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TE POKAPŪ TAUNAKITANGA

TEEN PARENTS EVIDENCE BRIEF

August 2019

ALLEN+CLARKE

ORANGA TAMARIKI
Ministry for Children

EVIDENCE CENTRE
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The Oranga Tamariki Evidence Centre works to build the evidence base that helps us better understand wellbeing and what works to improve outcomes for New Zealand's children, young people and their whānau.

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EXECUTIVE SUMMARY

Purpose

The purpose of this evidence brief is to provide up-to-date evidence from New Zealand and international literature about effective support for teenage parents, their children and family or whānau, as well as protective factors and risks of poor outcomes faced by teenage parents and their children. Furthermore, this brief includes information on models, support services and interventions currently in place in New Zealand, indicators of their effectiveness, and outcomes (both short- and long-term) for teenage parents and children engaged with those services.

Methodology

The brief includes two sections. Section One provides contextual information about teen pregnancy and parenting in Aotearoa New Zealand. Most of the contextual information was drawn from resources provided by Oranga Tamariki, supplemented by a small number of supporting texts. These publications provide data that help to form a picture of the current state of teenage pregnancy and parenthood in Aotearoa New Zealand. A total of 15 resources was used to develop Section One of the evidence brief.

Section Two reports the findings from a search for peer-reviewed and grey literature conducted using academic databases and Google Scholar. Because of the large number of articles and reports focusing on support interventions, protective factors, and risk factors for teenage parents, systematic and narrative reviews took priority. For articles and reports that explored support interventions in the New Zealand context, individual studies or reports (e.g., evaluations and reviews of teenage parent services and interventions) were also included. It should be noted that much of the literature and documents sourced from New Zealand were in the grey literature category, and no literature was able to be sourced on teenage parenting for Pacific peoples. In total, 41 sources were included in Section Two of the evidence brief.

Findings from the contextual data

Teen birth rates in Aotearoa New Zealand are declining but remain high compared to other countries. The teen birth rate is particularly high amongst Māori and Pacific teens compared to all other ethnicities. However, the data is clear that older teens (18 to 19 years) account for most births. The decline in the teen birth rate is understood to be a significant contributor to the overall decline in the total fertility rate for Aotearoa New Zealand. The March 2018 total fertility rate of 1.81 births per woman was the lowest on record.

Young people in Aotearoa New Zealand are delaying becoming sexually active, and some are using more effective methods of contraception. There has also been a strong downward trend in the abortion rate for women aged 15 to 19 years since 2007.

To provide better support to sexually active teens, pregnant teens, and teen parents, adults need to demonstrate that adolescent sex and contraception is a normal part of adolescence, so that all young people can access the best information and support available without fear of stigmatisation. Teens need timely access to free or low cost, culturally responsive sexual and reproductive health services. The present environment of increasing affordability, availability, and acceptability of long-

acting removable contraceptives (LARCs) could be used to support sexually active teens to avoid unplanned pregnancy.

There may be merit in developing a comprehensive, evidence-driven, framework for supporting teenage parents. Such a framework could consider identified needs relating to child health, mental health and wellbeing, economic wellbeing, the use of alcohol and drug services, and pregnancy during or following time living in care.

Findings from the literature

Effective support for teenage parents and their children

The international literature shows that while there are many examples of interventions with teenage mothers – psychosocial, educational, vocational – not all are effective. International and New Zealand-based sources find that supportive interventions for teenage parents should be early, comprehensive, wrap-around and strengths-based. Recent research also suggests that targeting potential participants for teenage parent interventions can create unintended outcomes such as perceptions of stereotyping and disengagement from teenagers. Targeting in this way, if done, should be carried out in an inclusive, participatory and sensitive manner.

There are specific international supportive interventions that highlight the potential effectiveness of programmes. The Second Chance Homes Network, a supportive housing programme for pregnant and parenting teenagers in the United States of America (USA), was found to consistently improve a number of outcomes for teenage parents and their children, but in particular, educational status, employment and stable residence was improved the longer pregnant and parenting teenagers stayed in the homes. Family Spirit, a participatory-designed home-visiting service for indigenous teenage mothers and children in the USA, was evaluated using a randomised control trial (RCT) methodology and was found to have significantly improved outcomes including teenage mothers gaining better parenting knowledge and feeling more in control of their lives, and their children experience fewer internalising, externalising, and dysregulation problems.

Gaps in the existing service provision were also identified in the literature. Given that the majority of support programmes are centred around teenage mothers, service providers could consider the ways in which they support teenage fathers, particularly where teenage fathers have multiple needs. Potential pathways for supporting teenage fathers were identified through the provision of primary health care. A gap was also identified for interventions supporting teenage parents who are co-parenting. Further consideration could also be provided to supporting teen parents in the context of their whānau and communities.

Risks and protective factors for teenage parents and their children

Many reviews of the literature show that teenage parents can face many challenges and risks, for themselves and their children. Recent research shows clear links between being a teenage mother and living in poor socio-economic circumstances, and that there are developmental issues for children of teenage parents from some ethnic groups, though ethnicity may not be a significant factor once socioeconomic circumstances are taken into consideration.

Challenges for teenage parents – including individual stigmatisation and discrimination, barriers to accessing needed services and limited opportunity to build education or vocations, and negative societal and community attitudes – are significant when faced with raising a child at a young age. There can be significant developmental issues for children of teenage parents. In particular, high levels of maternal stress, depression and deprivation is associated with developmental delay. There

is a lack of literature on teenage fatherhood, but recent literature reviews have confirmed earlier exploratory research conclusions. This research notes that teenage fatherhood can be both rewarding and challenging, and the service needs of teenage fathers can be numerous and complex.

Social support is an incredibly important protective factor for teenage parents, and they can and do show other indications of individual resilience within challenging circumstances. Fathers who are involved in the lives of their children are seen to be a protective factor for children of teenage mothers with depression. Although teenage parents face high rates of disadvantage, researchers are calling for changing individually focused deficit-based narratives around risks to more strengths-based approaches and better acknowledgement of contextual factors that can disadvantage teenage parents and their children. More recent literature shows that deficit-based perspectives on teenage pregnancy and parenthood are ineffective for supporting teenage parents, and strengths-based approaches are needed to ensure teenage parents feel supported by society.

Support programmes for teen parents in Aotearoa New Zealand

There are very few evaluations of interventions that aim to support teenage parents in New Zealand. Teen Parent Units (TPUs) which offer an intensive, secondary school-based wrap-around service for teenage mothers and their children, are the most frequently reported on intervention in the literature. The evidence suggests that TPUs that have been designed with the specific cultural, parenting, and learning needs of their students in mind successfully provide a comprehensive, wrap-around service that builds the confidence and capabilities of its parent-students.

Enrolment rates at teen parent units (TPUs) was reasonably stable between 2009 and 2018.

The nature of TPUs has changed since the inception of the Young Parent Payment (YPP) in 2012. The YPP obliges recipients to be available for secondary education or training. The literature suggests that this obligation has brought about an artificial increase in demand for TPUs without a corresponding motivation for change on the part of either the student-parents or the educators: just five out of 21 TPUs reviewed by the Education Review Office (ERO) in 2014 achieved the top ERO standard, described as "provided especially innovative and cohesive curriculum, pastoral support and pathways for students" (Education Review Office, 2014a, p. 1). In comparison, the 2017 review identified 11 out of 24 TPUs achieved the top ERP standard (Education Review Office, 2018), though it is important to note that the indicator and outcomes frameworks for the two evaluations were different. Furthermore, while there has been some criticism of the YPP, an evaluation of the Ministry of Social Development's Youth Service, including the YPP, found that it may lead to some positive outcomes, including engagement in education for longer, and moving from a benefit into work faster.

More generally, in the New Zealand context, the literature describes a high need for tikanga Māori models and supportive interventions for Māori teenage mothers and their children. The literature notes the loss and lack of traditional support structures for Māori, and that the public social and health support system – from a predominantly Western knowledge framework – sees teenage parents as a problem to be solved. It has been reported that successful TPUs focus on tikanga, te reo, and relationships with marae.

Consistent with international literature, New Zealand-based evidence suggests that social services designed to support teenage parents and their children can be stigmatising, both for Māori and non-Māori. For example, moralistic worldviews and beliefs around unmarried teenage mothers have been criticised by researchers in New Zealand. Findings from New Zealand literature also point out that teenage fathers are considered to be poorly served compared to teenage mothers, and pregnant

teenagers experience barriers to accessing antenatal care, including registering with a Lead Maternity Carer (LMC).

Indicators of effectiveness and outcomes of supportive interventions in Aotearoa New Zealand

Only four evaluations of supportive interventions for teenage parents and their children in the New Zealand context were located for inclusion in this evidence brief. All of the interventions were education-based and were either TPUs or closely linked to TPUs. Intended outcomes of TPUs, as articulated by the Ministry of Education (2016), include increased engagement in education, increased achievement in education, and successful transition to further education, training or employment. Some of the results of the four evaluations – particularly the quantitative-based impact evaluations – should be interpreted with caution, but nonetheless make a valuable contribution to better understanding supportive interventions for teenage parents in New Zealand.

The ERO reports give the impression that, when they are implemented well, TPUs can be highly effective. Attending a TPU is reported to have helped change lives of teenage parents and their children for the better. Highly effective TPUs had strong pedagogical leadership and expertise, including a range and depth of curriculum knowledge, and had strong partnerships to extend curriculum and pedagogical knowledge to help students achieve their goals. There is some data about the 'success' of TPUs, but this is largely limited to the attainment of educational qualifications. One study has shown that parents who attend a TPU are more likely to achieve NCEA Level 1, and the ERO evaluation notes that young parents who remained in the TPU for two years or more often went on to tertiary studies. In the most recent report, ERO has suggested that TPUs and their host schools should be encouraged to collect more data relating to other outcomes, including health and wellbeing.

Future support for teenage parents

The existing evidence suggests that early and comprehensive supportive intervention, social support, and reducing stigma and discrimination is important for pregnant and parenting teenagers. Teenage parents and their children can have multiple and complex needs but can also exhibit resilience in the face of significant challenges. Teenage parents are a diverse population, with variations in lived experiences, personal characteristics, and available supports and resources. The literature suggests that interventions should recognise this variability, to ensure efforts are tailored and flexible enough to meet specific needs and strengths. Additionally, the literature stresses that these interventions should be delivered in ways that do not exacerbate the stigma faced by some teenage parents.

Circumstances and factors that are present for teenage parents (and their children) are not necessarily due to the fact that they are teenage parents. This suggests that wider socio-economic factors such as poverty, unemployment, low education, poor familial relationships, inequality, poor housing, discrimination and stigma go some way to explaining these circumstances. It is argued in the literature that these broader social and economic issues should be addressed via strengths-based policy and youth development approaches, to ensure that should a teenager find themselves in the position where they may become a parent, that they are supported and empowered to make decisions that are best for themselves and their children.

There is an emerging body of literature that is attempting to reframe teenage pregnancy and parenting, in terms of challenging traditional discourses. For example, moving from deficit-based and moralistic discussions of the risk factors and problems of teenagers being pregnant and

parents, towards strengths-based, inclusive, supportive and empowering discourses. Important directions for future efforts in research, and intervention and service design include ensuring that teenage parents are involved in service design, and that they have voice in research about their life stories.

Dedicated approaches, in terms of supportive interventions for pregnant and parenting teenagers, may still be needed, particularly noting that attitudes towards teenage parents in society (and within interventions designed for them) can be discriminatory and stigmatising.

The following areas where additional support could be provided to teenage parents were identified from the literature.

1. Develop a framework for supporting teenage parents.
2. Normalise adolescent sex, contraception, and parenting.
    a. Provide comprehensive and consistent sex and contraception education.
    b. Provide easy to access and engaging information on sex, contraception, pregnancy, abortion, and parenting tools for teenagers.
    c. Provide better access to contraception.
3. Pilot promising programmes such as supportive housing interventions for teenage parents in Aotearoa New Zealand.
4. Find ways to support teenage fathers.
5. Finding ways to better support teen parents in the context of their whānau and communities.

SECTION ONE: THE CONTEXT FOR TEEN PREGNANCY AND PARENTING IN AOTEAROA NEW ZEALAND

Purpose

The purpose of this section is to provide contextual information on teen pregnancy and parenting in Aotearoa New Zealand, to inform the work of Oranga Tamariki in their assessment of the effectiveness of existing service provision for teen parents.

Methodology

Oranga Tamariki provided an array of resources to Allen + Clarke covering topics to be included. A core publication in this regard was Current Trends for Teenage Births in New Zealand: Update on the regional and national trends in teen births, and current trends for teen births in New Zealand (National Institute of Demographic and Economic Analysis & University of Waikato, 2015). Two further publications have been developed from its data and findings (Social Policy Evaluation and Research Unit, 2015a, 2015b). A limitation of these publications is that they draw on data up to 2013 (where available) (National Institute of Demographic and Economic Analysis & University of Waikato, 2015, p. 8). It is worthwhile noting that none of the young women who were in the 15 to 19 years of age cohort in 2013 are still in that cohort, meaning the data is not current. The current 15 to 19-year-old cohort is unrepresented in the 2012/13 data as these young women were, at that time, not of reproductive age.

Reports prepared by the Ministry of Health were drawn upon to understand the maternity system and outcomes in Aotearoa New Zealand. Other information sources consulted include Statistics New Zealand, Family Planning New Zealand, the Education Review Office, Ministry of Social Development, and the Ministry of Education, which provided some more current data.

Oranga Tamariki provided data derived from analysis of Statistics New Zealand's Integrated Data Infrastructure (IDI),[1] which draws on administrative datasets such as those of Oranga Tamariki, the Ministry of Social Development, and Inland Revenue, which include data from 2008 to 2017. More information about the IDI is found in Appendix 1.

Profile of an expectant teenager in Aotearoa New Zealand

The following vignette draws on the Report on Maternity, 2017 (Ministry of Health, 2019b) to describe aspects of the maternity experience of teenage women in Aotearoa New Zealand. The vignette tells the story of a fictional young woman, Teena. A hypothetical account of Teena's

[1] See Appendix 1 for more information about data derived from the IDI.

pregnancy, experience of giving birth, the condition of her baby, and the handover of care are described below. This was developed from data in the Report on Maternity, 2017, using median values (where possible) so that this vignette depicts an 'average' experience and may not represent the experience of any individual.

Being pregnant

When Teena became a mother in 2017, teenage pregnancy and motherhood had been becoming increasingly uncommon in Aotearoa New Zealand. Between 2008 and 2017 the birth rate for women under the age of 20 years in Aotearoa New Zealand fell by more than 50% (2019b, p. ix). While 61.7 women per 1000 women aged 15 to 44 years gave birth in 2017 (2019b, p. 8), this included just 15 per 1000 teenage women (2019b, p. 9).

Teena lives in the North Island, where teenage births are more common than in the South Island.[2] In 2017 Tairawhiti DHB had a particularly high birth rate for teens (2019b, p. 19).

