robyn Lisa Langlands and Lynne Russell, January 2015

https://www.researchgate.net/publication/322927783_Adolescent_non-suicidal_self-injury_in_Aotearoa_New_Zealand

Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019 https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf

Adverse childhood experiences in New Zealand and subsequent victimization in adulthood: Findings from a population-based study, Janet Fanslow, Ladan Hashemi, Pauline Gulliver, Tracey McIntosh, April 2021 https://pubmed.ncbi.nlm.nih.gov/33878644/

Alcohol and mental health: a review of evidence, with a particular focus on New Zealand, Dr Linda Cobiac, Professor Nick Wilson, Otago University, May 2018

Annual provisional suicide statistics for deaths reported to the Coroner between 1 July 2007 and 30 June 2020 https://coronialservices.justice.govt.nz/assets/Documents/Publications/2020-Annual-Provisional-Suicide-Statistics.pdf

Annual Report 2020/21, New Zealand Police

https://www.police.govt.nz/sites/default/files/publications/annual-report-2020-2021.pdf

Anxiolytics, sedatives, and hypnotics, Drugs.com

https://www.drugs.com/drug-class/anxiolytics-sedatives-and-hypnotics.html

Assessing service use for mental health by Indigenous populations in Australia, Canada, New Zealand and the United States of America: a rapid review of population surveys, Cecily McIntyre, Meredith G. Harris, Amanda J. Baxter, Stuart Leske, Sandra Diminic, Joseph P. Gone, Ernest Hunter & Harvey Whiteford, August 2017

https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-017-0233-5

Association of material hardship with maternal and child outcomes, Technical report of cross-sectional analysis of nine-month data from Growing Up in New Zealand cohort –2018. MSD

https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/material-hardship-maternal-and-child-outcomes/material-hardship-maternal-and-child-outcomes.docx

Attendance targets set to get Kiwi kids back in class, Hon Jan Tinetti, June 2022 https://www.beehive.govt.nz/release/attendance-targets-set-get-kiwi-kids-back-class

Basics about FASDs, Centers for Disease Control and Prevention, United States

 $\frac{\text{https://www.cdc.gov/ncbddd/fasd/facts.html\#:} \sim \text{text=In\%20addition\%2C\%20to\%20be\%20diagnosed,alcoholic\%20drinks\%20in\%20one\%20sitting.}$

Before we are born, Growing Up in New Zealand, 2010

https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/report01.pdf

Census 2018, NZ.Stat

CHIEF CORONER RELEASES ANNUAL SUICIDE STATISTICS, LAUNCHES NEW WEB TOOL WITH MINISTRY OF HEALTH, October 2021 https://coronialservices.justice.govt.nz/assets/Uploads/Chief-Coroner-releases-annual-suicide-statistics-launches-new-web-tool-with-Ministry-of-Health2.pdf

Child Poverty & Family Structure: What is the evidence telling us? Family First, 2016 https://familyfirst.org.nz/wp-content/uploads/2016/05/Child-Poverty-and-Family-Structure-FULL-REPORT-1.pdf

Children & Young People's Mental Health in the Digital Age, Shaping the future, OECD, 2018 https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf

Children's mental health services are 'in crisis': Health Minister Andrew Little, New Zealand Herald, May 30, 2022 https://www.nzherald.co.nz/nz/childrens-mental-health-services-are-in-crisis-health-minister-andrew-little/2M2GZDYMX5THRWJ3S3PZPAMVEI/

Climate change anxiety, Health Navigator New Zealand https://www.healthnavigator.org.nz/health-a-z/c/climate-change-anxiety/

Complexity of Tamariki Interacting with Oranga Tamariki: Reports of Concern compared to Entries to care, May 2022 https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Complexity-of-Tamariki-Interacting-with-Oranga-Tamariki-Oranga-

Depression or Distress? Examining SSRI prescribing in primary care, BPACnz https://bpac.org.nz/2019/ssri.aspx

Distorted reflections: Eating disorders rise as experts warn of overlooked crisis, Sophie Harris, Stuff, Jun 05, 2022 https://www.stuff.co.nz/national/health/300597502/distorted-reflections-eating-disorders-rise-as-experts-warn-of-overlooked-crisis

EVALUATION OF THE FAMILY START PROGRAMME, Report on the findings of the process evaluation, April 2020 https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Family-Start/Evaluation-of-the-Family-Start-programme.pdf

FactCheck Q&A: do eating disorders have the highest mortality rate of all mental illnesses? October 10, 2016, Updated: February 28, 2019 https://theconversation.com/factcheck-qanda-do-eating-disorders-have-the-highest-mortality-rate-of-all-mental-illnesses-66495

Fetal alcohol spectrum disorder, Ministry of Health

 $\frac{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder}{\text{https://www.health.govt.nz/our-work/diseases-$

Gang numbers have nearly doubled in five years, Police say, Bernadette Basagre, Stuff, Dec 02, 2021 https://www.stuff.co.nz/national/crime/300464553/gang-numbers-have-nearly-doubled-in-five-years-police-say

Going to your head, PHARMAC's analysis of data on psychiatric medicines prescribed in New Zealand, 2017 Edition https://pharmac.govt.nz/assets/going-to-your-head-psychiatric-medicines-use-2017.pdf

He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018 https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf

Health officials say funding of child mental health services 'has not kept pace' with growing numbers in crisis, New Zealand Herald, May 2022 https://www.nzherald.co.nz/nz/health-officials-say-funding-of-child-mental-health-services-has-not-kept-pace-with-growing-numbers-in-crisis/NZJSK7XKDL56HM4SHZKPT6VNYI/

Health Navigator New Zealand https://www.healthnavigator.org.nz/

How does methadone affect unborn babies? University of Auckland, October 2020 https://www.auckland.ac.nz/en/news/2020/10/20/Unborn-kids-exposed-to-methadone.html

Infoshare, Statistics New Zealand https://infoshare.stats.govt.nz/

Innocenti Report Card 16, Worlds of Influence, Understanding What Shapes Child Well-being in Rich Countries, UNICEF, 2020 https://www.unicef-irc.org/publications/pdf/Report-Card-16-Worlds-of-Influence-child-wellbeing.pdf

Inquiry into school attendance, Report of the Education and Workforce Committee, Fifty-third Parliament, March 2022, Presented to the House of Representatives

https://www.parliament.nz/resource/en-NZ/SCR_121164/92dac6fd9a9ea51f7aff84e523dfaaeefd6ca168

International comparisons of health and wellbeing in adolescence and early adulthood, Nuffield Trust, United Kingdom, 2019 https://www.nuffieldtrust.org.uk/research/international-comparisons-of-health-and-wellbeing-in-adolescence-and-early-adulthood

Is participation in Early Childhood Education related to child health and development? A report submitted to the Ministry of Social Development – Children and Families Research Fund – June 2019, AUT

https://msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/participation-in-ece/ece-participation-and-development.pdf

Life During Lockdown: Findings from the GUiNZ survey MSD, May 2020 $\,$

 $\underline{https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/research/covid-wellbeing-survey/index.html}$

Live births by nuptiality (Maori and total population) (Annual-Mar), Infoshare, Statistics New Zealand https://infoshare.stats.govt.nz/

Lobby group report ignores the realities, Jacinda Ardern, Sunday Star Times, 5 June, 2016

Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022 https://www.tandfonline.com/doi/full/10.1080/03036758.2022.2060266

Marriage good news for mental health, but separation and divorce have negative impacts, University of Otago, Wellington, December 2009 https://www.otago.ac.nz/news/news/otago006366.html

Measures to improve mental health of sole parent benefit recipients to improve employment outcomes, June 2010 https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research-archive/improve-mental-health-of-sole-parent-benefit-recepient.pdf

Medication dispensing for attention-deficit/hyperactivity disorder to New Zealand youth, Stephanie D'Souza, Nicholas Bowden, Sheree Gibb, Nichola Shackleton, Richard Audas, Sarah Hetrick, Barry Taylor, Barry Milne, September 2020 https://pubmed.ncbi.nlm.nih.gov/32994619/

Mental Health, Alcohol and Drug Addiction Sector Performance Monitoring and Improvement, Performance Measures <a href="https://nsfl.health.govt.nz/accountability/performance-and-monitoring/data-quarterly-reports-and-reporting/mental-health-alcohol-leadth-alcoho