Teena lives in a quintile 5 (high deprivation) neighbourhood,[3] which is the experience of 50.4% of teenage women who gave birth in 2017. In comparison, 5.4% of teenagers who gave birth in 2017 lived in a quintile 1 neighbourhood (2019b, p. 15).

Teena identifies as Māori. In 2017, 62% of babies born to women aged 15 to 19 years were born to Māori women. Women who are classified in the data as Pacific[4] accounted for 13% of births to 15 to 19 year-olds, and 25% of births to 15 to 19 year-olds were to women who identified as neither Māori nor Pacific,[5] (2019b, p. 12).

This is Teena's first baby. Most teenage women who give birth are doing so for the first time (83.3%) (2019b, p. 22).

Teena registered with a Lead Maternity Carer (LMC) in the first three months of her pregnancy. There is a roughly 50-50 chance (47.8%) that teenage women like Teena would do this (2019b, p. 34). When she first registered with her LMC, Teena was neither obese nor a smoker. However, one in four pregnant teenagers are obese at first registration (2019b, p. 25), and one in three are smokers (2019b, p. 25). Additionally, 67% of these women are also smokers two weeks after giving birth (2019b, p. 29).

The birth experience

Teena's baby was born at a primary birthing facility.6 Teenage women are less likely than all other age cohorts to give birth in a tertiary maternity facility (2019b, p. 63); and more likely (along with other cohorts of women under the age of 30 years) than women aged 30+ years to give birth in a

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[2] The South Island includes Stewart Island.

[3] NZDep Quintile ratings are based on census data, combining nine indicators to create a scale of relative deprivation. Quintile 1 represents least deprivation, and Quintile 5 represents the greatest deprivation.

[4] The National Maternity Collection, from which the 2017 Maternity Tables were draw, uses a prioritised single ethnic group system as follows: Māori, Pacific peoples, Indian, Asian (excluding Indian), Other, European. European and 'Other' are commonly grouped together as 'European or Other'.

[5] Please note that these data exclude the small number of women who gave birth prior to the age 15 years.

[6] "Primary maternity facilities and home births are recommended for well, healthy women likely to experience normal birth," (2019, p59).

primary facility (2019b, p. 63). Very few teenage women give birth at home, with teenage mothers accounting for less than 2% of home births in 2017 (2019b, p. 65).

Teena experienced a normal birth, which is defined as a "spontaneous vaginal birth … without an induced or augmented labour, an epidural or an episiotomy" (2019b, p. 88). As a teenager, this was considerably more likely compared to older mothers; just over 36% of women under 30 years have a normal birth, compared with 19.1% of women aged 40 years and over (2019b, p. 52). About 12% of teenage mothers experience caesarean section, compared to 25% of all women who gave birth in 2017 (2019b, p. 45).

Although Teena's labour was not induced, roughly 22% of teenage women experience induction of labour (2019b, p. 54). She did not experience augmentation,[7] but this practice is more common in the care of teenage women than for any other cohort (29.2% compared to an average of 22.8%) (2019b, p. 55).

Although Teena did not experience epidural pain relief, around one quarter of all women do have this experience, with little variation across the age cohorts (2019b, p. 56).

As a younger woman, Teena was somewhat less likely than other cohorts to experience episiotomy[8] (2019b, p. 57). 15.9% of all women giving birth vaginally experience episiotomy, but this reduces to roughly 14% for women under 20 years of age.

Teena's baby

In keeping with the median for all births, Teena's baby was born at 39 weeks gestation.

Her baby's weight was within the range of 'normal' (2.5 to 4.4kg), but the average birth weight of babies born to women under 20 years of age is slightly lower than the overall median (3.34kg compared to 3.41kg) (2019b, p. 69).

Although Teena's baby was born at term,[9] there was a small chance (slightly increased due to Teena's age) that her baby would experience low birth weight – that is, weighing less than 2.5kg at birth regardless of how far along she was in her pregnancy. In 2017 6.7% of babies born to women under 20 years of age were low birth weight compared to 6.1% of all Aotearoa New Zealand-born babies (2019b, p. 70).

Teena's baby was fully breastfed at two weeks of age. However, this is considerably less likely amongst the babies of teenage mothers compared to babies born to women aged 20 years or older (69.3% for babies born to teens compared to 80% of babies born to women aged 20 - 39 years) (2019b, p. 80).

[7] 'Augmentation' is the process of stimulating the uterus to increase the frequency, duration and intensity of contractions.

[8] Episiotomy is a surgical cut, administered to prevent tearing.

[9] Babies born between 37- and 41-weeks gestation are classified as being a 'term birth'. Babies born earlier than 37 weeks are classified as 'preterm'.

Handover of care

The LMC handed over care of Teena to her GP (95.5% of women) four to six weeks after Teena gave birth. At the same time, care of Teena's baby was handed over to a Well Child/Tamariki Ora provider (97.6% of babies) (2019b, p. 82).

Teen pregnancy and parenting in Aotearoa New Zealand: the current picture

This section provides an outline of the 'current state' and context around teen pregnancy and parenting in Aotearoa New Zealand, based on available data and research. It discusses the falling teen birth rate and explores data around contraception and abortion. The section advances from pregnancy to parenting through a discussion about Teen Parent Units (TPU) before considering other ways that teens might be supported with regards to contraception and family planning, and to support positive maternity care and teen parenting practises.

Aotearoa New Zealand's teen birth rates are declining, but remain high compared to other countries

The Ministry of Health 2017 Maternity Tables (Ministry of Health, 2019a) show that 2309 women aged 20 years or less gave birth in 2017. This is 3.9% of all babies born in Aotearoa New Zealand in 2017. In comparison, in 2008, 5293 women aged less than 20 years gave birth, representing 8.2% of all births in Aotearoa New Zealand that year. The decline in teenage births between 2008 and 2017 has been steady, as illustrated in Figure 1, which was developed from Statistics New Zealand data, Births and Deaths for the year ended December 2018, Table 4: Age-specific Fertility Rates. The downward trend is consistent with Oranga Tamariki IDI analysis, which shows that the number of teens giving birth for the first time more than halved between 1 December 2008 and 1 July 2018 (Oranga Tamariki, n.d.).

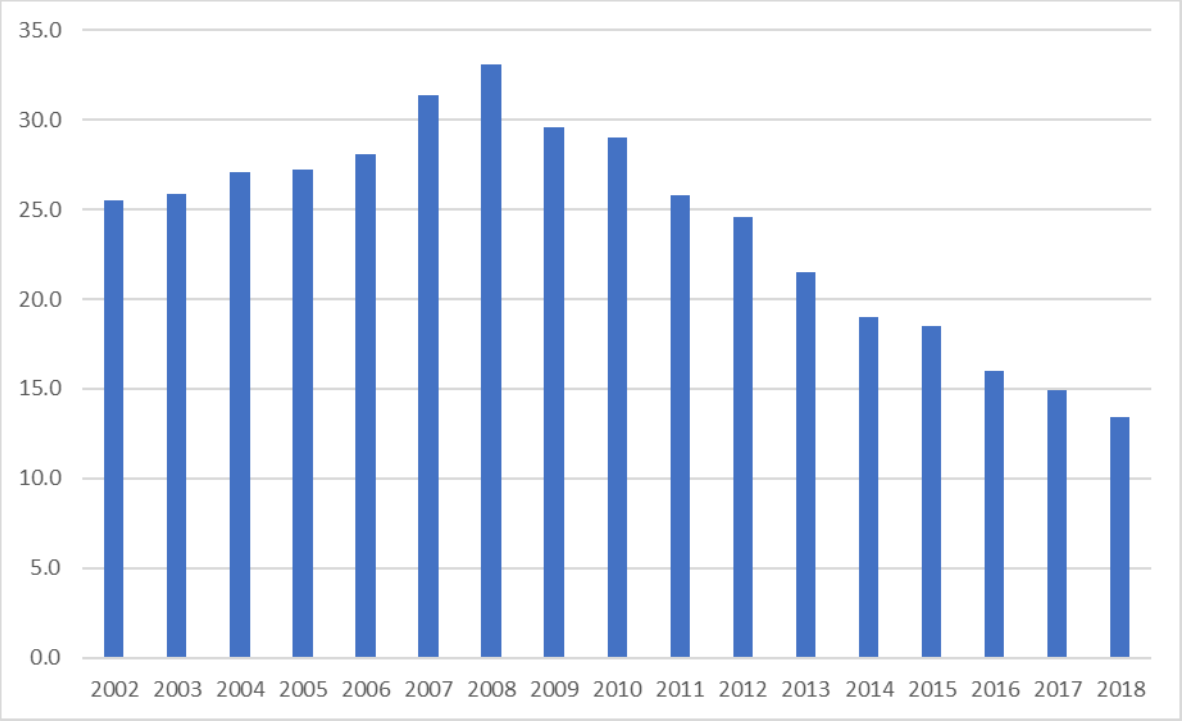

Figure 1: Fertility Rate change over time, per 1000 mean estimated women aged 15 to 19 years

Comparing the Aotearoa New Zealand teen birth rate data for 2012/13 with the data for United States and Australia, the Aotearoa New Zealand rate is higher than the rate for Australia and lower than the rate for United States. For 2010, the data for a further nine nations[10] is available. Comparing the Aotearoa New Zealand data against the data of these nations as well as United States and Australia, the Aotearoa New Zealand rate is (again) second highest, behind United States (National Institute of Demographic and Economic Analysis & University of Waikato, 2015; Social Policy Evaluation and Research Unit, 2015b, 2015a). Aotearoa New Zealand's teen pregnancy is sixth highest in the OECD (Duncan, Paterson, Anderson, & Pickering, 2019).

More recent data, for the year to March 2018, shows the Aotearoa New Zealand total fertility rate has declined to 1.81 births per woman, which was the lowest on record at that time. The decline is described as being "mainly driven by trends among women aged 15 to 29 years, whose birth rate are now at record lows" (New Zealand Family Planning, 2018). The magnitude of the decline is evident in the comparison between the 1972 birth rate (69 births per 1000 women aged 15 to 19 years) and the 2017 birth rate (15 births per 1000 women aged 15 to 19 years) (New Zealand Family Planning, 2018). As of May 2019, the most recent data available from the Statistics New Zealand Population tables is for the year ending March 2019. These data show continuation of the downward trend with the birth rate at 13.29 per 1000 women aged 15 to 19 years (Statistics New Zealand, n.d.).

Data from the 2017 Maternity Tables (Ministry of Health, 2019a) have been used to develop the two figures below. It is important to note that the data reports the percentage of all births that were associated with each age cohort by ethnicity. For example, Figure 1 illustrates that in 2017, 4.1% of all births to Māori women were to those aged 19 years, whilst 19-year-old women of Indian ethnicity gave birth to 0.2% of all the babies born to Indian women in Aotearoa New Zealand in 2017.

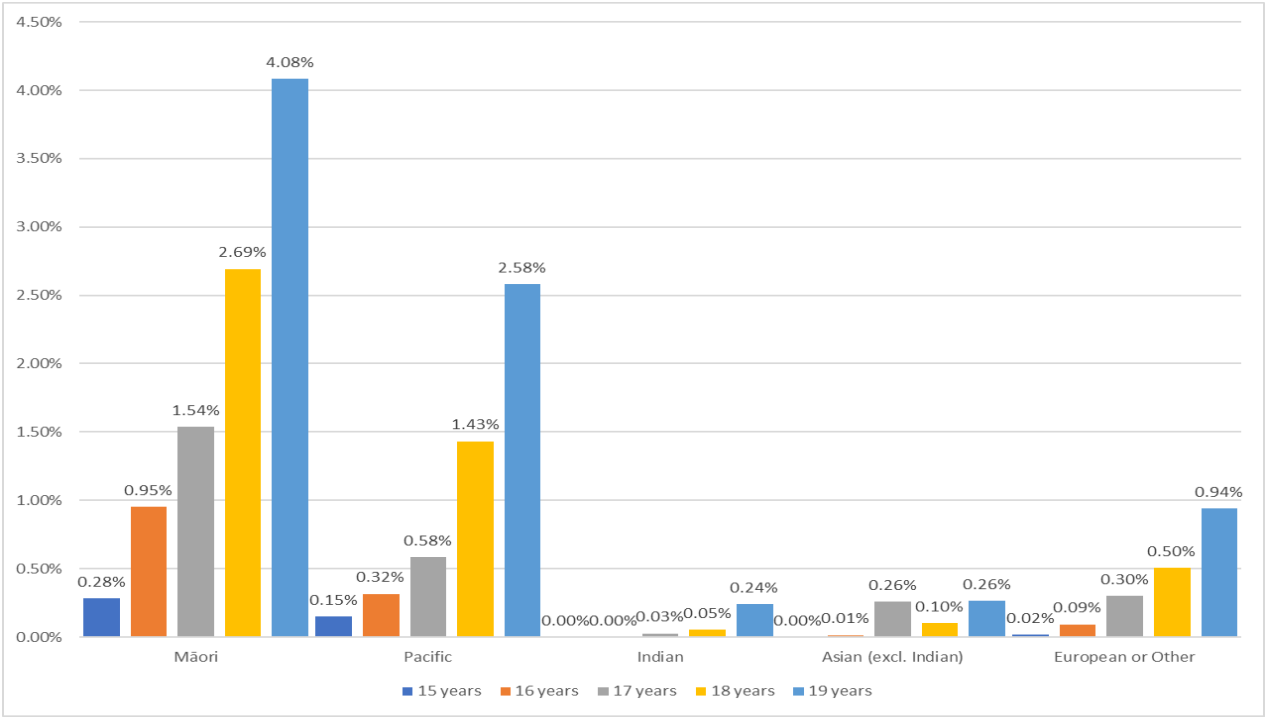

Figure 2: The percentage of births by ethnicity per age cohort for 2017

[10] United Kingdom, Ireland, Spain, Canada, France, Germany, Norway, Sweden, and Netherlands

These data demonstrate that the teen birth rate profile differs considerably by ethnicity. This is consistent with findings reported elsewhere, such as in the report produced for the Families Commission, that there is an ethnic or cultural effect which results in different birth rate trends by ethnicity in teenage births: Māori birth rates are higher even when socioeconomic status is held constant (National Institute of Demographic and Economic Analysis & University of Waikato, 2015, p. 28).

The same data used in Figure 2 is used in the following graph (Figure 3), but in this second graph younger teens (aged 15 to 17 years) are grouped for comparison with older teens (aged 18 to 19 years). As this view of the data shows, there are spikes in the number of births to Māori and Pacific women who are aged 18 to 19 years. It is possible this trend may in part reflect a cultural preference for earlier motherhood, as per the 'cultural effect' noted by the Families Commission (reported above). The IDI analysis has shown that between December 2008 and July 2018 there was a greater reduction in first time maternity rates for younger teens (15 to 17 years) (76% reduction) compared to older teens (18 and 19 years) (61% reduction) (Oranga Tamariki, n.d.).