Mental Health and Addiction: Service Use web tool https://minhealthnz.shinyapps.io/mental-health-and-addiction-web-tool/

Mental Health and Addiction Year in Review For the financial year 1 July 2020 – 30 June 2021 https://www.health.govt.nz/system/files/documents/publications/moh-mental-health-and-addiction-year-in-review-web.pdf

Mental Health in Aotearoa 2018 Mental Health Monitor and the 2018/19 New Zealand Health Survey https://www.hpa.org.nz/sites/default/files/Mental_Health_Aotearoa_Insight_2020.pdf

Mental Health in New Zealand from a Public Health Perspective, Ministry of Health, 1997 https://www.moh.govt.nz/notebook/nbbooks.nsf/0/193C70FED3C2D6BE4C2565D700188CAC/\$file/chap16.pdf

Mental Health Literacy: New Zealand Adolescents' Knowledge of Depression, Schizophrenia and Help-Seeking, Nimesha Tissera and Tatiana Tairi, 2020, Massey University, New Zealand https://www.psychology.org.nz/application/files/5815/9538/4269/Tissera_and_Tairi_14-21.pdf

Methamphetamine and care: What we know to date, Oranga Tamariki, July 2020

 $\underline{\text{https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Methamphetamine-and-care/Methamphetamine-and-Care.pdf}$

Methamphetamine in New Zealand: A snapshot of recent trends, Parliamentary Service, March 2021 https://www.parliament.nz/media/7832/methamphetamine_in_new-zealand_-a_snapshot_of_recent_trends.pdf

Mixed progress in adolescent health and wellbeing in Aotearoa New Zealand 2001–2019: a population overview from the Youth2000 survey series, Theresa Fleming, Jude Ball, Lynda Bavin, Claudia Rivera-Rodriguez, Roshini Peiris-John, Sue Crengle, May 2022 https://www.tandfonline.com/doi/full/10.1080/03036758.2022.2072349

Ministry of Social Development OIA response to L Mitchell, 15 July 2022

Ministry of Social Development OIA response to L Mitchell, 10 August 2022

New school attendance targets a hit and miss, 'ALAPASITA TEU, Maxim Institute, June 2022 https://www.maxim.org.nz/article/new-school-attendance-targets-a-hit-and-miss/

New Zealand Health Survey 2020/21, Annual Data Explorer

https://minhealthnz.shinyapps.io/nz-health-survey-2020-21-annual-data-explorer/_w_276f7237/#!/

New Zealand Health Survey Annual update of key findings 2012/13

 $\underline{https://www.moh.govt.nz/NoteBook/nbbooks.nsf/0/C5E688F85B4C4165CC2582A9006DB410/\$file/new-zealand-health-survey-annual-update-2012-13-dec13-v3.pdf}$

New Zealand Yearbook 1990

New Zealand Yearbook 1996

Northland's truancy issue - what's keeping our kids from going to school? NZ Herald, 3 May 2022

 $\frac{https://www.nzherald.co.nz/northern-advocate/news/northlands-truancy-issue-whats-keeping-our-kids-from-going-to-school/VPI6FDR4GZFAYZJ4HYA5WGC55E/$

Now We Are Eight: Life in middle childhood, Growing Up in New Zealand, MSD, 2020

 $\underline{https://www.growingup.co.nz/sites/growingup.co.nz/files/documents/GUINZ_Now_We_Are_8_ONLINE.pdf$

Now We Are Four: Describing the preschool years, Growing Up in New Zealand, Superu, 2017

 $\underline{https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/Report07_Now\%20we\%20are\%20four\%20report.pdf}$

Number of Pharmaceutical scripts for selected therapeutic groups, 2019/20

https://fyi.org.nz/request/13604-intentional-self-harm-hospitalisations-in-new-zealand

NZ ranked near bottom of Unicef child wellbeing report of 41 countries, Spin-off, Alice Webb-Liddall, September 2020 https://thespinoff.co.nz/society/03-09-2020/nz-ranked-fourth-worst-in-unicef-child-wellbeing-report-of-41-countries

Obesity statistics, New Zealand Health Survey, Ministry of Health https://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/obesity-statistics

Office of the Director of Mental Health and Addictions Services, 2020 Regulatory Report https://www.health.govt.nz/system/files/documents/publications/office_of_the_director_of_mental_health_and_addiction_services_-2020_regulatory_report_final_v2.pdf

PARENTING THROUGH FAMILY TRANSITIONS, Paul R. Amato, Professor of Sociology, Demography, and Family Studies, Pennsylvania State University, December 2004

https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj23/23-pages31-44.pdf

Patterns of Antidepressant Drug Prescribing and Intentional Self-harm Outcomes in New Zealand: An ecological study Public Health Intelligence Occasional Bulletin No. 43, Ministry of Health, 2007

https://www.health.govt.nz/system/files/documents/publications/patterns-antidepressant-drug-prescribing-v1.pdf

Persistence and change in behavioural problems during early childhood, Stephanie D'Souza, Lisa Underwood, Elizabeth R. Peterson, Susan M. B. Morton, and Karen E. Waldie, BMC Paediatrics, July 2019 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6659228/

PISA 2018: New Zealand students' wellbeing - School climate & student mindsets of 15-year-olds, Education Counts https://www.educationcounts.govt.nz/publications/series/PISA/pisa-2018/pisa-2018-student-wellbeing

PISA 2018 Results (Volume III): What School Life Means for Students' Lives, Chapter 2, Bullying https://www.oecd-ilibrary.org/sites/cd52fb72-en/index.html?itemId=/content/component/cd52fb72-en#fig6

Poipoia te kākano kia puawai, Family structure, family change and the wellbeing of tamariki Māori, JULY 2020 https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/family-structure-change-and-the-wellbeing-of-tamariki-maori.pdf

Prenatal determinants of depressive symptoms in childhood: Evidence from Growing Up in New Zealand, Gisela Theunissena, Stephanie D'Souza, Elizabeth R.Peterson, Caroline Walker, Susan M.B.Morton, Karen E Waldie, Journal of Affective Disorders, April, 2022 https://www.sciencedirect.com/science/article/abs/pii/S0165032722000878?via%3Dihub

Prevalence of antidepressant use and unmedicated depression in pregnant New Zealand women, Charlotte A Svardal, Karen Waldie, Barry Milne, Susan MB Morton and Stephanie D'Souza, 2021

https://growingup.co.nz/sites/growingup.co.nz/files/2021-07/ANZIP published.pdf

Prevalence of eating disorders over the 2000–2018 period: a systematic literature review, Marie Galmiche, Pierre Déchelotte, Grégory Lambert, Marie Pierre Tavolacci, April 2019

https://academic.oup.com/ajcn/article/109/5/1402/5480601

Protective factors of children and families at highest risk of adverse childhood experiences: An analysis of children and families in the Growing up in New Zealand data who "beat the odds", MSD/AUT, April 2019

https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund/report-protective-factors-aces-april-2019-final.pdf

Psychosocial characteristics and poly-drug use of pregnant women enrolled in methadone maintenance treatment, Davie-Gray, A., Moor, S., Spencer, C., & Woodward, L. J. (2013) https://psycnet.apa.org/record/2013-25576-008

Publicly funded hospital discharges with an intentional self-harm external cause code, 2019/20 https://fyi.org.nz/request/13604-intentional-self-harm-hospitalisations-in-new-zealand

RELATIONSHIPS AND FAMILIES IN CONTEMPORARY NEW ZEALAND, Law Commission, 2017 https://www.lawcom.govt.nz/sites/default/files/projectAvailableFormats/Study%20Paper%20-%20FINAL_0.pdf

Relationships and sexuality education (RSE) in primary schools, February 2022 https://theeducationhub.org.nz/relationships-and-sexuality-education-rse-in-primary-schools/

Resolving the paradox of increased mental health expenditure and stable prevalence, Graham N Meadows, Ante Prodan, Scott Patten, Frances Shawyer, Sarah Francis, Joanne Enticott, Sebastian Rosenberg, Jo-An Atkinson, Ellie Fossey, Ritsuko Kakuma, September 2019 https://www.monash.edu/_data/assets/pdf_file/0004/1808626/Resolving-the-paradox-of-increased-mental-health-expenditure-and-stable-prevalence-ANZJP-in-press-2019.pdf

School principal warns of 'horrendous' consequences for New Zealand amid truancy crisis, Newshub, June 6, 2022 https://www.newshub.co.nz/home/politics/2022/06/school-principal-warns-of-horrendous-consequences-for-new-zealand-amid-truancy-crisis.html