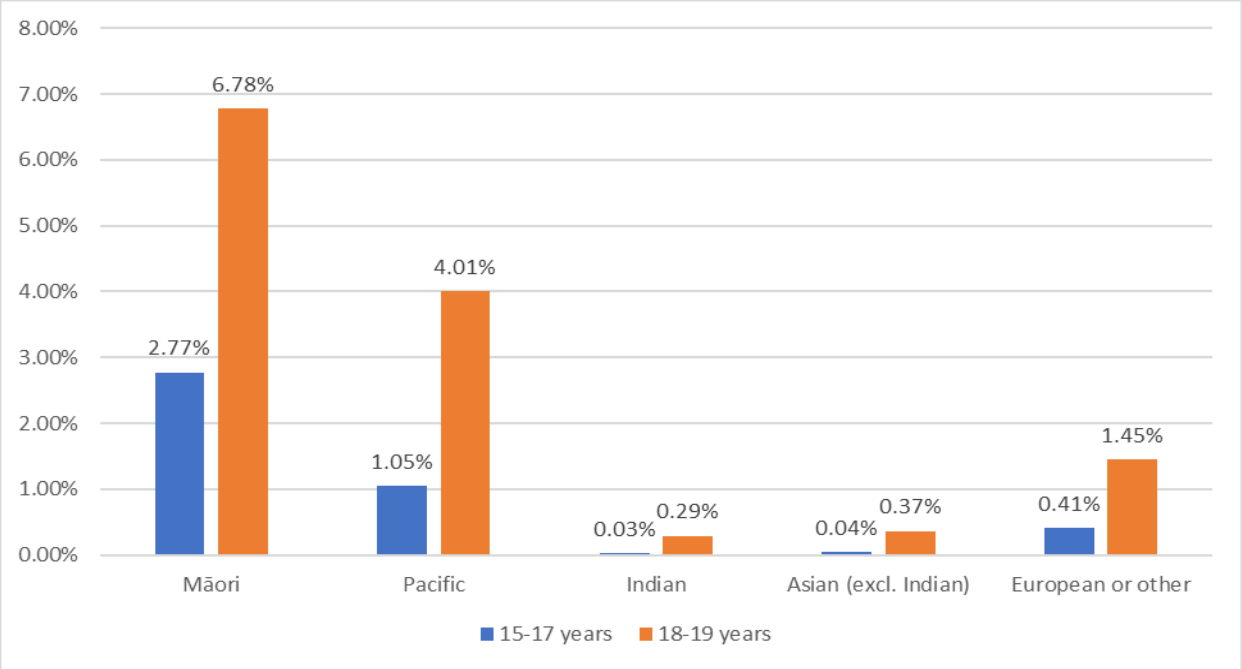

Figure 3: Percentage of births by ethnicity, grouped by younger (15 to 17 years) and older (18 and 19 years) sub-cohorts, 2017

The IDI analysis for June 2008 to September 2017 also shows the teen birth rate to have declined for all ethnicities, with Māori and Pacific teen birth rates declining at a slightly slower pace compared to all other ethnicities (grouped), (Oranga Tamariki, n.d.).

Using the IDI to has enabled researchers to generate more nuanced data, giving deeper insights into the contexts in which teenagers become parents. Of particular interest to Oranga Tamariki is any increased likelihood of becoming a young parent:

- whilst or subsequent to living in care or having a Family Group Conference/Family Whānau Agreement (having a 'statutory history'); or
- having been brought to the attention of the service (through a 'Report of Concern' (ROC)).

The IDI analysis (see Figure 4) shows that since June 2009, a decline in the teen birth rate has occurred both for teens with and without a statutory history. The rate of decline in birth rates relative

to June 2009 has been consistent for teens with no statutory history, while the decline in the birth rate for teens who have a statutory history has been slower until 2016 where a marked decline can be observed, narrowing the gap in the relative decline (Oranga Tamariki, n.d.).

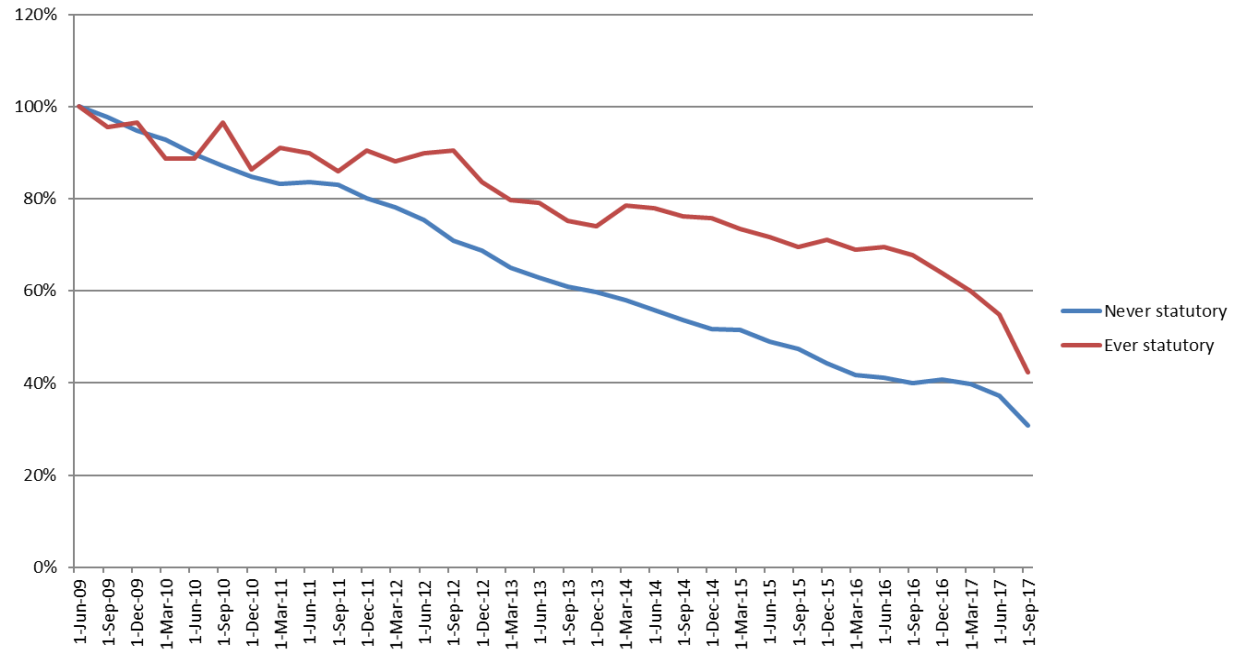

Figure 4: First time teen birth rate by statutory history

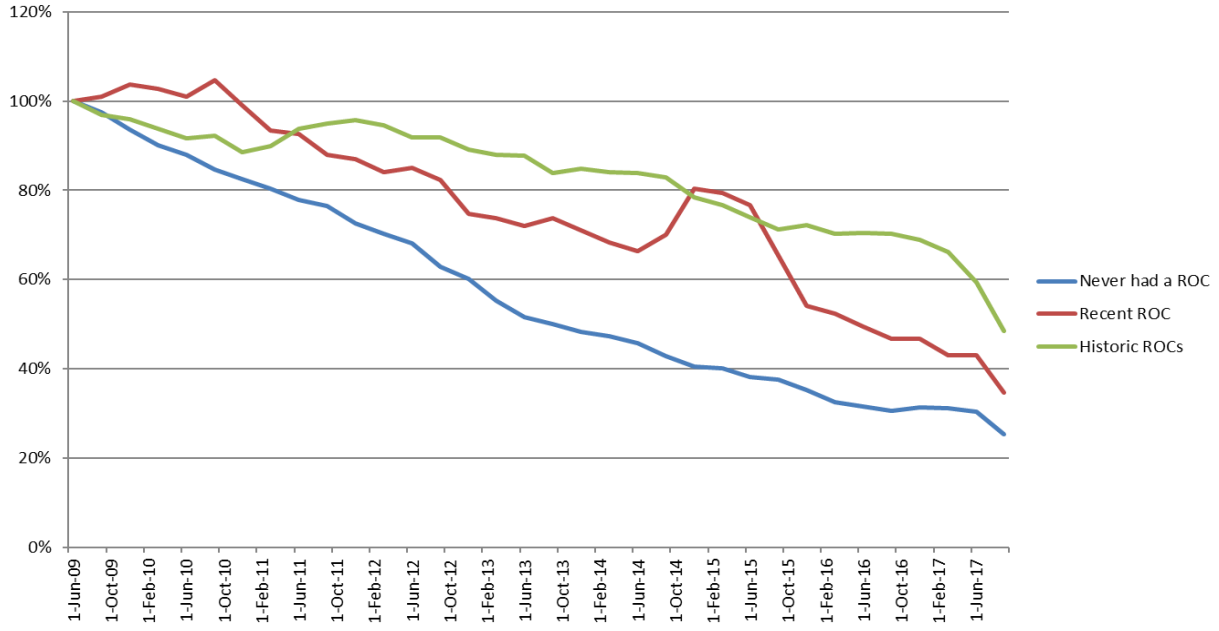

Figure 5: Relative decline in first time teen birth rate by Reports of Concern history

The IDI analysis (see Figure 5) shows that since 1 June 2009 there has been a considerable decline in the number of births to young women who have been the subject of a Report of Concern (ROC).

However, the rate of decline observed for this group is lower than that observed for those young women with no ROC history. Young women with a historic[11] ROC exhibited the least reduction in birth rates of the three groups, however all three groups showed a clear downward trend (Oranga Tamariki, n.d.).

The IDI analysis (see Figure 6) also shows the teen birth rate from September 2008 to May 2017 by mental health/substance usage (MHSU) treatment history. While the birth rate is reducing for both groups, the rate for teens with MHSU treatment history remains substantially higher than for those with no history. Further, while the data for those who are MHSU-experienced shows a slight downward trend, it is far more erratic than for the group who have not experienced MHSU treatment. This may be an effect of the very small numbers (Oranga Tamariki, n.d.)

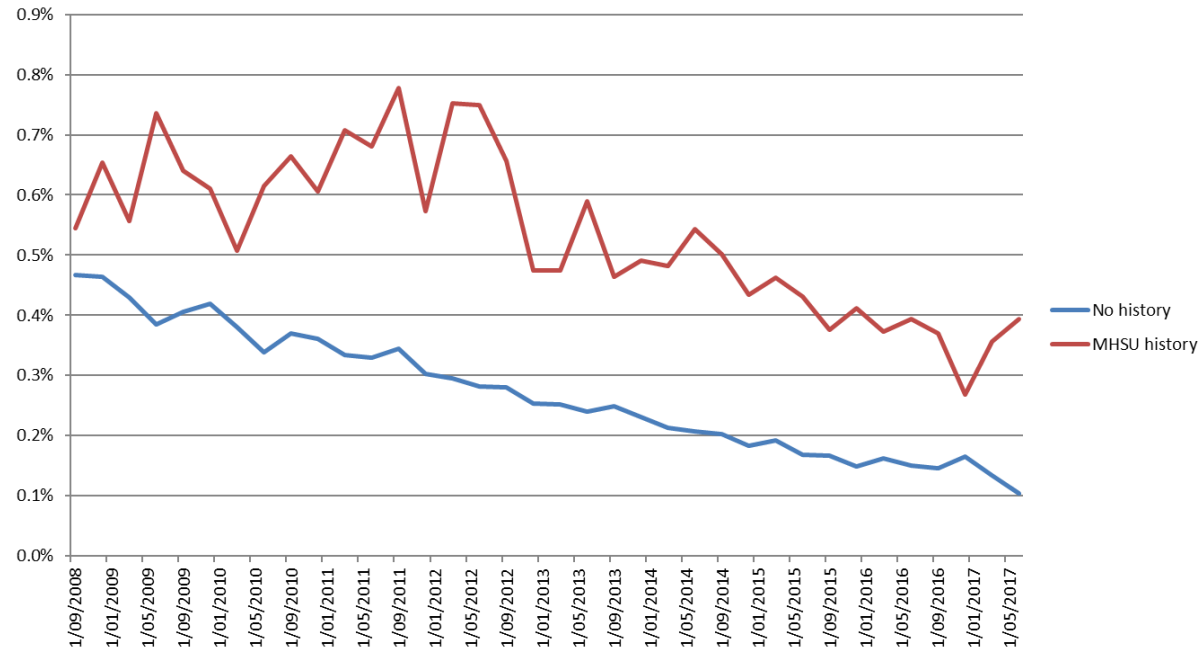

Figure 6: Initial teen birth rate per 1000 by MHSU treatment history

With the overall decline in teen birth rates, those who become young mothers may include a greater proportion of the most vulnerable and at-risk young women – i.e. MHSU treatment history, and/or ROCs, and/or statutory history. The data shows that that birth rates are reducing more slowly for those with a statutory history, have been the subject of a ROC, and/or have a MHSU treatment history, lending support to this hypothesis.

Young people in Aotearoa New Zealand are delaying becoming sexually active

Young people appear to be delaying becoming sexually active. In a 2012 survey of secondary school students, 24% reported that they had ever had sex. In comparison, in the equivalent surveys in 2001 and 2007, 33% reported ever having had sex (constant for both surveys) (National Institute of Demographic and Economic Analysis & University of Waikato, 2015, pp. 23–24).

[11] 'Historic' is used to refer to ROCs from more than one year prior.

Contraception rates have been stable, but some teens are using more effective methods

There was no reported change in the use of contraceptives (60%) by sexually active teenagers between 2001 and 2012 (National Institute of Demographic and Economic Analysis & University of Waikato, 2015, p. 25). However, for some young women, more reliable methods of contraception are being used. Since 2011 there has been a steady increase in the number of women aged 15 to 19 years being fitted[12] with a long-acting reversible contraceptive (LARC) (New Zealand Family Planning, 2019).

There is an opportunity to increase the use of LARCs by teenage women, as information about this highly effective[13] method of contraception is generally poorly distributed to and poorly understood by teenage women (Duncan, Paterson, et al., 2019). The decline in teenage pregnancy in the United States has been associated with the combination of increased public acceptance of contraceptive use by 18- and 19-year-olds (reduced stigmatisation of teens who use contraception), and the increased use of LARCs by this cohort (National Institute of Demographic and Economic Analysis & University of Waikato, 2015, p. 25).

The abortion rate for younger women has declined

The abortion rate to the year ended December 2017 has reduced from 9.4 per 1000 women aged 15 to 19 years in 2016, to 9.2 abortions per 1000 women in this age cohort in 2017 (Statistics New Zealand, 2018). These data extend a strong downward trend since a highpoint in 2007 (26.7 abortions per 1000 women aged 15 to 19 years).

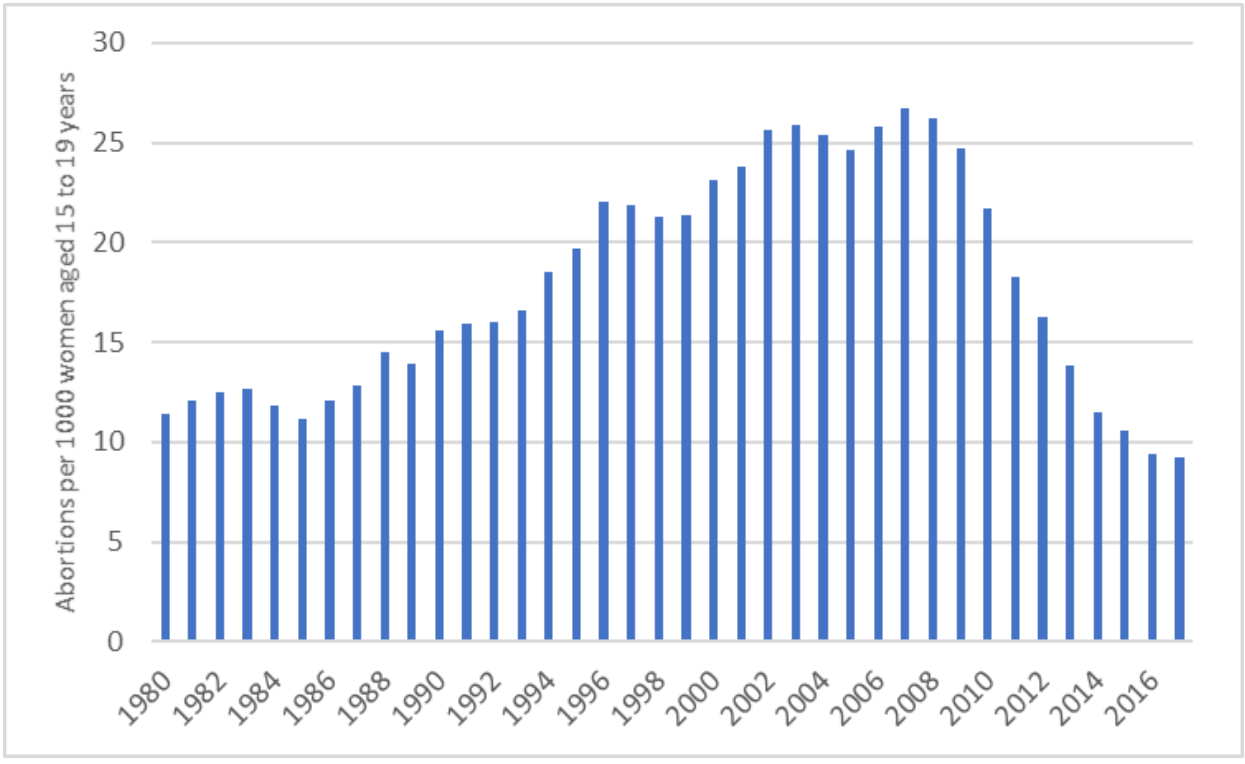

Figure 7: Changes in the abortion rate for young women aged 15 to 19 years over time

[12] LARC's differ in how they are 'fitted', with some being subdermal implants inserted into the arm, and some are intrauterine devices.

[13] LARCs are reported to be 22 times more effective than oral contraceptives (Duncan et al., 2019).

The graph in Figure 7 has been developed from the Statistics New Zealand data.[14] The graph shows the abortion rate (number of abortions per 1000 women aged 15 to 19 years) from 1980 to 2017 inclusive. The graph illustrates a steady climb in the abortion rate from 1980 to 2007, with a decline in the rate from 2008 to 2014, followed by a plateau period from 2015 to 2017. The data show that similar 'plateaus' occurred in the late 1990s (before continuing to rise) and again from 2003 to 2005, before the abortion rate began to decline, accelerating to a rapid decline in 2010.

Ways to provide better support to teens

Adults need to normalise adolescent sex and contraception

Teenage women have described feelings of being negatively judged for accessing contraception, and of fearing such judgement should they attempt to access contraception (Duncan, Paterson, et al., 2019). In contrast, one of the main reasons attributed to the low teen birth rate of Netherlands – the lowest in the OECD – is that "parents were more likely to normalise both sexual activity and contraception use," (National Institute of Demographic and Economic Analysis & University of Waikato, 2015, p. 25). No literature published in Aotearoa New Zealand was encountered during the development of this report that addressed parent and other adult attitudes to adolescent sex and contraception. However, a 2012 study conducted in California showed that parents were more accepting of teens being provided with emergency contraception (the morning-after pill), oral contraceptives, and condoms, but less accepting of IUDs and LARCs (Hartman et al., 2013). The authors concluded that the parents of teens needed more information about sexually transmitted infections and about contraception options, especially longer-acting methods such as LARCs and IUDs; and they needed to recognise that many teenagers experience an on-going consensual sexual relationship rather than single episode sex.

LARCs offer high protection against unplanned pregnancy and could be better utilised

LARCs provide highly effective protection from unplanned pregnancy (Duncan, Anderson, & Pickering, 2019; Family Planning New Zealand, 2017; McMicking & Lloyd, 2017; Shoupe, 2016). Although there has been an increase in the use of LARCs by young women in Aotearoa New Zealand (McMicking & Lloyd, 2017), LARCs remain under-utilised by teenage women. This may be because LARCs are more costly than other forms of contraception,[15] and/or limitations on access to LARCs, because these need to be inserted by a clinician who has been specifically trained.

In 2009 the American College of Obstetricians and Gynecologists (ACOG) recommended LARCs as the contraceptive of choice for most women (Shoupe, 2016). In 2012 ACOG took this a step further with a guideline recommending LARCs be considered for sexually active adolescents, who are at high risk of unintended pregnancy. Since then, there have been concerted efforts to develop programmes aimed at increasing young women's knowledge about LARCs.

'CHOICE', a public health programme in the United States, conducted a study in which a hierarchical 'menu of options' (most effective reversible method first, least effective reversible method last) was used to aid the discussion about contraception options (Shoupe, 2016). The study reported that

[14] See https://www.stats.govt.nz/information-releases/abortion-statistics-year-ended-december-2017.

[15] As at June 2017, New Zealand Family Planning charged $275.00 for the Jaydess, and $340.00 for the Mirena; compared to $5.00 for a six-month supply of the oral contraceptive pill. Jaydess and Mirena are hormonal-IUDs, which are the IU type indicated for adolescents.

once they were able to make an informed choice, most young women (72%) elected for a LARC. The follow up phase, 12 months later, found an overall satisfaction rate of 74–77% amongst LARC users aged 14 – 19 years, compared to 31-46% satisfaction amongst the same cohort who were using other methods. Women who had the LARC inserted were also considerably more likely to have continued with this contraceptive method one year later compared to those using other methods of contraception (86% compared to 49-56%). Shoupe (2016) also reports that a study in the United Kingdom has shown an association between the uptake of LARCs by young women and the fall in the abortion rate for the same cohort.

Inequitable access to information and services needs to be resolved

New Zealand Family Planning has noted the importance of social determinants of health in sexual and reproductive health, commenting on higher rates of unintended pregnancy and abortion amongst groups such as Māori and Pacific peoples, and low-income communities (New Zealand Family Planning, 2017). Timely access to conveniently located, free or low-cost, culturally responsive sexual and reproductive health services is needed for young people, "who may face stigma and barriers due to their age" (New Zealand Family Planning, 2017, p. 8).

More health services providers need to be trained to provide a wider range of contraception options, including LARCs (New Zealand Family Planning, 2017).

Develop a comprehensive framework for supporting teenage parents

Development of a framework to assess support for teenage mothers was commissioned in England. It was designed to help commissioners and service providers review their current support arrangements for expectant teens and young parents (Public Health England, 2015, p. 4). The framework focuses on identifying and addressing the needs of teenage parents and their children. Aotearoa New Zealand could develop a similar framework.

Identifying needs

The framework developed in England uses wide-ranging, robust data as evidence of identified needs. The table below lists the data-supported facts that have been used as the foundation of the framework, which in turn inform decision pathways for improving services to young parents. The table is supplemented with possible sources of similar data for Aotearoa New Zealand.

Table 1: Data at the foundation of the framework for supporting teenage mothers and young fathers

Topic	What the data says (England)	Possible sources for Aotearoa New Zealand data
Child health		
Smoking	Teenage mothers are twice as likely to smoke before and during pregnancy and three times more likely to smoke throughout pregnancy	*Maternity data* (MOH accessible via IDI)
Infant mortality	Babies of teenage mothers have a 13% higher risk of still birth Babies of teenage mothers have a 56% higher risk of infant mortality Babies of teenage mothers are three	*Mortality data* (MOH accessible via IDI)

Topic	What the data says (England)	Possible sources for Aotearoa New Zealand data
	times more likely to die from Sudden Unexplained Death in Infancy	
Low birthweight	21% higher risk of low birthweight	*Maternity data* (MOH accessible via IDI)
Premature birth	21% higher risk of premature birth of first baby 95% higher risk of premature birth for second baby	*Maternity data* (MOH accessible via IDI)
Breastfeeding	Teenage mothers are a third less likely to start breastfeeding and half as likely to be breastfeeding at 6-8 weeks	*Maternity data* (MOH accessible via IDI) Plunket (publicly available data is not broken down by age cohort but may be available)
Hospitalisation	Children of teenage mothers are twice as likely to be hospitalised for gastro-enteritis or accidental injury	*Publicly funded hospital discharges – event and diagnosis/procedure information* (MOH accessible via IDI).
Cognition	At age 5, children of teenage mothers are 4 months behind on spatial ability, 7 months behind on non-verbal ability and 11 months behind on verbal ability	B4 School Check (MOH accessible via IDI)
Mental health and emotional wellbeing		
Mental Health	Teenage mothers have higher rates of poor mental health for up to three years after the birth	*PRIMHD*[16] (MOH data accessible via IDI) *Pharmaceutical data* (MOH accessible via IDI)
Postnatal depression	Teenage mothers are three times more likely to experience postnatal depression	HPA 2015, *Postnatal Depression in New Zealand: Findings from the 2015 New Mothers' Mental Health Survey*
Relationships	Two in three teenage mothers experience relationship breakdown in pregnancy or the three years after birth	*Benefit dynamics data* (MSD data accessible via IDI)
Economic wellbeing		
Poverty	Children born to teenage mothers have a 63% higher risk of living in poverty Women who were teenage mothers are 22% more likely to be living in poverty at age 30	*2013 Census* (Statistics New Zealand) *Family Start* (Oranga Tamariki data accessible via IDI) *Social housing data* (HNZ accessible via IDI)

[16] Records about accessing secondary mental health and addiction service providers.

Topic	What the data says (England)	Possible sources for Aotearoa New Zealand data
Employment	One in five girls aged 16 – 18 years not in education, employment or training (NEET) are teenage mothers Men who were young fathers are twice as likely to be unemployed at 30	*Benefit dynamics data* (MSD via IDI) *NEET* (Oranga Tamariki) Youth Service Interventions (MSD data accessible via IDI)
Alcohol and drug use services		
An estimated one in twelve women under 20 years of age accessing drug and alcohol services are either pregnant or teenage mothers One in six men under 25 years of age accessing drug and alcohol services are young fathers		Ministry of Health *Alcohol use data and stats, Annual update 2017/18*. Unlikely to include detail on age of becoming a parent. *PRIMHD*[17] (MOH data accessible via IDI) *Pharmaceutical data* (MOH accessible via IDI)
Looked after[18] **young people and care leavers**		
Young people who have been looked after are three times more likely to be a parent by 18 years of age 25% of young women leaving care are pregnant, and 50% become pregnant with 18-24 months		*Statutory History*[19] (Oranga Tamariki)

To develop a similar framework based on the data-based evidence of need in Aotearoa New Zealand, it is likely that other data, relevant to Aotearoa New Zealand population and public health interests, may usefully be included. For example, Rheumatic Fever incidence, immunisation rates, drownings, food bank use, dental care registrations, long-term benefit reliance, participation in early childhood education, public housing wait times etc. Accessing components of the IDI, if possible, could provide more granular data, perhaps including at regional or DHB level data to highlight local needs.

Addressing identified needs

The framework developed in England lists resources that appear to (at least in part) address an identified need. The framework recognises that needs may be addressed differently according to the characteristics of the local community, attempting to suggest options that may be useful in different circumstances. To translate this information to the Aotearoa New Zealand context would require an audit of sorts of the many community-based programmes and resources available throughout Aotearoa New Zealand. These would need to be assessed for quality (evidence-based design; appropriately qualified service delivery people; well-managed; demonstrable efficacy) before being

[17] Records about accessing secondary mental health and addiction service providers.

[18] 'Looked after' is a term used in England to mean that the person is care-experienced.

[19] Data in this regard has been brought into the IDI and is included above. See Figure 4.

included in the framework. It seems likely that such a framework would be dynamic, requiring ongoing effort to keep it up to date and relevant.

SECTION TWO: AN OVERVIEW OF THE LITERATURE

Purpose

The purpose of this section of the evidence brief is to provide up-to-date evidence from Aotearoa New Zealand and international literature about effective support interventions for teenage parents, their children and family or whānau, as well as protective factors and risks faced by teenage parents and their children. Furthermore, this brief includes information on models, services and interventions currently in place in Aotearoa New Zealand, indicators of their effectiveness, and outcomes (both short- and long-term) for teenage parents and children engaged with those interventions.

Findings from this evidence brief will help Oranga Tamariki to explore how service design and delivery can be improved for teenage parents.

Methodology

Scope

This evidence brief will contribute to Oranga Tamariki's evidence base by providing an overview of current literature as it relates to the research areas outlined in Table 2, based on the following research questions:

1. What interventions work for teenage parents, what are the risks faced by teenage parents and their children, and what contributes to better outcomes (e.g., protective factors)?
2. What models, services, and interventions are currently in place in Aotearoa New Zealand, and what is their demonstrated effectiveness for teenage parents, Māori, and other groups?

Table 2: Key research areas

Information type	Key evidence	Information source
Aotearoa New Zealand and international literature	**Research question 1:** • Effective interventions for teenage parents, their children, and family or whānau • Risks faced by teenage parents and their children • Protective factors for teenage parents and their children	• Oranga Tamariki • Academic databases • Other online sources (e.g., The Hub, Superu)
Literature on models in place in Aotearoa New Zealand	**Research question 2:** • Models/services/interventions currently in place in Aotearoa New Zealand • Indicators of effectiveness of those models/services/interventions	• Input and resources from the Whānau and Community Initiatives team in Oranga Tamariki regarding a list of service provision organisations • Academic databases

Information type	Key evidence	Information source
	• Outcomes for teenage parents and their children engaged with those models	• Other online sources (e.g., The Hub, Superu)

Literature search

In total, information from 41 articles or reports was used to provide an overview of the key research areas. The following databases were searched between 29 and 31 August 2018:

- Cochrane Library
- CINAHL
- ProQuest
- PsycINFO
- PubMed
- ScienceDirect
- Scopus
- Web of science.

To conduct the search, we used combinations of key word terms. All search terms used in the scan are provided in Table 2. Searches were conducted using all possible combinations from each of the three columns. The search terms that were found to be the most effective in returning relevant information have been bolded. Māori and Pacific words were less successful in returning useful sources, though, "Māori" was a useful search term in that it returned items of relevance to Aotearoa New Zealand.

The keywords included in the search strategy are listed below in Table 3.