Sir Peter Gluckman warns of 'overwhelming' new pandemic of mental health problems in children and teens, NZ Herald, July 2022 https://www.nzherald.co.nz/nz/sir-peter-gluckman-warns-of-overwhelming-new-pandemic-of-mental-health-problems-in-children-and-teens/QPQZVBACBOGBBZLKQPRUDB2CBQ/

Social, Emotional and Behavioural Difficulties in New Zealand Children: New Zealand Health Survey, Ministry of Health, June 2018 https://www.health.govt.nz/publication/social-emotional-and-behavioural-difficulties-new-zealand-children-new-zealand-health-survey

Social, Emotional and Behavioural Difficulties in New Zealand Children, Technical Report, Ministry of Health, 2018 https://www.health.govt.nz/system/files/documents/publications/social-emotional-behavioural-difficulties-nz-children-technical-report-may18.pdf

Social impacts and costs of schizophrenia: a national cohort study using New Zealand linked administrative data, Sheree Gibb, Naomi Brewer, Nicholas Bowden, NZMJ, June 2021

https://assets-global.website-files.com/5e332a62c703f653182faf47/60d3d6d0277e27e93260f7f0_5057%20-%20final.pdf

Sole parenting in New Zealand: An update on key trends and what helps reduce disadvantage, MSD, 2010 https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/sole-parenting/sole-parenting-in-nz-an-update-on-key-trends-and-what-helps-reduce-disadvantage.pdf

Suicide Facts: Deaths and intentional self-harm hospitalisations 2013, Ministry of Health https://www.health.govt.nz/publication/suicide-facts-deaths-and-intentional-self-harm-hospitalisations-2013

Suicide webtool, Chief Coroner/Ministry of Health https://minhealthnz.shinyapps.io/suicide-web-tool/

Taranaki children and young people are struggling to access mental health services, Helen Harvey, Stuff, April 23, 2022 https://www.stuff.co.nz/taranaki-daily-news/news/128415429/taranaki-children-and-young-people-are-struggling-to-access-mental-health-services

Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022 https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf

Te Ohonga Ake, The Determinants of Health for Māori Children and Young People in New Zealand, MOH, February 2013 https://www.tdhb.org.nz/misc/documents/2014-The-Determinants-Health-Maori-Children-Young-People-NZ.pdf

The empty nest is refilled: The joys and tribulations of raising grandchildren in Aotearoa, Gordon Liz (2016), Auckland: Grandparents Raising Grandchildren Trust (NZ)

https://www.grg.org.nz/site/grg/The%20empty%20nest%20is%20refilled%20-%20Research%20Report.pdf

The feasibility of using predictive risk modelling to identify new-born children who are high priority for preventive services - companion technical report, MSD, February 2014

https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/predictive-modelling/00-feasibility-study-report-technical-companion.pdf

THE IMPACT OF MATERNAL DEPRESSION IN YOUNG CHILDREN A. D.COX, C. PUCKERING, A. POUND and M. MILLS, 1987 https://www.researchgate.net/profile/Christine-Puckering/publication/19719335_The_Impact_of_Maternal_Depression_on_Young_Children/links/5799dfa008aedca4efb911b5/The-Impact-of-Maternal-Depression-on-Young-Children.pdf

The influences of social connectedness on behaviour in young children: A longitudinal investigation using GUiNZ data, December 2018 https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/influences-of-social-connectedness-on-behaviour-in-young-children.pdf

The material wellbeing of New Zealand households: trends and relativities using non-income measures, with international comparisons, Prepared by Bryan Perry, Ministry of Social Development, Wellington, November 2021 https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/monitoring/household-income-report/2021/non-incomes-report-2021.docx

Upfront: Infant mental health and child protection, Best Practice Journal, 2011 https://bpac.org.nz/bpi/2011/october/upfront.aspx

Vulnerability Report 1: Exploring the Definition of Vulnerability for Children in their First 1000 Days, Growing Up in New Zealand, University of Auckland, 2014

https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/report04.pdf

'We see the data, we see the challenges' - Little defends health system, RNZ, 17 July 2022 https://www.rnz.co.nz/news/national/471114/we-see-the-data-we-see-the-challenges-little-defends-health-system

Why has increased provision of psychiatric treatment not reduced the prevalence of mental disorder? Mulder, R., Rucklidge, J., & Wilkinson, S. (2017). Australian and New Zealand Journal of Psychiatry

https://www.researchgate.net/profile/Julia-Rucklidge/publication/319287348_Why_has_increased_provision_of_psychiatric_treatment_not_reduced_the_prevalence_of_mental_disorder/links/59f43646a6fdcc075ec36513/Why-has-increased-provision-of-psychiatric-treatment-not-reduced-the-prevalence-of-mental-disorder.pdf

Young people who have been involved with Oranga Tamariki: Mental and physical health and healthcare access, Fleming, T., Archer, D., Sutcliffe, K., Dewhirst, M., & Clark, T.C. (2021), The Youth19 Research Group, The University of Auckland and Victoria University of Wellington, New Zealand

https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Youth19-Rangatahi-Smart-Survey/Youth19-young-people-involved-with-Oranga-Tamaki_mental-physical-health-and-healthcare-access.pdf Young women 'vast majority' of rising self-harm incidents in New Zealand, The Guardian, Nov 2019

Young women 'vast majority' of rising self-harm incidents in New Zealand, The Guardian, Nov 2019 https://www.theguardian.com/society/2019/nov/06/young-women-vast-majority-of-rising-self-harm-incidents-in-new-zealand

Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, 2017 https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf

Endnotes

- 1 Innocenti Report Card 16, Worlds of Influence, Understanding What Shapes Child Well-being in Rich Countries, UNICEF, 2020, https://www.unicef-irc.org/publications/pdf/Report-Card-16-Worlds-of-Influence-child-wellbeing.pdf
- 2 Annual provisional suicide statistics for deaths reported to the Coroner between 1 July 2007 and 30 June 2020, https://coronialservices.justice.govt.nz/assets/Documents/Publications/2020-Annual-Provisional-Suicide-Statistics.pdf
- 3 Mental Health Literacy: New Zealand Adolescents' Knowledge of Depression, Schizophrenia and Help-Seeking, Nimesha Tissera and Tatiana Tairi, 2020, Massey University, New Zealand, https://www.psychology.org.nz/application/files/5815/9538/4269/Tissera_and_Tairi 14-21.pdf
- 4 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, 26 July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf
- 5 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 6 Methamphetamine and care: What we know to date, Oranga Tamariki, July 2020, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Methamphetamine-and-care/Methamphetamine-and-Care.pdf
- 7 The empty nest is refilled: The joys and tribulations of raising grandchildren in Aotearoa, Gordon Liz (2016), Auckland: Grandparents Raising Grandchildren Trust (NZ), https://www.grg.org.nz/site/grg/The%20empty%20nest%20is%20refilled%20-%20Research%20 Report.pdf
- 8 Now We Are Four: Describing the preschool years, Growing Up in New Zealand, Superu, 2017, https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/Report07_Now%20we%20are%20four%20report.pdf
- 9 New Zealand Health Survey 2020/21, Annual Data Explorer, https://minhealthnz.shinyapps.io/nz-health-survey-2020-21-annual-data-explorer/
- 10 ACEs and mental health outcomes, Adverse Childhood Experiences, Julia L.Sheffler, Ian Stanley, Natalie Sachs-Ericsson, 2020, https://www.sciencedirect.com/science/article/pii/B9780128160657000045
- 11 Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf
- 12 Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf
- 13 THE IMPACT OF MATERNAL DEPRESSION IN YOUNG CHILDREN A. D.COX, C. PUCKERING, A. POUND and M. MILLS, 1987, https://www.researchgate.net/profile/Christine-Puckering/publication/19719335_The_Impact_of_Maternal_Depression_on_Young_Children/links/5799dfa008aedca4efb911b5/The-Impact-of-Maternal-Depression-on-Young-Children.pdf
- 14 Vulnerability Report 1: Exploring the Definition of Vulnerability for Children in their First 1000 Days, Growing Up in New Zealand, University of Auckland, 2014, https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/report04.pdf
- 15 New Zealand Health Survey 2020/21, Annual Data Explorer, Indicator: Mental health
- 16 Mental Health, Alcohol and Drug Addiction Sector Performance Monitoring and Improvement, Performance Measures, https://nsfl. health.govt.nz/system/files/documents/pages/copy_of_pp6mh01_dashboard_apr20_to_mar21.xlsm
- 17 Te Ohonga Ake, The Determinants of Health for Māori Children and Young People in New Zealand, MOH, February 2013, https://www.tdhb.org.nz/misc/documents/2014-The-Determinants-Health-Maori-Children-Young-People-NZ.pdf
- 18 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 19 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 20 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 21 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 22 Health officials say funding of child mental health services 'has not kept pace' with growing numbers in crisis, New Zealand Herald, May 2022, https://www.nzherald.co.nz/nz/health-officials-say-funding-of-child-mental-health-services-has-not-kept-pace-with-growing-numbers-in-crisis/NZ|SK7XKDL56HM4SHZKPT6VNYI/
- 23 Children's mental health services are 'in crisis': Health Minister Andrew Little, New Zealand Herald, May 30, 2022, https://www.nzherald.co.nz/nz/childrens-mental-health-services-are-in-crisis-health-minister-andrew-little/2M2GZDYMX5THRWJ3S3PZPAMVEI/
- 24 Why has increased provision of psychiatric treatment not reduced the prevalence of mental disorder? Mulder, R., Rucklidge, J., & Wilkinson, S. (2017). Australian and New Zealand Journal of Psychiatry, https://www.researchgate.net/profile/Julia-Rucklidge/publication/319287348_Why_has_increased_provision_of_psychiatric_treatment_not_reduced_the_prevalence_of_mental_disorder/links/59f43646a6fdcc075ec36513/Why-has-increased-provision-of-psychiatric-treatment-not-reduced-the-prevalence-of-mental-disorder.pdf