Table 3: Search terms

Search term 1	Search term 2	Search term 3
teen* parent*	**Māori/Maaori**	**outcome***
young parent*	Pacific*/Pasifika	risk factor
adolescent parent*	**indigenous**	**protective**
rangatahi*	**father**/dad/tane/taane	model
	mother/mum/whaea	**service model***
	solo/single	support
	child*/tamariki/tamaiti	service*
	infant*	service* provider*
	toddler*	provider
	baby/babies/pepe/pipi/pepi	**effective**
	pregnan*/hapu*/to	**engagement**
	famil*/whānau/whaanau/aiga	youth development

Search term 1	Search term 2	Search term 3
	New Zealand	strengths based/strengths-based
		cultur*

Selection and review of returned material

In the final selection of literature, priority was given to:

- sources of information produced by recognised and reputable organisations
- relevance to primary research areas
- English language publications
- more recent literature (2008 – 2018)
- material that exhibited methodological rigour (e.g., systematic reviews, representative samples)
- New Zealand literature, and international literature applicable in the New Zealand context.

Full-text articles and documents were assessed to:

- check that each document fell within the scope of the evidence brief
- test and verify the quality of the research
- review the context and findings of each study in terms of its relevance to the research areas and applicability to the Aotearoa New Zealand setting
- identify any further key documents referenced in the bibliographies of included texts.

The title and abstracts of initial returns were reviewed for relevance to the key research areas. Material was excluded if it did not fit within the criteria listed above. We ensured, where possible, to include literature on teenage fathers, and whole-of-whānau and tikanga Māori approaches and support for teenage parents. We also wanted to understand, if possible, why a dedicated response to teenage parenting is needed. We provide some views on this later in this document.

From this first sweep, abstracts for all potential inclusions (154 documents) were reviewed for relevance to the key research areas. Five documents from the first sweep were literature from within the Aotearoa New Zealand context – these were all included in the evidence brief. Due to the large number of articles identified as relevant to effective support interventions, protective factors, and risk factors for teenage parents in the international context, we prioritised systematic and narrative reviews, and articles related to the evaluation of interventions for teenage parents, including longitudinal and follow-up studies.

Additional documents were excluded because they were identified as duplicate studies, because they did not provide information relevant to the research areas, or because they related to a population other than teenage parents and their children. In total, 130 documents were excluded from the evidence brief after reviewing the full text.

A search for grey literature was also conducted using Google Scholar, and through a targeted search of teenage parenting intervention service websites in Aotearoa New Zealand, identified through literature provided by Oranga Tamariki. As we were reading through grey literature we identified and sought out other documents and included them if they fitted within the criteria outlined above and

were accessible. Some grey literature documents that were published prior to 2008 have been included due to the lack of literature available on teenage parenting in Aotearoa New Zealand. Only four evaluations of support interventions in Aotearoa New Zealand were sourced. It is important to note that this was a rapid, rather than exhaustive, search of the grey literature. A total of 17 documents or sources were included in the evidence brief from the grey literature search.

This left a total of 41 articles and reports included in this section of the evidence brief.

Limitations and gaps

When considering the information provided in this evidence brief, it is important to recognise that a systematic review of the literature was not conducted for this report. Although the search of the literature was relatively detailed and extensive, it is likely that some research or reports that address the key research areas were not identified in the search (and therefore not included in this report).

Furthermore, the quality of each study or report was not formally assessed in this evidence brief. As a result, this report includes information from reviews that provided useful information but lacked some important components such as clear eligibility criteria, search strategies, study selection processes, and assessment of methodology and bias in individual studies. We have also included information sourced from individual studies, which may be more subject to bias than research that collates findings across several studies and analyses the results as a whole. While we have attempted to address these limitations by clearly indicating the source of information presented in this evidence brief, it is important that the information presented from non-systematic reviews or individual studies are interpreted with caution.

The broad scope of the evidence brief and the limited number of documents that could be reviewed means that a high-level review approach has been taken to a broad and nuanced topic. Other points to note from scanning the literature sourced on teenage parents is that more literature is available on teen mothers – less so on teenage fathers and fatherhood (Tuffin, Rouch, & Frewin, 2018). Also, it is sometimes unclear in the literature whether teenage mothers are single and parenting alone, or in a relationship and co-parenting with their partner who may or may not be the father of the child – "while not all teenage mothers are sole parents, most experience periods of sole parenthood" (Collins, 2010, p.1).

There is also a lack of literature that specifically focuses on teenage parenting by Pacific peoples. Veukiso-Ulugia's (2016) article on sexual and reproductive health of adolescent Sāmoan New Zealanders may provide some insight into why this is:

> *In respect of sexual conduct, the ideal Sāmoan girl and Sāmoan boy are expected to show sexual restraint. These 'traditional' values are heavily influenced by Christian teachings* (Veukiso-Ulugia, 2016, p.74).

Perhaps due to the taboo nature of the subject of sexual and reproductive health for Sāmoan peoples (Veukiso-Ulugia, 2016), teenage pregnancy and parenting in this population may be hidden. Veukiso-Ulugia's key findings were that the Sāmoan population in Aotearoa New Zealand is changing and that sexual health attitudes and behaviours among Sāmoan youth are diverse – and acknowledging this diversity from a public policy perspective is important. Furthermore, more reliable data and information on these matters can produce better evidence-based responses to ensure better health outcomes for young Sāmoans (Veukiso-Ulugia, 2016) and for Pacific peoples more broadly.

A final limitation of this evidence brief is that a lot of literature included has been sourced from outside of Aotearoa New Zealand – particularly on effective support interventions, risks and protective factors – primarily from the USA with a few documents from Canada and the United Kingdom (UK). Although some teenage parent interventions in these jurisdictions are broadly similar to Aotearoa New Zealand's, care needs to be taken when generalising the findings to the unique cultural and environmental context of New Zealand. Further robust evaluations of interventions for teenage parents in Aotearoa New Zealand is required to assess their effectiveness.

What services and support interventions work, what are the risks faced by teenage parents and their children, and what contributes to better outcomes?

Services and Interventions for teenage parents, their children, and families or whānau

There are many examples of interventions with teenage mothers, though not all are effective

SmithBattle, Loman, Chantamit-o-pas, and Schneider (2017) conducted an umbrella review of meta-analyses of interventions to improve outcomes for teenage mothers. High-quality studies reviewed showed some significant outcomes, although most had small effect sizes. Outcomes included:

- reduced low birth weight (for psychosocial interventions designed to provide psychological or social support, improve knowledge of maternal and foetal health, and promote access to healthcare)
- reduced repeat pregnancies/births (for tailored interventions)
- maternal education (using enrolment in education and vocational programmes as an indicator)
- maternal employment.

Short-term home visiting programmes were also associated with significant improvements in parenting outcomes such as: parent-child *teaching interactions* after the intervention, and at follow-up; and parent-child *relationship* after the intervention and at follow-up; although, these results were based on small sample sizes. Outcomes for interventions for maternal depression, and maternal use of contraception had low/no significance (SmithBattle et al., 2017).

There were some limitations associated with these findings. Many of the meta-analyses did not include moderator analyses, which meant that other factors outside of the interventions could have been causing the changes observed. Furthermore, SmithBattle and colleagues discussed that many behavioural interventions offer limited resources and occur too late to mitigate educational and social disparities that may be experienced before teenage pregnancy (SmithBattle et al., 2017).

Services and support interventions for teenage parents should be early, comprehensive, and supportive

One Aotearoa New Zealand-based follow-up study of 13 women aged 24-29 who were previously teenage mothers[20], discussed the importance of comprehensive early intervention services to address the multiple and often complex needs of teenage mothers and their children, which can help build skills and competencies, and support educational, social and economic participation (Collins, 2010).

Conn, de Figueiredo, Sherer, Mankerian, and Iverson (2018), in their USA-based study which included interviews and focus groups with 24 diverse 16-25-year-old parents, found that training is needed for providers working with young ethnic minority parents – especially in urban, low-income communities – to help build young parents' confidence and sense of self-worth. Educators also have an opportunity to de-stigmatise young parents' experiences and offer support and mentorship to buffer the effects of stress and promote healthy development (Conn et al., 2018).

Targeting potential participants for teenage parent interventions should be done sensitively

An evaluation of the Teens & Toddlers Pregnancy Prevention programme based in the UK included data on how young women experienced being identified as at-risk for teenage pregnancy, in order to better understand the unintended consequences of such a targeting strategy (Sorhaindo et al., 2016). While targeting strategies have merits in terms of equity and impact of programmes, it was found that the particular targeting approach was problematic for the following reasons:

- The lack of transparency from schools on the targeting strategy led to feelings of confusion and mistrust among some of the teenage women.
- Black and minority ethnic young women believed that the assessment of their risk was based on stereotyping, and others felt that their outgoing character was unfairly seen as a risk.
- The teenage women responded to being targeted by adopting particular strategies such as distancing, silence, and refusal.

The authors concluded that it is important for programme designers to involve potential participants in determining the need for supportive intervention, or introducing population-level programmes instead (Sorhaindo et al., 2016).

Service providers need to consider how they support teenage fathers, particularly where they have multiple needs

In their review of the literature on teenage fathers and fatherhood, Kiselica and Kiselica (2014) stated that the service needs of teenage fathers are numerous, and may include the following: educational and vocational support services; job readiness training; job referrals; parenting education; medical and reproductive health services; education about sex, reproduction and family life; mental health services; substance abuse services; crisis intervention services; couples and family counselling; peer support; adult mentors; childcare assistance; and legal advice regarding, for example, paternity and child support.

[20] The original study was conducted in 2001 in which 18 teenage mothers were interviewed on their views and experiences on teenage motherhood – 13 of the original participants were located in 2008 and agreed to participate in in-depth interviews.

In a commentary on the healthcare needs of teenage fathers, Berte (2016) highlighted that teenage fathers require services that will enable them to become involved, responsible parents, while also ensuring continued progress towards their own life goals (e.g., education or career). Berte suggests some clear strategies and ways in which primary health care providers could engage with teenage fathers. These include:

- Asking male adolescents if they are fathers – regardless of a yes or no answer, this creates awareness and an opportunity for a dialogue of support.
- Ensuring that support is unbiased – whether the teenager is a father or not, or if they are unsure.
- If they are a teenage father, identifying their support needs and whether these needs are being met, and if not, providing information and relevant contacts within their community to enable the individual to access support.
- Ensuring that the best opportunities for education and counselling are identified, with the outcome being the father's positive relationship with a child.

Services and service providers should support teenage parents who are co-parenting

In a USA-based longitudinal study examining co-parenting in teenage mothers and their children's fathers, it was found that many fathers of children born to teenage mothers are active co-parents (Lewin, Mitchell, Beers, Feinberg, & Minkovitz, 2012). One of the key findings from this study was that it confirms research that shows co-parenting conflict between teenage parents influences child adjustment in terms of behaviour problems. The authors of the study concluded that practitioners and service providers working with teenage mothers should encourage father participation at medical/health/clinical contacts, and should provide support for the relationship between the parents, whether they are living together or not, as part of service provision (Lewin et al., 2012).

Policies to promote positive youth development are needed to help teenage parents

Kiselica and Kiselica (2014), in their literature review on teenage fathers, noted that policies to promote positive youth development are needed to reduce risk factors, and to foster connections with schools and communities. They also stated that public policies should:

- support initiatives with the aim to reduce poverty
- provide positive adult role models
- foster communication and child-monitoring skills of parents
- inspire young people's commitment to school
- involve youth in fulfilling community service projects
- offer adult-supervised recreation programmes (Kiselica & Kiselica, 2014).

Findings from specific support interventions for teenage parents and their children

The following findings from evaluations and research on specific international interventions for teenage parents and their children may be useful to consider.

SafeCare

A study was conducted in 2018 on the effectiveness for an evidence-based, structured, in-home behavioural parent training protocol (SafeCare) for teenage parents engaged in child welfare services in Oklahoma, USA (Hubel, Rostad, Self-Brown, & Moreland, 2018). SafeCare was designed to reduce the occurrence of risk factors for child maltreatment by improving parent-child/infant

relationships, parent knowledge and skills, and other contextual environmental factors. It had previously been established as effective with a diverse group of parents – including young parents under 21 years of age – during a state-wide implementation in child welfare services (Carta et al., 2013; Chaffin et al., 2012; Silovsky et al., 2011; in Hubel et al., 2018). However, when this specific study examined the effectiveness of SafeCare for the under age 21 parent subsample (*n*=294), it did not result in significantly improved outcomes in terms of preventing child welfare recidivism or reducing risk factors associated with child abuse and neglect, as compared to the overall parent population engaged in child welfare services as usual. Furthermore, there were no significant differences between SafeCare and child welfare services as usual, with regards to programme engagement and satisfaction, for young parents (Hubel et al., 2018).

These findings suggest that while the SafeCare programme may be effective for parents overall, there does not appear to be evidence to suggest additional benefits for teenage parents. Hubel and colleagues suggest that it is important to develop, test, and evaluate interventions that are specifically designed to target teenage parents. They suggest that interventions could be based upon neuro-developmental differences of teenagers, preference for technology-based resources, and additional service needs specific to teenage parents such as fertility planning – as the needs of teenage parents may be significantly different to adults (Hubel et al., 2018). Primary prevention of risk factors that lead to abuse and neglect is also important, as the effectiveness of interventions such as SafeCare are limited within contextual factors such as low levels of education, under- or un-employment, and lack of access to adequate housing (Hubel et al., 2018).

Second Chance Homes Network

The Second Chance Homes Network (SCH) in Georgia, USA was founded in 2001 in collaboration with the Georgia Department of Human Resources. The overarching goals of the SCH are to build strong families and break the cycle of persistent poverty and dependency associated with teenage childbearing. The SCH is a supportive housing programme for pregnant and parenting teenagers with five core components (recognised by The Child Trends and Healthy Teens Network) including supports and resources to promote:

- self-sufficiency
- housing stability
- financial stability
- successful and engaged parenting and attachment
- healthy relationships (Hudgins, Erickson, & Walker, 2014).

There are seven homes in Georgia run by five community-based organisations, housing five to seven parenting mothers up to age 21 and their children, as well as a limited number of pregnant teenagers who will remain in residence after giving birth. SCH also has partnerships with local community organisations to provide support and services to other teenagers in surrounding communities (Hudgins et al., 2014).

Evaluations of SCH over the previous decade have:

> *…consistently revealed improvements in several key outcomes, including education, housing, income, self-sufficiency, parenting, repeat pregnancy, and child outcomes* (Hudgins et al., 2014, p.101).

A further evaluation of the programme was conducted in 2012, using data collected from each resident (*n*=415)[21] at intake, discharge, and follow-up at three, 12 and 24 months after discharge (Hudgins et al., 2014). The evaluation found that there were benefits in all of the key areas identified in previous evaluations, and that those who stayed longer in the SCH houses demonstrated better outcomes, especially around educational status, employment and stable residence (Hudgins et al., 2014).