- 25 Resolving the paradox of increased mental health expenditure and stable prevalence, Graham N Meadows, Ante Prodan, Scott Patten, Frances Shawyer, Sarah Francis, Joanne Enticott, Sebastian Rosenberg, Jo-An Atkinson, Ellie Fossey, Ritsuko Kakuma, September 2019, https://www.monash.edu/_data/assets/pdf_file/0004/1808626/Resolving-the-paradox-of-increased-mental-health-expenditure-and-stable-prevalence-ANZ|P-in-press-2019.pdf
- 26 Association of material hardship with maternal and child outcomes, Technical report of cross-sectional analysis of nine-month data from Growing Up in New Zealand cohort –2018, MSD, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/material-hardship-maternal-and-child-outcomes/material-hardship-maternal-and-child-outcomes.docx
- 27 The influences of social connectedness on behaviour in young children: A longitudinal investigation using GUiNZ data, Paul E. Jose, Jaimee Stuart, Jan Pryor, and Nicole Ja, December 2018, Ministry of Social Development/Victoria University, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/influences-of-social-connectedness-on-behaviour-in-young-children.pdf
- 28 The influences of social connectedness on behaviour in young children: A longitudinal investigation using GUiNZ data, Paul E. Jose, Jaimee Stuart, Jan Pryor, and Nicole Ja, December 2018, Ministry of Social Development/Victoria University, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/influences-of-social-connectedness-on-behaviour-in-young-children.pdf
- 29 Is participation in Early Childhood Education related to child health and development? A report submitted to the Ministry of Social Development Children and Families Research Fund June 2019, AUT, https://msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/participation-in-ece/ece-participation-and-development.pdf
- 30 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266
- 31 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758 2022 2060266
- 32 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266
- 33 Inquiry into school attendance, Report of the Education and Workforce Committee, Fifty-third Parliament, March 2022, Presented to the House of Representatives, https://www.parliament.nz/resource/en-NZ/SCR_121164/92dac6fd9a9ea51f7aff84e523dfaaeefd6ca168
- 34 Ministry of Social Development OIA response to L Mitchell, 15 July 2022
- 35 PISA 2018 Results (Volume III): What School Life Means for Students' Lives, Chapter 2, Bullying, https://www.oecd-ilibrary.org/sites/cd52fb72-en/index.html?itemId=/content/component/cd52fb72-en#fig6
- 36 Mental Health and Addiction: Service Use web tool, MOH, https://minhealthnz.shinyapps.io/mental-health-and-addiction-web-tool/
- 37 Distorted reflections: Eating disorders rise as experts warn of overlooked crisis, Sophie Harris, Stuff, Jun 05 2022, https://www.stuff.co.nz/national/health/300597502/distorted-reflections-eating-disorders-rise-as-experts-warn-of-overlooked-crisis
- 38 Children & Young People's Mental Health in the Digital Age, Shaping the future, OECD, 2018, https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf
- 39 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf
- 40 New Zealand Yearbook 1990
- 41 Gang numbers have nearly doubled in five years, Police say, Bernadette Basagre, Stuff, Dec 02 2021, https://www.stuff.co.nz/national/crime/300464553/gang-numbers-have-nearly-doubled-in-five-years-police-say
- 42 Annual Report 2020/21, New Zealand Police, https://www.police.govt.nz/sites/default/files/publications/annual-report-2020-2021.pdf
- 43 EVALUATION OF THE FAMILY START PROGRAMME, Report on the findings of the process evaluation, April 2020, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Family-Start/Evaluation-of-the-Family-Start-programme.pdf
- 44 Assessing service use for mental health by Indigenous populations in Australia, Canada, New Zealand and the United States of America: a rapid review of population surveys, Cecily McIntyre, Meredith G. Harris, Amanda J. Baxter, Stuart Leske, Sandra Diminic, Joseph P. Gone, Ernest Hunter & Harvey Whiteford, August 2017, https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-017-0233-5
- 45 PISA 2018: New Zealand students' wellbeing School climate & student mindsets of 15-year-olds, Education Counts, https://www.educationcounts.govt.nz/publications/series/PISA/pisa-2018/pisa-2018-student-wellbeing
- $46\ Climate\ change\ anxiety,\ Health\ Navigator\ New\ Zealand,\ https://www.healthnavigator.org.nz/health-a-z/c/climate-change-anxiety/dealth-a-z/c/climate-change-anxiety/$
- 47 Sir Peter Gluckman warns of 'overwhelming' new pandemic of mental health problems in children and teens, July 2022, NZ Herald, https://www.nzherald.co.nz/nz/sir-peter-gluckman-warns-of-overwhelming-new-pandemic-of-mental-health-problems-in-children-and-teens/QPQZVBACBOGBBZLKQPRUDB2CBQ/
- 48 The fine print attached to the UNICEF chart reads, "data were only available for two of these three years in New Zealand."
- 49 NZ ranked near bottom of UNICEF child wellbeing report of 41 countries, Spin-off, Alice Webb-Liddall, September 2020, https://thespinoff.co.nz/society/03-09-2020/nz-ranked-fourth-worst-in-unicef-child-wellbeing-report-of-41-countries
- 50 Annual provisional suicide statistics for deaths reported to the Coroner between 1 July 2007 and 30 June 2020, https://coronialservices.justice.govt.nz/assets/Documents/Publications/2020-Annual-Provisional-Suicide-Statistics.pdf