Family Spirit

The Family Spirit intervention is a paraprofessional[22]-delivered home-visiting service for indigenous American teenage mothers and children. It was developed over the course of a decade through community-based participatory research, and it includes 43 lessons delivered in a culturally congruent format by family health educators. The educators have at a minimum a high school diploma and at least two years of additional related work experience or education, and are required to speak their Native language and English (Barlow et al., 2015). Outcomes for the intervention were measured after three years using a randomised control trial methodology, which showed that from pregnancy to 36 months postpartum, mothers in the intervention group had:

- significantly greater parenting knowledge
- significantly greater parental locus of control (parent self-efficacy, parent control, and child control)
- fewer depressive symptoms
- fewer externalising problems (opposition/defiance, rule breaking, and social problems)
- lower past month use of marijuana and illegal drugs.

Children in the intervention group had:

- fewer externalising problems (activity/impulsivity, defiance/aggression)
- fewer internalising problems (distress/anxiety, inhibition/withdrawal)
- fewer dysregulation problems (sleeping, eating, emotions, sensory experiences) (Barlow et al., 2015).

This showed that Family Spirit promoted effective parenting, reduced maternal risks, and improved developmental outcomes for children for indigenous American parents, noted as the population subgroup with the fewest resources and highest behavioural health disparities in the USA (Barlow et al., 2015).

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[21] 531 teenage mothers in total had been in a SCH home and discharged, but only 116 stayed in the home for one month or less. This was not considered an adequate time period for which service receipt could produce intended outcomes, so the total population was 415. It should also be noted that removing those who did not complete from the intervention sample can artificially inflate the effect size/measured effectiveness of a programme, as this can limit the treatment sample to only those for whom the treatment was effective in keeping engaged.

[22] "Paraprofessional" is a job title given to persons in various occupational fields who are trained to assist professionals, but do not have professional licensure. The paraprofessionals in this study were called "family health educators".

Literary interventions

Parental reading interventions have been found to have a positive impact on children's developing language and literacy skills (Scott, Van Bysterveldt, & McNeill, 2016). A 2016 Aotearoa New Zealand study assessed the effectiveness of an experimental, emergent literary intervention that targeted teenage mothers attending an educational facility and aimed to change shared reading behaviour (Scott et al., 2016). Twenty-seven teenage mothers completed a seven-week intervention based in the facility which tested a range of emergent literary skills that they could utilise when reading with their children. These skills were demonstrated through videoed shared reading interactions with their young children. Results showed significantly greater frequencies of vocabulary, questioning, and book/print features-focused[23] reading behaviours from pre-test to post-test (Scott et al., 2016).

Risks faced by teenage parents and their children

Teenage parents can face many challenges

Much of the literature around teenage motherhood focuses on risks for mothers and children, including health risks, lower levels of education, reduced employment opportunities, long-term welfare dependency and an intergenerational transfer of disadvantage (Collins, 2010). Teenage and young parents are commonly faced with multiple stressors, such as financial burden, role restriction, and social isolation, which can be compounded by social factors such as attention to education and career, stigma and judgement from social networks, racial and class stereotyping, and presumptions about the capabilities of adolescents to assume parenting roles (Conn et al., 2018).

Kamp and McSharry in their 2018 text *Re/Assembling the Pregnant and Parenting Teenager*, say teenage parents face appalling realities, including:

> *…the enduring stigma as 'stupid sluts' or 'deadbeat boys'; unnecessary psychological distress in the face of ambiguous access to safe, local abortion where their choice (either free or forced by circumstances) is to terminate an unwanted pregnancy; avoidable complexities in accessing education, health and seeking employment and, perhaps most damaging of all, a frequent silencing of voice as others – experts, statisticians, policymakers, moralists, tabloid media – speak for and about who they are and who they and their children might become* (Kamp & McSharry, 2018, p.22).

Being a teenage mother is linked with negative socio-economic circumstances

In a Canadian study that utilised data from the 2006 Census, the socio-economic characteristics of First Nations and non-Aboriginal teenage mothers in comparison to non-teenage mothers in a cohort of 25 to 29 year old women was observed (Garner, Guimond, & Senécal, 2013). It found that teenage mothers were less likely to have graduated from high school, and more likely to live in overcrowded housing and in a home in need of major repair. Teenage mothers were also found to have lower household incomes after adjustments were made for the composition of the household (Garner et al., 2013). First Nations women were more likely to be teenage mothers than non-Aboriginal women (Garner et al., 2013).

[23] Recognising book and print concepts or features such as capital letters, speech bubbles, and signs (Scott et al., 2016).

However, research carried out in Aotearoa New Zealand suggests that a link between Māori teenage parents and adverse outcomes is due to the socio-economic circumstances of the individual, not their ethnicity:

> *Teenage pregnancy is not a risk factor for adverse outcomes for Māori women once socioeconomic status has been taken into account* (Mantell et al., 2004).

Developmental issues were identified for children of teenage parents in studies involving some ethnic groups facing multiple challenges

A recent USA-based longitudinal study used latent class growth analysis to identify developmental trajectories in children of Mexican-origin teenage mothers (*n*=204). Three distinct groups emerged:

- a delayed/decreasing functioning group
- an at-risk/recovering functioning group
- a normative/stable functioning group (Jahromi, Zeiders, Updegraff, Umaña-Taylor, & Bayless, 2017).

Children with delayed/decreasing functioning were more likely than the normative/stable functioning group to have families with lower income, and fewer learning materials at home. These children also had teenage mothers with more depressive symptoms and greater co-parental conflict with the teens' mother figures (Jahromi et al., 2017).

Jahromi and colleagues' above research on developmental trajectories supports findings from another USA-based study on parenting stress, social support and depression for 180 ethnic minority (African American and Latina) teenage mothers and impacts on their children (Huang, Costeines, Kaufman, & Ayala, 2014). The results suggested that higher levels of parenting stress as well as a perceived lack of social support were associated with higher levels of depression in teenage mothers at baseline; and higher levels of maternal deprivation were associated with more developmental delays in infants after one year from baseline. Huang and colleagues (2014) concluded that to ensure healthy infant development, it is critical to find ways to decrease stress and increase social supports for teenage mothers.

There are ongoing challenges faced by mothers in Aotearoa New Zealand who had children as teenagers

Collins (2010), in her follow-up study with a small number of young Aotearoa New Zealand mothers (*n*=13) who had been teenage parents found a number of reported ongoing challenges such as maternal mental health concerns, family violence, and children having physical, emotional and behavioural issues. Others lacked social and material support, with problems in their wider families affecting assistance. Several experienced difficult custody and access issues with birth fathers, and some lacked suitable or stable accommodation, had financial concerns, or could see no pathways to suitable employment (Collins, 2010).

However, focusing on individual "deficits" or risk factors for pregnant and parenting teenagers does not work, and a strengths-based approach is needed to ensure services and support are appropriately designed

Brand, Morrison and Down (2014), in their literature review, call for an open and honest dialogue around how teenage pregnancy and young motherhood can be rethought, to:

> *…re-vision the 'deficit view' of young motherhood in order to address contradictions between research evidence, policy discourse and current practice and service provision* (Brand et al., 2014, p.174).

They argue that there is a need for qualitative research to privilege the voices of young women and consider multidimensional experiences of young motherhood. This focus could provide a way to move away from universally prescribed interventions – that can be seen as fragmented, silo-based, and out of step with the realities of daily life as well as potentially stigmatising towards young mothers – and towards approaches that foster relational and responsive relationships and address the unique needs of teenage mothers at different points in their life trajectories (Brand et al., 2014).

Supporting this, Conn and colleagues (2018) elicited in-depth narratives about the experiences of teenage mothers, including those of "shame, stigma and discrimination associated with perceptions of their "fitness" to be a parent and moral judgement due to ageist attitudes" (Conn et al., 2018). Participants in this study spoke of the positive and adaptive ways in which they coped with such experiences, such as focusing on their role as a parent and as a role model for their children (Conn et al., 2018). Conn and colleagues talked about the need for a focus on:

> *…the healthcare system, and providers whose negative messages and judgment serve to decrease young parents' willingness to utilize the healthcare systems for support, information and to maximize their health and the health of their new family, which may contribute to pre-existing disparities* (Harrison et al., 2016, in Conn et al., 2018).

A health-care focus on individual 'risk factors' that direct attention towards a deficit frame also deflects issues away from structural root causes of young motherhood, which includes the inequitable distribution of social and cultural resources (Brand et al., 2014).

Protective factors for teenage parents and their children

Social support is an important protective factor for teenage parents

Brand and colleagues (2014) presented a review of selected research literature on support for pregnant and young mothers in the community. Their key finding is that there is clear evidence for the vital role that social support plays in young women's experience of pregnancy and motherhood, especially in terms of forming a positive motherhood identity (Brand et al., 2014). Conn and colleagues also found this in their research with young mothers, but noted that opportunities for social support for young mothers can be limited (Conn et al., 2018). They also noted that while teenage parenting programmes have typically focused on education, vocation, and sexual health, fewer are directed toward providing socio-emotional support to young parents (Conn et al., 2018).

Collins (2010) also found in her follow-up study of young mothers in Aotearoa New Zealand that the women acknowledged the importance of family and whānau, partners, and peers in providing social support to them.

Teenage parents can and do show resilience within challenging circumstances

Not all young parents and their children experience detrimental outcomes. For example, some view pregnancy as a positive catalyst for change, leading to self-transformation and increasing motivation to complete education (Cherry et al., 2015, in Conn et al., 2018). Furthermore, some young parents saw the following benefits associated with early childbearing: closer relationships with children due to less of an age gap; opportunities for long, successful careers as mothers; having time to "enjoy life" after children leave home; and having more energy while child-rearing at a younger age (Conn et al., 2018).

Young women in Collins' (2010) Aotearoa New Zealand who used to be teenage mothers were able to demonstrate factors associated with resilience, including individual characteristics such as:

- being motivated and taking responsibility
- having goals, aspirations and pride in achievements
- using insights into their past as a means of moving forward
- having a strong sense of identity
- seeing their lives in a wider context.

Collins also found that young mothers who focused on the best interests of their children found this a useful way of resolving conflict with their children's birth fathers (Collins, 2010). While all of the young women in this study had received income support at some point and some had been engaged in tertiary study while receiving income support, most were engaged in paid employment, and some were economically independent (Collins, 2010).

Fathers are seen as a protective factor for children born to teenage mothers with depression

A 2015 USA-based study by Lewin and colleagues (2015) suggested that fathers of children born to teenage mothers may be a protective resource. One hundred and nineteen teenage mothers and their infants (less than six months old) were involved in a quasi-experimental trial of a paediatric primary care programme. 29% of the mothers were depressed. Data was gathered from mothers who completed questionnaires administered at baseline, before participation in the intervention or non-intervention (comparison) conditions. Out of all of the mothers that participated, they reported that 78% of fathers were engaged in their child's life – usually seeing them a few times a month – and that 71% of fathers took responsibility for their children (Lewin et al., 2015). This research showed that father involvement appears to mitigate the heightened risk associated with depression in the immediate post-partum period for mothers. In a multiple linear regression:

- father responsibility predicted lower infant distress
- maternal depression predicted higher infant distress
- there was a significant interaction in which father engagement buffered the effect of maternal depression on infant distress (Lewin et al., 2015).

These results offer insight into how young children born to teenage mothers might be protected from an early age against adverse effects of growing up with mothers experiencing depression. The findings also help to debunk stereotypes of young or teenage fathers, and demonstrate that many of them are involved with their children and that their involvement may have an important role in their child's development and well-being (Lewin et al., 2015). They suggest that it is important to ensure that teenage fathers are supported to have positive involvement in the lives of their children.

Commentary on teenage fatherhood

Teenage fathers, like teenage mothers, are also disproportionately disadvantaged compared to the general population, being more likely to: experience poverty; be involved in gang activity or illegal behaviour; have poor school performance, including a higher likelihood of drop-out; and use alcohol, drugs or other substances (Berte, 2016; Kiselica & Kiselica, 2014). They are also more likely to have experienced: physical or sexual abuse; disconnection or relationship troubles with one or both parents; psychiatric illness; and many transitions or changes in their family structure, as well as poor supervision of their activities (Sipsma et al., in Berte, 2016; Kiselica & Kiselica, 2014).

Tuffin and colleagues (2018) have noted a dearth of literature on the experiences of teenage fathers – which has "created a space occupied by myths and stereotypes" (Tuffin, Rouch, & Frewin, 2018, p.269). They conducted an exploratory study in the mid-2000s in Aotearoa New Zealand, carrying out extended interviews with teenage fathers. Their 2018 book chapter seeks to review research on teenage fatherhood conducted since their original research, and see how it may have been supported or challenged (Tuffin et al., 2018). They found that while more recent research provides some differing perspectives, they supplement and support the original conclusions from their earlier research on teenage fathers, which include:

- There are a number of challenges and pressures on teenage fathers.
- There are psychologically positive aspects whereby fatherhood can be transformative for young men.
- Teenage fathers do take up the responsibilities of fatherhood and advocate on behalf of their children, for example, in intergenerational repair[24] and ensuring their children have a better future.
- Positive outcomes offer a counter-discourse to the stereotypes of teenage fathers as irresponsible, disinterested or unwilling participants in their child's lives – keeping in mind that positive outcomes may not be guaranteed.
- With the 'right' support (e.g., through relationships with the mother of the child and other familial relationships such as the child's grandparents), teenage fatherhood can be re-framed as an opportunity rather than a negative experience.

What models, services, and support interventions are currently in place in Aotearoa New Zealand, and what is their demonstrated effectiveness for teenage parents, Māori, and other groups?

Teen Parent Units

Teen Parent Units (TPUs) are state-funded units within or attached to state secondary schools. They intend to assist pregnant or parenting teenagers to complete their secondary education. There are 23 teen parent schools affiliated with the Association of Teen Parent Educators New Zealand (ATPENZ). These TPUs are mostly in the North Island: four schools are in the South Island.

The ATPNZ describes Teen Parent Units as:

> *a community of young women with the same goal – to finish their college education and provide a second chance for themselves and their child. (Association of Teen Parent Educators New Zealand, n.d.).*

As well as their major focus on the education[25] of the mother, TPUs are intended to provide a degree of wrap-around support for the parent(s) and child(ren). For example, TPUs facilitate access to

[24] A concept or discourse whereby a damaged childhood becomes open to the idea of repair through the next generation. Tuffin and colleagues (2018) said that teenage fathers in their research "wanted their offspring to have a better childhood than their own as they sought to repair the mistakes of their own upbringing through striving to become better parents than the previous generation" (p. 274).

[25] The New Zealand curriculum is taught.

community resources – particularly health-related resources such as the Royal New Zealand Plunket Trust, Well Child Tamariki Ora and support systems, such as marae. TPUs also include on-site childcare, or childcare is located nearby, provided by qualified early childhood workers.

Publicly available Ministry of Education data[26] reports TPU enrolment levels over time. These data for the past ten years are provided in Table 4. A reasonably stable level of enrolment in TPUs is apparent through most of this period, with a slight elevation in the number of males enrolled in the past three years, and a considerable decline in enrolments as at 1 July 2018 compared to the previous years.

Table 4: Enrolment at TPUs 2009 - 2018

As at 1 July	Male	Female	Total enrolled
2018	6	411	417
2017	7	495	502
2016	4	507	511
2015	2	510	512
2014	1	491	492
2013	2	515	517
2012	1	471	472
2011	2	511	513
2010	0	489	489
2009	1	462	463

Young women who become pregnant while they are enrolled at a school which hosts a TPU are more likely to enrol in a TPU (70%) compared with young women who became pregnant while enrolled in a school without a TPU (58%) (Vaithaianathan, Maloney, Wilson, Staneva, & Jiang, 2017, p. 23).

For young parents receiving the Young Parent Payment (YPP), there is an obligation to either be undertaking a full-time course or to be available to undertake a full-time course: attending secondary school meets that obligation. Therefore, Aotearoa New Zealand as a society, has a responsibility to provide secondary education services that are adapted to the needs of teenage parents. Miller (2018) has noted that teenage parents have often been alienated from conventional secondary schools before or during pregnancy, and so it is important that schools for teenage parents challenge and transform the conventional secondary school model in order to create a positive learning environment in which teenage parents can thrive. Similarly, Kamp (2018) has commented on the importance of the design of the learning environment, first and foremost attending to the complex needs of teenagers who are experiencing the challenge of being a student simultaneously with being a teenage parent.

[26] See https://www.educationcounts.govt.nz/statistics/schooling/student-numbers/6028.

Some TPUs are more effective than others

The most recent review of TPUs by the ERO was conducted early in 2017 (Education Review Office, 2018). ERO reported that 11 of the 23 TPUs were providing "highly effective practices that promoted positive outcomes for the students across a variety of domains," (Education Review Office, 2018, p. 4). Eight TPUs were found to be mostly effective, and five TPUs were not performing well overall.

In terms of academic achievement, a Working Paper commissioned by the Ministry of Social Development reported that young women who were enrolled at a school which hosts a TPU at the time they became pregnant were statistically significantly more likely (9.7 percentage points) to achieve NCEA Level 1 by the age of 19 compared to their peers who were not enrolled at a TPU hosting school. This represents about a one third increase. The statistically significant effect holds for NCEA Level 2, but it is smaller, with an increase of 5.5 percentage points in the probability of completing NCEA Level 2 by the age of 19 years (Vaithaianathan et al., 2017, pp. 30–31).

Although these data provide strong evidence of an advantage for young women who transfer into the TPU hosted by their present school, a further finding evidences the value of being enrolled at any school at the time of conception. Young women who were enrolled at any secondary school (hosting or not hosting a TPU) were 24.4 percentage points more likely to achieve NCEA Level 1 and 19.6 percentage points more likely to achieve NCEA Level 2 by the age of 19 years than their peers who had left school prior to becoming pregnant. These data suggest that young women who become pregnant after leaving secondary school are less likely to achieve NZCEA Level 1 or Level 2 by returning to a TPU whilst pregnant or parenting compared with than women who become pregnant while enrolled at a secondary school. Further, a 2013 evaluation by ERO found that students who stayed in the TPU for two years or more had the best academic outcomes, with most going on to tertiary studies (Education Review Office, 2014a, p. 10).

For every statistic there is an anomaly. The ATPENZ website includes numerous stories and testimonials where a young woman falls on the 'wrong' side of the probability data but has nonetheless experienced academic success whilst enrolled at a TPU, and often also in tertiary education.

The Education Review Office (ERO) has identified two barriers to continued TPU enrolment: irregular attendance, and poor understanding of the behaviour and learning expectations arising from enrolment. For example, smoking and bad language are not permitted; and students are expected to complete their course work and assignments (Education Review Office, 2018, p. 19).

Features of effective TPUs

Just three evaluations of models of care currently provided to teenage parents in Aotearoa New Zealand were identified during this literature review, and they all concern TPUs:

- *Evaluation of Teen Parent Units* (Education Review Office, 2014a)
- *Impact of School-Based Support on Educational Outcomes of Teen-Mothers: Evidence from New Zealand's "Teen Parent Units"* (Vaithaianathan et al., 2017)
- *Teen Parent Units* report (Education Review Office, 2018).

All three evaluations had a strong education focus, but the ERO evaluations also included social, health and wellbeing outcomes.

Evaluation of Teen Parent Units (ERO 2014a)

The 2013 ERO evaluation of TPUs was published in 2014. The evaluation questions related to:

- student induction
- teaching and learning
- transition to further education or employment
- partnerships that supported the positive development of students' educational, social, health and wellbeing outcomes.

ERO noted that "the most successful TPUs are focused on supporting students and their children to gain better social, health and wellbeing outcomes" (Education Review Office, 2014a, p. 18). They urged TPUs and the Ministry of Education to expand their data collection efforts to include information about parent and child health and wellbeing outcomes. Their report also recommended the development of a whole-of-government strategy to help specify roles and goals for "sexuality education, sexual and reproductive health, and promoting health and wellbeing of teen parents and their children" (Education Review Office, 2014a, p. 19).

The evaluation found that when TPUs are implemented well, they provide thorough, wrap-around care for teenage parents[27] and their children. ERO identified five TPUs that "provided especially innovative and cohesive curriculum, pastoral support and pathways for students" (Education Review Office, 2014b, p. 1). Attributes of these TPUs included:

- strong, stable leadership that promoted positive learning cultures
- values of respect, care, and acceptance
- a considerable focus on te reo and tikanga Māori
- a focus on learning and future pathways
- high expectations of the young parents as students
- an accredited early childhood education centre situated to encourage easy interaction with the parents (supporting bonding and breastfeeding)
- a positive relationship with the host school, including working closely with the school careers advisor to help teen parents plan their transition beyond the TPU
- well-established relationships with a wide range of health, education, housing and support providers
- well-established relationships with the community – such as local marae
- providing transport for parents and children to get to and from the TPU
- having an active and ongoing relationship with TPU graduates.

These attributes were later further articulated and expanded in the Outcomes Framework for TPUs, which drew from key strategic documents, including the *Ministry of Education Statement of Intent*, and *Ka Hikitia – Accelerating Success and the New Zealand Curriculum* (Ministry of Education, 2016).

[27] It was not made clear in this evaluation report whether the parents were mothers or fathers – although when references were made to parents in the TPUs the phrases "young women" or "mothers" were typically used.

Impact of School-Based Support on Educational Outcomes of Teen-Mothers: Evidence from New Zealand's "Teen Parent Units" (Vaithaianathan et al., 2017)

Vaithaianathan and colleagues' impact evaluation focused on increased school enrolment rates and increased achievement of school qualifications by teenage mothers as indicators of effectiveness – both of which were achieved through access to a TPU (Vaithaianathan et al., 2017). Their findings indicate that the school enrolment gap between teenage women who give birth and those who do not, can be reduced by specialist school-based services designed to meet the needs of teenage mothers. These services can also significantly raise the achievement levels of teenage mothers who do enrol in school (Vaithaianathan et al., 2017). The authors note that their impact evaluation, which drew on administrative data to quantify outcomes, has a number of limitations. It does not allow all of the outcomes sought by TPUs to be measured, and errors in data linkage and data limitations result in imprecise estimates of the true impacts of TPUs. For example, due to an absence of data on TPU enrolment the authors assumed that a young mother was enrolled in a TPU post-birth if she enrolled in a TPU governing school, which may not have been the case. This may mean that the impacts of TPUs are over or under-estimated, and, that teenage parents who could benefit from enrolment and participation in a TPU (but are only enrolled in a TPU governing school, not the TPU) are not receiving support and assistance they may require (Vaithaianathan et al., 2017).

Teen Parent Units Report (Education Review Office, 2018)

The Outcomes Framework for TPUs (Ministry of Education, 2016), developed following the 2013 ERO evaluation, described above, was utilised in the 2017 evaluation (Education Review Office, 2018). It contains indicators of effectiveness relating to Te Whare Tapa Wha: te taha hinengaro (psychological health), te taha whānau (family health), te taha tinana (physical health), and te taha wairua (spiritual health) for:

- student, whānau and child (when students are achieving outcomes)
- teachers and staff (when teachers and staff are supporting students to achieve outcomes)
- governance and leadership (when governance and leadership are supporting their staff and students to achieve outcomes).

The specific outcomes in the framework are described as "end goals we are collectively striving to achieve through student enrolment in a TPU" (Ministry of Education, 2016):

- increased engagement in education
- increased achievement in education
- successful transition to further education, training or employment.

In their report ERO identified 11 TPU's that they considered 'highly effective', commenting:

> *Leaders and teachers fostered a culture of success and wellbeing that permeated through every aspect of these TPUs: from the quality of the student induction process, to the level of commitment and resource allocation to support students' transition into further study and work. These TPUs provided an effective intervention service for young parents who might otherwise struggle to improve their outcomes,* (Education Review Office, 2018, p. 4).

How TPUs see themselves

Recent 'school newsletters' from a small number of TPUs were accessed while reviewing literature for this evidence brief. The images and news items in these informal sources suggest that TPUs are happy, productive places, where teenage parents are respected; and their complex roles and lives are

acknowledged. Considering the emerging literature presented in this brief that emphasises the value of re-framing narratives around teenage pregnancy, these TPUs appear to offer a caring, non-stigmatising space where teenage parents can realise educational potential.

Overall, the evidence suggests that teenage parents' educational and life outcomes are improved when their TPU provides wrap-around care for them and their children: "young mothers who attend TPUs often report that this has been helpful in changing their lives for the better" (Ministry of Social Development, 2017).

Models of care based on tikanga Māori are needed for teenage parents and their children

Several published papers focus considerably on the effects on young Māori of living in a society that has little understanding of or empathy for Māori perspectives about pregnancy, birthing, and parenting (Mantell et al., 2004; Myers & Metzger, 2014; Pihama, 2011; Ware, 2014). Pihama (2011) notes that the breakdown of communal living practices through colonisation has resulted in diminished (or lost) traditional support systems, meaning the teenage mother can no longer rely on family or whānau for extended support. Instead, she is seen by the replacement system as a problem to be solved.

Therefore, authors argue, that there are prevailing public (and public service) perceptions about Māori teenage parents, that are poorly informed. Ware (2014) explains:

> *An understanding of Māori childrearing can be found in the creation narrative of Ranginui and Papatūānuku. Within this narrative, cultural values relevant to childrearing are illustrated. Children are by whakapapa (genealogy) an embodiment of all those who have gone before them from whom they inherit tapu and mana. Children are treated with aroha in order to protect their tapu and develop their mana. Children belong to and are the responsibility of the community as well as parents and therefore everyone has a role in contributing to the development and well-being of the young* (2014, pp. 12–13).

Instead, having children prior to completion of education and getting married has been constructed as a moral and economic crisis (Ware, 2014) – often leading to stigmatisation of teenage parents as being irresponsible, immature, incapable, and "a financial burden on society" (Ware, 2014, p. 3). It has also been noted that there is low awareness of the practice of whāngai: the practice of a child being raised by family or whānau rather than the birth parent (Wylie, Stewart, Hope, & Culshaw, 2009, p. 10).

Above, in the discussion about academic education, it was apparent from an ERO review of TPUs that attributes of TPUs that are operating well include a focus on tikanga, on te reo, and on developing relationships with local marae (Education Review Office, 2014a). ERO also noted some of the teachers from TPUs that are operating well had taken professional learning and development opportunities specifically focused on building relationships with Māori learners and their family or whānau.

Research conducted with 10 young parents and their families or whānau through the Thrive Teen Parenting Support Trust in Auckland (Myers & Metzger, 2014) has highlighted the importance of whānau and families in the lives of teenage parents. The report includes three sets of recommendations for organisations working with teenage parents, which are included below as Figure 8, Figure 9, and Figure 10.

1 Supporting whānau and families

This research recommends that organisations which work with young parents consider:

- **implementing context driven practice, whereby the needs of young parents are considered within the context of their whānau and families;**
- **practising in a way which upholds and respects the significance of positive whānau involvement; understanding that there are factors which can affect the quality of whānau support and focusing on mitigating these;**
- **providing up-to-date accessible information and support, including connecting whānau and families of teen parents to each other and; support young people in a way which holds them in the cultural context of their whānau and communities;**
- **support young people in a way which holds them in the cultural context of their whānau and communities.**

Figure 8. Recommendations to support whānau and families (Myers & Metzger, 2014, p. 2)

2 Supporting young parents

- **assist young parents to identify where they find support in their whānau or family and help them to identify where they can access this support;**
- **encourage young people to have realistic expectations around the quality and types of family and whānau support available;**
- **consider a culture of practise whereby young parents are encouraged to bring along partners and other whānau and family members to support and encourage them and; use moderated social networking to help young parents share information around communication and support within their whānau and families.**

Figure 9. Recommendations to support young parents (Myers & Metzger, 2014, p. 2)

3 Developing young parent whānau-friendly communities

The harm and the fear of social engagement experienced by young parents and their whānau could be alleviated by a community-wide response to addressing social stigma and discrimination towards young parents. Therefore, this research recommends that organisations which work with young parents:

- **increase societal and community awareness around the impact of discrimination on young parents;**
- **build sector capacity to assist whānau and families to support young parents and help the wider sector;**
- **understand the important role that whānau and families play in supporting young parents.**

Figure 10. Recommendations to develop young parent whānau-friendly communities (Myers & Metzger, 2014, p. 3)

Myers and Metzger noted that Māori participants in their research – including teenage parents and their whānau or family – "drew on key Māori concepts [whanaungatanga, manaakitanga, turangawaewae, hinengaro and wairua] to express what was important to them" (2014, p. 8).

Myers and Metzger also found that during pregnancy, teenagers need non-judgemental support and time to adjust their dreams (reframing their aspirations and goals), and they need help establishing maternity care. When baby is born, they need: reassurance (advice but not pressure); praise; sharing of parenting stories; recognition that asking for help is a strength, not a weakness; pastoral care that does not encourage or reward negative behaviour; support to identify and ameliorate risk; and non-judgemental encounters, because judgement induces stigma – a topic discussed throughout this evidence brief.

In her chapter of the recently published book *Re/Assembling the Pregnant and Parenting Teenager: Narratives from the field*, Miller (2018) describes the wrap-around care provided through Karanga Mai Young Parents College, a TPU in Kaiapoi, north of Christchurch:

> *The holistic and all-encompassing approach to education and support at the College was exemplified in the Whare Tapa Wha model. … Built in the acknowledgement of the young women's multiple needs, the College provided practical, emotional, familial and spiritual support and nurturing* (Miller, 2018, p. 253).

Miller's point, that the TPU utilised the Whare Tapa Wha model, brings together the two themes that presented most strongly in the review of the literature concerning services and support interventions in place in Aotearoa New Zealand for teenage parents – that positive outcomes for teenage parents are associated with academic interventions, and tikanga Māori approaches are needed.