- 51 CHIEF CORONER RELEASES ANNUAL SUICIDE STATISTICS, LAUNCHES NEW WEB TOOL WITH MINISTRY OF HEALTH, October 2021, https://coronialservices.justice.govt.nz/assets/Uploads/Chief-Coroner-releases-annual-suicide-statistics-launches-new-web-tool-with-Ministry-of-Health2.pdf
- 52 Young people who have been involved with Oranga Tamariki: Mental and physical health and healthcare access, Fleming, T., Archer, D., Sutcliffe, K., Dewhirst, M., & Clark, T.C. (2021), The Youth19 Research Group, The University of Auckland and Victoria University of Wellington, New Zealand, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Youth19-Rangatahi-Smart-Survey/Youth19_young-people-involved-with-Oranga-Tamaki_mental-physical-health-and-healthcare-access.pdf
- 53 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 54 Suicide Facts: Deaths and intentional self-harm hospitalisations 2013, Ministry of Health, https://www.health.govt.nz/publication/suicide-facts-deaths-and-intentional-self-harm-hospitalisations-2013
- 55 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 56 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, 26 July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf
- 57 Young women 'vast majority' of rising self-harm incidents in New Zealand, The Guardian, Nov 2019, https://www.theguardian.com/society/2019/nov/06/young-women-vast-majority-of-rising-self-harm-incidents-in-new-zealand
- 58 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 59 Alcohol and mental health: a review of evidence, with a particular focus on New Zealand, Dr Linda Cobiac, Professor Nick Wilson, Otago University, May 2018, https://www.ahw.org.nz/Portals/5/Resources/Submissions/2018/Alcohol%20Healthwatch%20Alcohol%20 and%20mental%20health%202018.pdf
- 60 Fetal alcohol spectrum disorder, Ministry of Health, https://www.health.govt.nz/our-work/diseases-and-conditions/fetal-alcohol-spectrum-disorder#:~:text=There%20is%20no%20data%20on,each%20year%20in%20New%20Zealand.
- 61 Before we are born, Growing Up in New Zealand, 2010, https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/report01.pdf
- 62 Basics about FASDs, Centers for Disease Control and Prevention, United States, https://www.cdc.gov/ncbddd/fasd/facts. html#:~:text=In%20addition%2C%20to%20be%20diagnosed,alcoholic%20drinks%20in%20one%20sitting.
- 63 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 64 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 65 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 66 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 67 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 68 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 69 Methamphetamine in New Zealand: A snapshot of recent trends, March 2021, Parliamentary Service, https://www.parliament.nz/media/7832/methamphetamine in new-zealand -a snapshot of recent trends.pdf
- 70 Methamphetamine and care: What we know to date, Oranga Tamariki, July 2020, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Methamphetamine-and-care/Methamphetamine-and-Care.pdf
- 71 EVALUATION OF THE FAMILY START PROGRAMME, Report on the findings of the process evaluation, April 2020, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Family-Start/Evaluation-of-the-Family-Start-programme.pdf
- 72 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf

- 73 Psychosocial characteristics and poly-drug use of pregnant women enrolled in methadone maintenance treatment, Davie-Gray, A., Moor, S., Spencer, C., & Woodward, L. J. (2013), https://psycnet.apa.org/record/2013-25576-008
- 74 How does methadone affect unborn babies? University of Auckland, October 2020, https://www.auckland.ac.nz/en/news/2020/10/20/Unborn-kids-exposed-to-methadone.html
- 75 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 76 Upfront: Infant mental health and child protection, Best Practice Journal, 2011, https://bpac.org.nz/bpj/2011/october/upfront.aspx
- 77 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 78 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 79 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 80 Prenatal determinants of depressive symptoms in childhood: Evidence from Growing Up in New Zealand, Gisela Theunissena, Stephanie D'Souza, Elizabeth R.Peterson, Caroline Walker, Susan M.B.Morton, Karen E Waldie, Journal of Affective Disorders, April 2022, https://www.sciencedirect.com/science/article/abs/pii/S0165032722000878?via%3Dihub
- 81 A Meta-Analysis of Maternal Prenatal Depression and Anxiety on Child Socioemotional Development, Sheri Madigan, Hannah Oatley, Nicole Racine, R M Pasco Fearon, Lea Schumacher, Emis Akbari, Jessica E Cooke, George M Tarabulsy, September 2018, https://pubmed.ncbi.nlm.nih.gov/30196868/
- 82 A Better Start, E Tipu e Rea, Brief Evidence Reviews for the Well Child Tamariki Ora Programme Report submitted to MoH on 11 December 2019, Parental alcohol, cannabis, methamphetamine, and opioid use during pregnancy, Sarah E Maessen, Trecia Wouldes, https://www.health.govt.nz/system/files/documents/publications/wcto-domain-5-parental-alcohol-cannabis-methamphetamine-and-opioid-use-during-pregnancy.pdf
- 83 Ministry of Social Development OIA response to L Mitchell, 10 August 2022
- 84 Methamphetamine and care: What we know to date, Oranga Tamariki, July 2020, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Methamphetamine-and-care/Methamphetamine-and-Care.pdf
- 85 Complexity of Tamariki Interacting with Oranga Tamariki: Reports of Concern compared to Entries to care, May 2022, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Complexity-of-Tamariki-Interacting-with-Oranga-Tamariki-Reports-of-Concern-Compared-to-Entries-to-Care/Complexity-of-Tamariki-Interacting-with-Oranga-Tamariki6-05-2022.pdf
- 86 The empty nest is refilled: The joys and tribulations of raising grandchildren in Aotearoa, Gordon Liz (2016), Auckland: Grandparents Raising Grandchildren Trust (NZ), https://www.grg.org.nz/site/grg/The%20empty%20nest%20is%20refilled%20-%20Research%20 Report.pdf
- 87 New Zealand Health survey, Ministry of Health, NZ Health Survey 2020/21, Annual Data Explorer, Topic: Mental health
- 88 Social, Emotional and Behavioural Difficulties in New Zealand Children: New Zealand Health Survey, Ministry of Health, June 2018, https://www.health.govt.nz/publication/social-emotional-and-behavioural-difficulties-new-zealand-children-new-zealand-health-survey
- 89 Social, Emotional and Behavioural Difficulties in New Zealand Children, Technical Report, Ministry of Health, 2018, https://www.health.govt.nz/system/files/documents/publications/social-emotional-behavioural-difficulties-nz-children-technical-report-may18.pdf
- 90 Persistence and change in behavioural problems during early childhood, Stephanie D'Souza, Lisa Underwood, Elizabeth R. Peterson, Susan M. B. Morton, and Karen E. Waldie, BMC Paediatrics, July 2019, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6659228/
- 91 Now We Are Four: Describing the preschool years, Growing Up in New Zealand, Superu, 2017, https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/Report07_Now%20we%20are%20four%20report.pdf
- 92 Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf
- 93 ACEs and mental health outcomes, Adverse Childhood Experiences, Julia L.Sheffler, Ian Stanley, Natalie Sachs-Ericsson, 2020, https://www.sciencedirect.com/science/article/pii/B9780128160657000045
- 94 Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf
- 95 Adverse childhood experiences in New Zealand and subsequent victimization in adulthood: Findings from a population-based study, Janet Fanslow, Ladan Hashemi, Pauline Gulliver, Tracey McIntosh, April 2021, https://pubmed.ncbi.nlm.nih.gov/33878644/
- 96 Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf

- 97 Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf
- 98 Adverse childhood experiences and school readiness outcomes, Results from the Growing up in New Zealand study, April 2019, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-adverse-childhood-experiences-and-school-readiness-outcomes-april-2019-final.pdf
- 99 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf
- 100 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf
- 101 Now We Are Four: Describing the preschool years, Growing Up in New Zealand, Superu, 2017, https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/Report07 Now%20we%20are%20four%20report.pdf
- 102 THE IMPACT OF MATERNAL DEPRESSION IN YOUNG CHILDREN A. D.COX, C. PUCKERING, A. POUND and M. MILLS, 1987, https://www.researchgate.net/profile/Christine-Puckering/publication/19719335_The_Impact_of_Maternal_Depression_on_Young_Children/links/5799dfa008aedca4efb911b5/The-Impact-of-Maternal-Depression-on-Young-Children.pdf
- 103 THE IMPACT OF MATERNAL DEPRESSION IN YOUNG CHILDREN A. D.COX, C. PUCKERING, A. POUND and M. MILLS, 1987, https://www.researchgate.net/profile/Christine-Puckering/publication/19719335_The_Impact_of_Maternal_Depression_on_Young_Children/links/5799dfa008aedca4efb911b5/The-Impact-of-Maternal-Depression-on-Young-Children.pdf
- 104 Vulnerability Report 1: Exploring the Definition of Vulnerability for Children in their First 1000 Days, Growing Up in New Zealand, University of Auckland, 2014, https://www.growingup.co.nz/sites/growingup.co.nz/files/2019-10/report04.pdf
- 105 Measures to improve mental health of sole parent benefit recipients to improve employment outcomes, June 2010, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research-archive/improve-mental-health-of-sole-parent-benefit-recepient.pdf
- 106 Prevalence of antidepressant use and unmedicated depression in pregnant New Zealand women, Charlotte A Svardal, Karen Waldie, Barry Milne, Susan MB Morton and Stephanie D'Souza, 2021, https://growingup.co.nz/sites/growingup.co.nz/files/2021-07/ANZJP_published.pdf
- 107 Mental Health, Alcohol and Drug Addiction Sector Performance Monitoring and Improvement, Performance Measures, https://nsfl. health.govt.nz/system/files/documents/pages/copy_of_pp6mh01_dashboard_apr20_to_mar21.xlsm
- 108 Social impacts and costs of schizophrenia: a national cohort study using New Zealand linked administrative data, Sheree Gibb, Naomi Brewer, Nicholas Bowden, NZMJ, June 2021, https://assets-global.website-files.com/5e332a62c703f653182faf47/60d3d6d0277e27e93260f7f0 5057%20-%20final.pdf
- 109 Te Ohonga Ake, The Determinants of Health for Māori Children and Young People in New Zealand, MOH, February 2013, https://www.tdhb.org.nz/misc/documents/2014-The-Determinants-Health-Maori-Children-Young-People-NZ.pdf
- 110 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 111 Health Navigator New Zealand, https://www.healthnavigator.org.nz/
- 112 Infoshare, Statistics New Zealand, Population Estimates
- 113 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 114 Anxiolytics, sedatives, and hypnotics, Drugs.com, https://www.drugs.com/drug-class/anxiolytics-sedatives-and-hypnotics.html
- 115 Number of Pharmaceutical scripts for selected therapeutic groups, 2019/20, https://fyi.org.nz/request/13604-intentional-self-harm-hospitalisations-in-new-zealand
- 116 Health Navigator New Zealand, https://www.healthnavigator.org.nz/
- 117 Medication dispensing for attention-deficit/hyperactivity disorder to New Zealand youth, Stephanie D'Souza, Nicholas Bowden, Sheree Gibb, Nichola Shackleton, Richard Audas, Sarah Hetrick, Barry Taylor, Barry Milne, September 2020, https://pubmed.ncbi.nlm.nih.gov/32994619/
- 118 Medication dispensing for attention-deficit/hyperactivity disorder to New Zealand youth, Stephanie D'Souza, Nicholas Bowden, Sheree Gibb, Nichola Shackleton, Richard Audas, Sarah Hetrick, Barry Taylor, Barry Milne, September 2020, https://pubmed.ncbi.nlm.nih.gov/32994619/
- 119 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 120 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 121 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 122 Mental Health and Addiction Year in Review For the financial year 1 July 2020 30 June 2021, https://www.health.govt.nz/system/files/documents/publications/moh-mental-health-and-addiction-year-in-review-web.pdf
- 123 Children's mental health services are 'in crisis': Health Minister Andrew Little, New Zealand Herald, May 30, 2022, https://www.nzherald.co.nz/nz/childrens-mental-health-services-are-in-crisis-health-minister-andrew-little/2M2GZDYMX5THRWJ3S3PZPAMVEI/

- 124 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 125 Taranaki children and young people are struggling to access mental health services, Helen Harvey, Stuff, Apr 23, 2022, https://www.stuff.co.nz/taranaki-daily-news/news/128415429/taranaki-children-and-young-people-are-struggling-to-access-mental-health-services
- 126 Children's mental health services are 'in crisis': Health Minister Andrew Little, May 30, 2022, New Zealand Herald, https://www.nzherald.co.nz/nz/childrens-mental-health-services-are-in-crisis-health-minister-andrew-little/2M2GZDYMX5THRWJ3S3PZPAMVEI/
- 127 'We see the data, we see the challenges' Little defends health system, RNZ, 17 July 2022, https://www.rnz.co.nz/news/national/471114/we-see-the-data-we-see-the-challenges-little-defends-health-system
- 128 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 129 He Ara Oranga, Report of the Government Inquiry into Mental Health and Addiction, 2018, https://www.mentalhealth.inquiry.govt.nz/assets/Summary-reports/He-Ara-Oranga.pdf
- 130 Sir Peter Gluckman warns of 'overwhelming' new pandemic of mental health problems in children and teens, July 2022, NZ Herald, https://www.nzherald.co.nz/nz/sir-peter-gluckman-warns-of-overwhelming-new-pandemic-of-mental-health-problems-in-children-and-teens/QPQZVBACBOGBBZLKQPRUDB2CBQ/
- 131 Why has increased provision of psychiatric treatment not reduced the prevalence of mental disorder? Mulder, R., Rucklidge, J., & Wilkinson, S. (2017). Australian and New Zealand Journal of Psychiatry, https://www.researchgate.net/profile/Julia-Rucklidge/publication/319287348_Why_has_increased_provision_of_psychiatric_treatment_not_reduced_the_prevalence_of_mental_disorder/links/59f43646a6fdcc075ec36513/Why-has-increased-provision-of-psychiatric-treatment-not-reduced-the-prevalence-of-mental-disorder.pdf
- 132 Why has increased provision of psychiatric treatment not reduced the prevalence of mental disorder? Mulder, R., Rucklidge, J., & Wilkinson, S. (2017). Australian and New Zealand Journal of Psychiatry, https://www.researchgate.net/profile/Julia-Rucklidge/publication/319287348_Why_has_increased_provision_of_psychiatric_treatment_not_reduced_the_prevalence_of_mental_disorder/links/59f43646a6fdcc075ec36513/Why-has-increased-provision-of-psychiatric-treatment-not-reduced-the-prevalence-of-mental-disorder.pdf
- 133 Why has increased provision of psychiatric treatment not reduced the prevalence of mental disorder? Mulder, R., Rucklidge, J., & Wilkinson, S. (2017). Australian and New Zealand Journal of Psychiatry, https://www.researchgate.net/profile/Julia-Rucklidge/publication/319287348_Why_has_increased_provision_of_psychiatric_treatment_not_reduced_the_prevalence_of_mental_disorder/links/59f43646a6fdcc075ec36513/Why-has-increased-provision-of-psychiatric-treatment-not-reduced-the-prevalence-of-mental-disorder.pdf
- 134 Patterns of Antidepressant Drug Prescribing and Intentional Self-harm Outcomes in New Zealand: An ecological study Public Health Intelligence Occasional Bulletin No. 43, Ministry of Health, 2007, https://www.health.govt.nz/system/files/documents/publications/patterns-antidepressant-drug-prescribing-v1.pdf
- 135 Depression or Distress? Examining SSRI prescribing in primary care, BPACnz, https://bpac.org.nz/2019/ssri.aspx
- 136 Depression or Distress? Examining SSRI prescribing in primary care, BPACnz, https://bpac.org.nz/2019/ssri.aspx
- 137 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf
- 138 Resolving the paradox of increased mental health expenditure and stable prevalence, Graham N Meadows, Ante Prodan, Scott Patten, Frances Shawyer, Sarah Francis, Joanne Enticott, Sebastian Rosenberg, Jo-An Atkinson, Ellie Fossey, Ritsuko Kakuma, September 2019, https://www.monash.edu/_data/assets/pdf_file/0004/1808626/Resolving-the-paradox-of-increased-mental-health-expenditure-and-stable-prevalence-ANZIP-in-press-2019.pdf
- 139 Resolving the paradox of increased mental health expenditure and stable prevalence, Graham N Meadows, Ante Prodan, Scott Patten, Frances Shawyer, Sarah Francis, Joanne Enticott, Sebastian Rosenberg, Jo-An Atkinson, Ellie Fossey, Ritsuko Kakuma, September 2019, https://www.monash.edu/__data/assets/pdf_file/0004/1808626/Resolving-the-paradox-of-increased-mental-health-expenditure-and-stable-prevalence-ANZJP-in-press-2019.pdf
- 140 Te Huringa: Change and Transformation Mental Health Service and Addiction Service Monitoring Report 2022, https://www.mhwc.govt.nz/assets/Te-Huringa/Finals-1-April-2022/MHWC-Te-Huringa-Service-Monitoring-Report.pdf
- 141 Resolving the paradox of increased mental health expenditure and stable prevalence, Graham N Meadows, Ante Prodan, Scott Patten, Frances Shawyer, Sarah Francis, Joanne Enticott, Sebastian Rosenberg, Jo-An Atkinson, Ellie Fossey, Ritsuko Kakuma, September 2019, https://www.monash.edu/_data/assets/pdf_file/0004/1808626/Resolving-the-paradox-of-increased-mental-health-expenditure-and-stable-prevalence-ANZJP-in-press-2019.pdf
- 142 Resolving the paradox of increased mental health expenditure and stable prevalence, Graham N Meadows, Ante Prodan, Scott Patten, Frances Shawyer, Sarah Francis, Joanne Enticott, Sebastian Rosenberg, Jo-An Atkinson, Ellie Fossey, Ritsuko Kakuma, September 2019, https://www.monash.edu/__data/assets/pdf_file/0004/1808626/Resolving-the-paradox-of-increased-mental-health-expenditure-and-stable-prevalence-ANZJP-in-press-2019.pdf
- 143 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf
- 144 Mental Health Literacy: New Zealand Adolescents' Knowledge of Depression, Schizophrenia and Help-Seeking, Nimesha Tissera and Tatiana Tairi, 2020, Massey University, New Zealand, https://www.psychology.org.nz/application/files/5815/9538/4269/Tissera_and_Tairi_14-21.pdf
- 145 Child Poverty & Family Structure: What is the evidence telling us? Family First, 2016, https://familyfirst.org.nz/wp-content/uploads/2016/05/Child-Poverty-and-Family-Structure-FULL-REPORT-1.pdf

- 146 Live births by nuptiality (Māori and total population) (Annual-Mar), Infoshare, Statistics New Zealand, https://infoshare.stats.govt.nz/
- 147 Child Poverty & Family Structure: What is the evidence telling us? Family First, 2016, https://familyfirst.org.nz/wp-content/uploads/2016/05/Child-Poverty-and-Family-Structure-FULL-REPORT-1.pdf
- 148 A Love Letter to The Women's Bookshop, from Deborah Shepard, October 2017, https://booksellersnz.wordpress.com/2017/10/26/a-love-letter-to-the-womens-bookshop-from-deborah-shepard/
- 149 The feasibility of using predictive risk modelling to identify new-born children who are high priority for preventive services companion technical report, February 2014, MSD, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/predictive-modelling/00-feasibility-study-report-technical-companion.pdf
- 150 New Zealand Yearbook 1996
- 151 Census 2018, NZ.Stat, Age group of youngest dependent child in family by family type, for families with dependent children in occupied private dwellings, 2006, 2013, and 2018 Censuses (RC, TA, DHB, SA2), https://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE8400#
- 152 The material wellbeing of New Zealand households: trends and relativities using non-income measures, with international comparisons, Prepared by Bryan Perry, Ministry of Social Development, Wellington, November 2021, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/monitoring/household-income-report/2021/non-incomes-report-2021.
- 153 Association of material hardship with maternal and child outcomes, Technical report of cross-sectional analysis of nine-month data from Growing Up in New Zealand cohort –2018, MSD, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/material-hardship-maternal-and-child-outcomes/material-hardship-maternal-and-child-outcomes.docx
- 154 Association of material hardship with maternal and child outcomes, Technical report of cross-sectional analysis of nine-month data from Growing Up in New Zealand cohort –2018, MSD, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/material-hardship-maternal-and-child-outcomes/material-hardship-maternal-and-child-outcomes.docx
- 155 The influences of social connectedness on behaviour in young children: A longitudinal investigation using GUiNZ data, December 2018, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/influences-of-social-connectedness-on-behaviour-in-young-children/influence-of-social-connectedness-on-behaviour-in-young-children.pdf
- 156 Poipoia te kākano kia puawai, Family structure, family change and the wellbeing of tamariki Māori, JULY 2020, https://www.msd. govt.nz/documents/about-msd-and-our-work/publications-resources/research/family-structure-change-and-the-wellbeing-of-tamariki-maori.pdf
- 157 Protective factors of children and families at highest risk of adverse childhood experiences: An analysis of children and families in the Growing up in New Zealand data who "beat the odds" April 2019, MSD/AUT, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/children-and-families-research-fund/children-and-families-research-fund-report-protective-factors-aces-april-2019-final.pdf
- 158 The influences of social connectedness on behaviour in young children: A longitudinal investigation using GUiNZ data, December 2018, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/influences-of-social-connectedness-on-behaviour-in-young-children/influence-of-social-connectedness-on-behaviour-in-young-children.pdf
- 159 Marriage good news for mental health, but separation and divorce have negative impacts, University of Otago, Wellington, December 2009, https://www.otago.ac.nz/news/news/otago006366.html
- 160 PARENTING THROUGH FAMILY TRANSITIONS, Paul R. Amato, Professor of Sociology, Demography, and Family Studies, Pennsylvania State University, December 2004, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj23/23-pages31-44.pdf
- 161 PARENTING THROUGH FAMILY TRANSITIONS, Paul R. Amato, Professor of Sociology, Demography, and Family Studies, Pennsylvania State University, December 2004, https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj23/23-pages31-44.pdf
- $162\ Lobby\ group\ report\ ignores\ the\ realities, Jacinda\ Ardern,\ Sunday\ Star\ Times,\ 5\ June\ 2016$
- 163 A Meta-Analysis of Published Research on the Psychological Effects of Nonmaternal Care on Child Development: Social Policy Implications Claudio Violato, PhD and Clare Russell, PhD University of Calgary, https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.513.5592&rep=rep1&type=pdf
- 164 Is participation in Early Childhood Education related to child health and development? A report submitted to the Ministry of Social Development Children and Families Research Fund June 2019, AUT, https://msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/participation-in-ece/ece-participation-and-development.pdf
- 165 Is participation in Early Childhood Education related to child health and development? A report submitted to the Ministry of Social Development Children and Families Research Fund June 2019, AUT, https://msd.govt.nz/documents/about-msd-and-our-work/publications-resources/research/participation-in-ece/ece-participation-and-development.pdf
- 166 Mixed progress in adolescent health and wellbeing in Aotearoa New Zealand 2001–2019: a population overview from the Youth2000 survey series, Theresa Fleming, Jude Ball, Lynda Bavin, Claudia Rivera-Rodriguez, Roshini Peiris-John, Sue Crengle, May 2022, https://www.tandfonline.com/doi/full/10.1080/03036758.2022.2072349
- 167 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266
- 168 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266

169 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266

170 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266

171 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266

172 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266

173 Inquiry into school attendance, Report of the Education and Workforce Committee, Fifty-third Parliament, March 2022, Presented to the House of Representatives, https://www.parliament.nz/resource/en-NZ/SCR 121164/92dac6fd9a9ea51f7aff84e523dfaaeefd6ca168

174 Ministry of Social Development OIA response to L Mitchell, 15 July 2022

175 Northland's truancy issue - what's keeping our kids from going to school? NZ Herald, 3 May, 2022, https://www.nzherald.co.nz/northern-advocate/news/northlands-truancy-issue-whats-keeping-our-kids-from-going-to-school/VPI6FDR4GZFAYZ|4HYA5WGC55E/

176 School principal warns of 'horrendous' consequences for New Zealand amid truancy crisis, Newshub, June 6, 2022, https://www.newshub.co.nz/home/politics/2022/06/school-principal-warns-of-horrendous-consequences-for-new-zealand-amid-truancy-crisis.html

177 Attendance targets set to get Kiwi kids back in class, Hon Jan Tinetti, June 2022, https://www.beehive.govt.nz/release/attendance-targets-set-get-kiwi-kids-back-class

178 School principal warns of 'horrendous' consequences for New Zealand amid truancy crisis, Newshub, June 6, 2022, https://www.newshub.co.nz/home/politics/2022/06/school-principal-warns-of-horrendous-consequences-for-new-zealand-amid-truancy-crisis.html

179 New school attendance targets a hit and miss, 'ALAPASITA TEU, Maxim Institute, June 2022, https://www.maxim.org.nz/article/new-school-attendance-targets-a-hit-and-miss/

180 PISA 2018 Results (Volume III): What School Life Means for Students' Lives, Chapter 2, Bullying, https://www.oecd-ilibrary.org/sites/cd52fb72-en/index.html?itemId=/content/component/cd52fb72-en#fig6

181 Now We Are Eight: Life in middle childhood, Growing Up in New Zealand, MSD, 2020, https://www.growingup.co.nz/sites/growingup.co.nz/files/documents/GUINZ_Now_We_Are_8_ONLINE.pdf

182 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf

183 Inquiry into school attendance, Report of the Education and Workforce Committee, Fifty-third Parliament March 2022, Presented to the House of Representatives, https://www.parliament.nz/resource/en-NZ/SCR 121164/92dac6fd9a9ea51f7aff84e523dfaaeefd6ca168

184 Children & Young People's Mental Health in the Digital Age, Shaping the future, OECD, 2018, https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf

185 Innocenti Report Card 16, Worlds of Influence, Understanding What Shapes Child Well-being in Rich Countries, UNICEF, 2020, https://www.unicef-irc.org/publications/pdf/Report-Card-16-Worlds-of-Influence-child-wellbeing.pdf