Social services that are intended to support the most vulnerable are often experienced as stigmatising

A third highly present theme in the Aotearoa New Zealand literature, as noted in the international literature earlier in this evidence brief, is the extent to which social services that are intended to provide support are experienced by teenage parents as stress-inducing and stigmatising. The literature suggests that for many teenage parents, interactions with government agencies often result in a loss of confidence and increased isolation and stress, with teenage parents often becoming reluctant to ask for help (Myers & Metzger, 2014). It has been noted above that Ware (2014) reported stigmatisation, with teenage parents considered irresponsible, immature, incapable, and a financial burden. In her thesis *E hine, Ngā Whāea: Teen Mothering in the Gaze,* Adcock (2016) also observed that stigmatation can lead teenage parents to disengage from systems that are intended to provide support:

> *As young Māori mothers, the women in this study often faced discrimination and/or were made to prove themselves as deserving of support [from Work and Income New Zealand, Housing New Zealand, Child, Youth and Family]. Accessing that support was often problematic. The participants in this study frequently articulated an acute awareness of their subjugated positions, and in turn, often disengaged from support services* (Adcock, 2016, p. 59).

The Young Parents Payment (YPP) has also been identified as stigmatising, with young parents subjected to increased surveillance and obligations through which "children are effectively removed from the full-time care and 'negative' influence of young mothers" (Ware, Breheny, & Forster, 2017, p. 510).

Drawing on the experiences of the teenage parents who participated in their research, Wylie and colleagues (2009, p. 11) developed the following list of attributes teenage parents seek in their service providers:

- professional, respectful, non-judgemental, listening
- a supportive, positive, empathetic, strengths-based approach
- give options, and information to enable informed decision-making
- openness and honesty about entitlements
- proactive support for connecting clients with other services
- facilitate engagement through assistance with transportation and childcare assistance
- seamlessness: being able to access support from the same place throughout pregnancy and into parenting.

Wylie and colleagues (2009, p. 9) noted that a recommendation in 2005 "that Work and Income establish youth-friendly liaison positions to tailor their services to the needs of young parents" had not proceeded at that time; the authors strongly endorsed the recommendation. There has been nothing encountered in the literature reviewed for this evidence brief that suggests this recommendation has been acted upon.

The Young Parent Payment (YPP) may ensure teenage parents are engaged in education for longer, and move from a benefit and into work faster

The YPP, while criticised in literature above, may lead to positive outcomes for teenage parents (McLeod, Dixon, & Crichton, 2016). The YPP is part of the Youth Service, a programme administered by the Ministry of Social Development (MSD). The Youth Service is designed to encourage and assist disadvantaged youth to stay in education and achieve qualifications. Young Parent Payments are one of three main strands of the programme. Community organisations are contracted by MSD to provide mentoring and support for youth participating in the Youth Service. As part of the Service, changes to youth benefits were made that were intended to encourage continued study, including:

- obligations to participate in the service and in formal study
- financial incentives
- sanctions for failing to meet obligations
- access to childcare payments.

McLeod and colleagues' evaluation explored the impact of the programme on the educational retention, qualification achievement, benefit receipt, and employment rates of participating youth in the 24 to 30 months after they come onto benefit, using administrative data from the Integrated Data Infrastructure (IDI) to measure outcomes. The impacts of the programme were estimated by carrying out a matched comparison with a historical group of youth beneficiaries, which as noted in the paper, has methodological limitations (McLeod et al., 2016). The proportion of YPP recipients who complete a level 1, 2, or 3 qualification is raised through participation in the programme. Participation also appears to raise benefit receipt rates in the short term, but there is some evidence that it encourages young parents to move off the benefit and into work in the medium term (24 to 30 months after starting benefit), especially for YPP recipients (McLeod et al., 2016).

Antenatal care can be troublesome to access for pregnant teenagers

The need and/or desirability for antenatal care services that are customised to meet the needs of teenage women has also been raised in the Aotearoa New Zealand literature (Makowharemahihi et al., 2014; Pihama, 2011). Makowharemahihi and colleagues describe the difficulties experienced by 44 pregnant or recently pregnant Māori teenagers to register with a LMC: young people did not know how to register, and they did not know how to find out how to register. The authors note that primary

health providers they interviewed were not proactive in helping these young women to get a midwife. Teenage parents reported that communicating with a potential midwife was a "one-way process", with a practice of "leaving a message" and waiting for the midwife to get back in touch – a communication system that may be anxiety-inducing for a newly-pregnant teenager. Some young parents reported that they got the help they needed from unlikely sources, including a nurse taking a smear, and another doing an STD test. The authors imply that services used by teenagers to confirm their pregnancy – for example, school nurses and community-based youth health services – need to develop processes to assist the newly-pregnant teenager to register with an LMC.

Attending antenatal classes designed specifically to meet the needs of young people has been reported by teenage parents to have been a very positive experience (Wylie et al., 2009). Wylie and colleagues report that some of the young parents they interviewed initially attended un-customised antenatal classes, and stopped attending "because of the age of other participants" (Wylie et al., 2009, p. 7).

We conducted a non-exhaustive search for websites supporting the needs of newly pregnant teenagers in Aotearoa New Zealand, which yielded a small number of services. *Thrive Teen Parent Support Trust* (based in Auckland), *St John of God Hauora Trust Support for Young Parents* (based in Christchurch), and *Presbyterian Support Southland Family Works, Young Parents service* (based in Southland) each provide useful information presented in a friendly and supportive tone. These organisations offer assistance from pregnancy onwards, with a considerable range of services available. The Counties Manukau Health website includes the *Young Mums Midwifery Service.* The website uses simple language and includes links to help find a midwife (by geographic area), describes the care available, lists antenatal classes and birthing units, and lists service providers that focus on providing care for Māori and Pacific mothers. It is beyond the scope of this evidence brief, but it may be interesting to find out how many people use the websites, and if they find the information helpful for obtaining the maternity care sought.

Teenage fathers are poorly served compared to teenage mothers

Similar to the international literature included in this evidence brief, literature sourced from Aotearoa New Zealand suggest that teenage fathers are not well served:

> *While fathers have a positive impact on the development of their children when a positive relationship is retained, they are much less likely to be supported and encouraged in their parenting in the same manner as young mothers* (Wylie et al., 2009, p. 9).

Two of the organisations with a strong online presence include programmes specifically for teenage fathers. For example, the *Young Dads Group* at Thrive (Auckland) aims to provide opportunities for young fathers to "gain confidence, build knowledge and skills within their role as a father, and to connect with their peers and support networks within their communities" (Thrive Teen Parent Support Trust, n.d.).

However, beyond these examples the literature presents a single message, well-illustrated by this extract from a Families Commission report from 2011:

> *Teenage fathers need accessible information and support that engages them in their parenting role. …There is little information and support available for teenage fathers* (Families Commission/ Komihana a whānau, 2011, pp. 3, 20).

One literature review (Edwards & Ratima, 2014) emphasises the importance of providing specific support to Māori teenage fathers. The review notes that teenage fathers "feel isolated from support

and advice about being a father, and they have been neglected by services" (Edwards & Ratima, 2014, p. 35). They cite a 2010 report produced by the Ministry of Social Development which identified evidence from local and international studies about working effectively with teenage fathers, which includes:

- Having positive attitudes toward them as young men and fathers is one of the most critical principles.
- Delivering services in ways that are appropriate to teenage fathers, their culture and their age.
- Focusing on the significance and value of fathers' relationships with their children is also important.
- Ensuring the service is responsive to the needs and preferences of young men, such as through male-focused approaches.
- Addressing the broader needs as well, even when programmes are intended to deal with a specific issue, as they are then likely to be more effective. This could include supporting teen parents in the context of their whānau and communities.

CONCLUSIONS

The purpose of this evidence brief is to provide up-to-date evidence about effective support interventions for teenage parents, protective factors, and risk factors, as well as explore interventions or service models currently in place in Aotearoa New Zealand, drawing from existing national and international literature. This information can be used for developing policy and supportive programmes that address needs and build upon strengths identified for teenage parents.

This evidence brief provides the context for teen pregnancy and parenting as well as a synthesised overview of the current literature exploring interventions, protective and risk factors for teenage parents and their children.

The first section of the report, describing the context for teen pregnancy and parenting in Aotearoa New Zealand, has been developed largely from sources suggested or provided by Oranga Tamariki. It is clear that the birth rate for teens in Aotearoa New Zealand has substantially reduced, as has the abortion rate for this cohort. These reductions have occurred in the context of teenagers tending to delay becoming sexually active. Teens who become parents are more likely to be older teens (18 years or more). Teenage mothers are more likely to identify as Māori or Pacific than other ethnicities, and they are more likely to live in NZDep quintile 5 neighbourhoods.

The second section of the report is not a systematic review of the literature: it based on a thorough and extensive search of both national and international literature, including several systematic reviews and meta-analyses. As such, it provides a summary of the current consensus within the literature and can provide useful directions for decision-making regarding the role of government agencies in supporting teenage parents and their children. That said, because the literature search was not comprehensive, it is likely that some research or reports that address the key research areas are not included in this report. The quality of each study and report included in this evidence brief was also not formally assessed, which means that some of the findings may be subject to bias. We have attempted to address this limitation by clearly indicating the source of information contained in this report. It is also important to recognise that some of the evidence found in the literature is based on research conducted outside of Aotearoa New Zealand. Care must therefore be taken in applying the findings from this evidence brief to the unique cultural and environmental context here.

This evidence brief demonstrates the richness and depth of information available on teenage parents and their children internationally, however a number of gaps were identified in the existing evidence base. Aside from statistical data, there is a lack of information on teenage pregnancy and parenting for young Pacific peoples in Aotearoa New Zealand. Less is also known about teenage fathers, as opposed to teenage mothers. Finally, and perhaps most importantly, there is a large gap in research and evaluation of support interventions for pregnant teenagers and teenage parents that is specific to the Aotearoa New Zealand context. While there are some links between national and international literature, more information is necessary to reflect realities in the Aotearoa New Zealand context to ensure services and interventions are applicable to Māori teenage parents and children in particular. This information is vital to ensure that pregnant teenagers and teenage parents and children experience good health and wellbeing outcomes and are supported in their communities.

The existing evidence suggests that early and comprehensive support intervention, social support, and reducing stigma and discrimination is important for pregnant and parenting teenagers. Teenage

parents and their children can have multiple and complex needs but can also exhibit resilience in the face of significant challenges. Teenage parents are a diverse population, with variations in lived experiences, personal characteristics, and available supports and resources. The literature suggests that interventions should recognise this variability, to ensure efforts are tailored and flexible enough to meet specific needs and strengths. Additionally, the literature stresses that support interventions should be delivered in ways that do not exacerbate the stigma faced by some teenage parents.

Circumstances and factors that are present for teenage parents (and their children) are not necessarily due to the fact that they are teenage parents. This suggests that wider socio-economic factors such as poverty, unemployment, low education, poor familial relationships, inequality, poor housing, discrimination and stigma go some way to explaining these circumstances. It is argued in the literature that these broader social and economic issues should be addressed via strengths-based policy and youth development approaches, to ensure that should a teenager find themselves in the position where they may become a parent, that they are supported and empowered to make decisions that are best for themselves and their children.

There is an emerging body of literature that is attempting to reframe teenage pregnancy and parenting, in terms of challenging traditional discourses. For example, moving from deficit-based and moralistic discussions of the risk factors and problems of teenagers being pregnant and parents, towards strengths-based, inclusive, supportive and empowering discourses. Important directions for future efforts in research, and intervention and service design include ensuring that teenage parents are involved in service design, and that they have voice in research about their life stories.

Dedicated approaches, in terms of interventions for pregnant and parenting teenagers, may still be needed, particularly noting that attitudes towards teenage parents in society (and within interventions designed for them) can be discriminatory and stigmatising.

IMPLICATIONS

As a macro recommendation to this section, we recommend that any intervention or approach that is explored or implemented utilises social and cultural lenses of Māori, Pacific peoples, and other non-Pākehā/New Zealand European cultures. This should ensure that initiatives are culturally safe and appropriate for all teenage parents including consideration of mechanisms to better support teen parents in the context of their whānau and communities.

These recommendations are broader than the responsibility of Oranga Tamariki sitting across the social sector agencies.

1. *Develop a framework for supporting teenage parents*

One way to better-address the needs of teenage parents may be to develop a comprehensive, dynamic, framework that describes evidence-based needs and existing resources intended to meet those needs. There needs to be a geographic component to such a framework, and it also needs to address the accessibility of services more widely. Such a framework will identify service gaps. A multi-agency approach is likely to be necessary to successfully identify and resolve service gaps.

2. *Normalise adolescent sex, contraception, and parenting*

The deficit focus on teenage parents is problematic and leads to negative outcomes such as shame and social isolation. A strengths-based approach to supporting teenagers who are exploring sex and contraception, and those who are or are becoming teenage parents – thus, ensuring they have comprehensive social support wrapped around them – will likely increase positive outcomes. This includes supporting attitude and behaviour change of parents of teenagers, and teachers.

2.1 Provide comprehensive and consistent sex and contraception education

This will assist with recommendation number 2 and ensure that teenagers are receiving the information that they need to make better informed decisions about sex and contraception.

2.2 Provide easy to access and engaging information on sex, contraception, pregnancy, abortion, and parenting tailored for teenagers

Information materials will further assist communication and normalisation of sex, contraception and parenting for teenage parents, and education around these topics.

2.3 Provide better access to highly protective contraception

Further gains in the prevention of teen pregnancy might be made by increasing education and awareness about LARCs; and supporting their use by teens by ensuring their affordability. This is a subsection of recommendation 2, as it is important that access to contraception comes with normalisation, better education, and better information about sex and contraception.

3. *Pilot promising programme such as supportive housing interventions for teenage parents*

International literature on these types of interventions suggest such programmes may be worthy of feasibility studies, with pilots adapted to the Aotearoa New Zealand context. This could be explored further in the literature and feasibility studies could be conducted.

4. *Find ways to support teenage fathers*

There is a lack of literature in relation to the experience of teenage fathers, and what interventions work for them. Primary research should be conducted with teenage fathers to find out what they need as young parents, and what would work for them in terms of services and support. One topic that may especially useful is effective co-parenting, which can support the parenting journey of teens mothers as well as young fathers.

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Appendix 1: IDI Disclaimer

Disclaimers

The results in this presentation are not official statistics, they have been created for research purposes from the Integrated Data Infrastructure (IDI) managed by Statistics New Zealand.

Access to the anonymised data used in this study was provided by Statistics NZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business or organisation and the results in this Excel workbook have been confidentialised to protect these groups from identification.

Careful consideration has been given to the privacy, security and confidentiality issues associated with using administrative and survey data in the IDI. Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from www.stats.govt.nz.

The results are based in part on tax data supplied by Inland Revenue to Statistics NZ under the Tax Administration Act 1994. This tax data must be used only for statistical purposes, and no individual information may be published or disclosed in any other form, or provided to Inland Revenue for administrative or regulatory purposes.

Any person who has had access to the unit-record data has certified that they have been shown, have read, and have understood section 81 of the Tax Administration Act 1994, which relates to secrecy. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

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