186 Obesity statistics, New Zealand Health Survey, Ministry of Health, https://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/obesity-statistics

187 New Zealand Health Survey Annual update of key findings 2012/13, https://www.moh.govt.nz/NoteBook/nbbooks.nsf/0/C5E688F85B4C4165CC2582A9006DB410/\$file/new-zealand-health-survey-annual-update-2012-13-dec13-v3.pdf

188 Mental Health in New Zealand from a Public Health Perspective, Ministry of Health, 1997, https://www.moh.govt.nz/notebook/nbbooks.nsf/0/193C70FED3C2D6BE4C2565D700188CAC/\$file/chap16.pdf

189 Mental Health and Addiction: Service Use web tool, MOH, https://minhealthnz.shinyapps.io/mental-health-and-addiction-web-tool/

190 Te Ohonga Ake, The Determinants of Health for Māori Children and Young People in New Zealand, MOH, February 2013, https://www.tdhb.org.nz/misc/documents/2014-The-Determinants-Health-Maori-Children-Young-People-NZ.pdf

191 Distorted reflections: Eating disorders rise as experts warn of overlooked crisis, Sophie Harris, Stuff, Jun 05 2022, https://www.stuff.co.nz/national/health/300597502/distorted-reflections-eating-disorders-rise-as-experts-warn-of-overlooked-crisis

192 FactCheck Q&A: do eating disorders have the highest mortality rate of all mental illnesses? October 10, 2016, Updated: February 28, 2019, https://theconversation.com/factcheck-qanda-do-eating-disorders-have-the-highest-mortality-rate-of-all-mental-illnesses-66495

193 Prevalence of eating disorders over the 2000–2018 period: a systematic literature review, Marie Galmiche, Pierre Déchelotte, Grégory Lambert, Marie Pierre Tavolacci, April 2019, https://academic.oup.com/ajcn/article/109/5/1402/5480601

194 Distorted reflections: Eating disorders rise as experts warn of overlooked crisis, Sophie Harris, Stuff, Jun 05 2022, https://www.stuff.co.nz/national/health/300597502/distorted-reflections-eating-disorders-rise-as-experts-warn-of-overlooked-crisis

195 Children & Young People's Mental Health in the Digital Age, Shaping the future, OECD, 2018, https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf

196 Youth Suicide in New Zealand: a Discussion Paper, Sir Peter Gluckman, OFFICE OF THE PRIME MINISTER'S CHIEF SCIENCE ADVISOR, July 2017, https://dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-26-Youth-suicide-in-New-Zealand-a-Discussion-Paper.pdf

197 Mixed progress in adolescent health and wellbeing in Aotearoa New Zealand 2001–2019: a population overview from the Youth2000 survey series, Theresa Fleming, Jude Ball, Lynda Bavin, Claudia Rivera-Rodriguez, Roshini Peiris-John, Sue Crengle, May 2022, https://www.tandfonline.com/doi/full/10.1080/03036758.2022.2072349

198 Children & Young People's Mental Health in the Digital Age, Shaping the future, OECD, 2018, https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf

199 Children & Young People's Mental Health in the Digital Age, Shaping the future, OECD, 2018, https://www.oecd.org/els/health-systems/Children-and-Young-People-Mental-Health-in-the-Digital-Age.pdf

200 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266

201 PISA 2018: New Zealand students' wellbeing - School climate & student mindsets of 15-year-olds, Education Counts, https://www.educationcounts.govt.nz/publications/series/PISA/pisa-2018/pisa-2018-student-wellbeing

202 Long-term trends in adolescent alcohol, tobacco and cannabis use and emerging substance use issues in Aotearoa New Zealand, Jude Ball, Rose Crossin, Joseph Boden, Sue Crengle & Richard Edwards, April 2022, https://www.tandfonline.com/doi/full/10.1080/0303 6758.2022.2060266

203 New Zealand Yearbook 1996

204 Gang numbers have nearly doubled in five years, Police say, Bernadette Basagre, Stuff, Dec 02 2021, https://www.stuff.co.nz/national/crime/300464553/gang-numbers-have-nearly-doubled-in-five-years-police-say

205 Annual Report 2020/21, New Zealand Police, https://www.police.govt.nz/sites/default/files/publications/annual-report-2020-2021.pdf

206 EVALUATION OF THE FAMILY START PROGRAMME, Report on the findings of the process evaluation, April 2020, https://www.orangatamariki.govt.nz/assets/Uploads/About-us/Research/Latest-research/Family-Start/Evaluation-of-the-Family-Start-programme.pdf

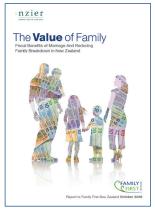
207 Assessing service use for mental health by Indigenous populations in Australia, Canada, New Zealand and the United States of America: a rapid review of population surveys, Cecily McIntyre, Meredith G. Harris, Amanda J. Baxter, Stuart Leske, Sandra Diminic, Joseph P. Gone, Ernest Hunter & Harvey Whiteford, August 2017, https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-017-0233-5

208 PISA 2018: New Zealand students' wellbeing - School climate & student mindsets of 15-year-olds, Education Counts, https://www.educationcounts.govt.nz/publications/series/PISA/pisa-2018/pisa-2018-student-wellbeing

209 Climate change anxiety, Health Navigator New Zealand, https://www.healthnavigator.org.nz/health-a-z/c/climate-change-anxiety/

210 Sir Peter Gluckman warns of 'overwhelming' new pandemic of mental health problems in children and teens, July 2022, NZ Herald, https://www.nzherald.co.nz/nz/sir-peter-gluckman-warns-of-overwhelming-new-pandemic-of-mental-health-problems-in-children-and-teens/QPQZVBACBOGBBZLKQPRUDB2CBQ/

RESEARCH PUBLISHED BY FAMILY FIRST NZ:



Family Breakdown: 2008



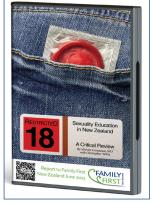
Marriage: 2009



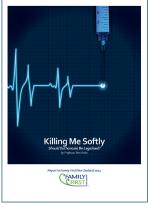
Drinking Age: 2011



Daycare: 2012



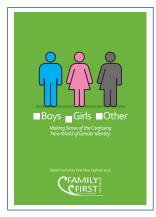
Sex Education: 2013



Euthanasia: 2014



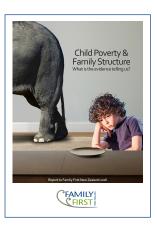
Screentime: 2015



Gender Identity: 2015



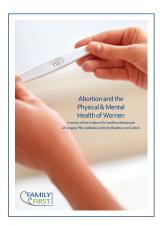
Anti-Smacking Law: 2016



Child Poverty: 2016



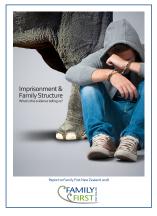
Child Abuse: 2016



Abortion & Health: 2018



Why Mothers Matter: 2018



Imprisonment: 2018



Dinner & Family Life: 2018



Why Fathers Matter: 2018

RESEARCH PUBLISHED BY FAMILY FIRST NZ:



Children Transitioning: 2018



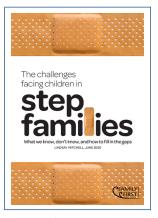
Fertility: 2019



Parent Guide – Gender: 2019



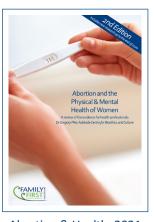
Anti-Smacking Law: 2020



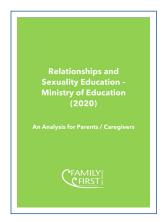
Stepfamilies: 2020



Cannabis Legalisation: 2020 (in conjunction with SAM-NZ)



Abortion & Health: 2021



Sexuality Education: 2021



Teenage Birth Rate: 2021



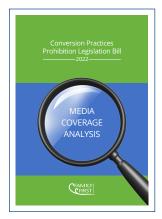
Euthanasia Referendum: 2021
MEDIA ANALYSIS



Cannabis Referendum: 2021
MEDIA ANALYSIS



Prostitution Report: 2021



Conversion Practices: 2022
MEDIA ANALYSIS



Teenage Mental Health: 2022



Abortion (Roe v Wade): 2022
MEDIA ANALYSIS

