Submission No 3

PREVENTION OF YOUTH SUICIDE IN NEW SOUTH WALES

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Date Received: 20 July 2017

Submission to the NSW Parliamentary Inquiry into Prevention of Youth Suicide in New South Wales

Benchmark Analytics, July 2017

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Summary

The statistics show that suicide has a strong gender bias with males accounting for more than 80% of total suicides in Australia since 1979. This bias holds across all age cohorts, including those aged 15 to 24.

It is understood that suicide rates have some association with unemployment. An individual who becomes unemployed may lose self-esteem and feel inadequate for not fulfilling personal or family expectations. This can lead to mental health problems and cause a proportion of these people to commit suicide.

Unemployment rates may also indirectly impact on suicide rates. A poor employment market may cause people to drop out of the labour market or delay career plans.

This submission details data on youth suicide and its association with unemployment rates.

Data on suicide and unemployment

The incidence of suicide in Australia is described by three measures: (1) the actual number of suicides per year, (2) the crude death rate, and (3) age-adjusted death rates.

The crude death rate is a ratio of the total number of suicides, divided by the total resident population. The age-adjusted death rate is a ratio of total suicide deaths for an age cohort, divided by the number of residents in that age cohort. These rates are expressed as deaths per 100,000 population.

The ABS publishes all three indicators on an annual basis. For age-adjusted death rates, the ABS provides estimates for both 5-year and 10-year age cohorts and further split by gender. The data used in this submission is annual and dates back to 1979. It is not split by state.

The unemployment rate is an estimate of the ratio (percentage) of citizens in a resident population that are willing to work, but unable secure paid employment. This definition does not include those people who chose not to work, such as full-time students or home makers.

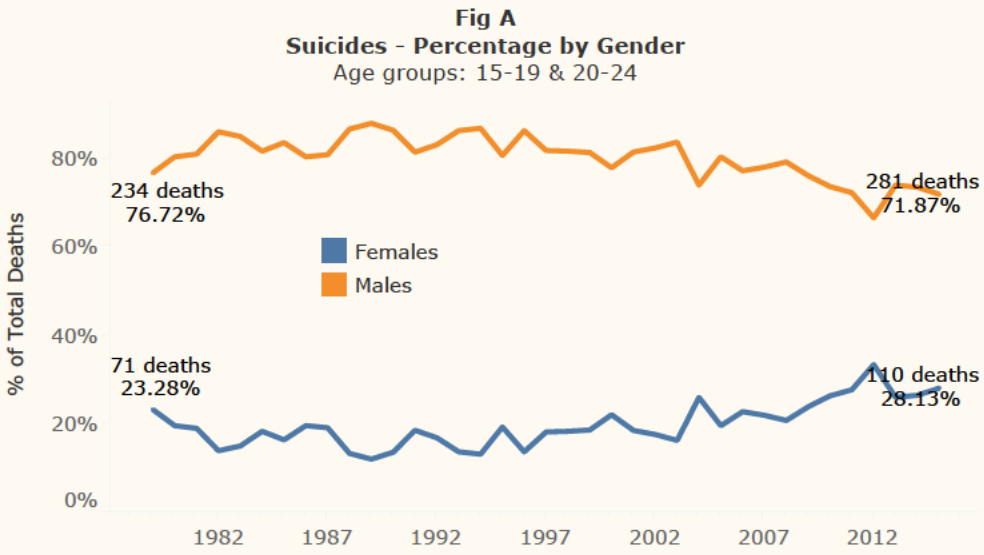
Labour force data is published by the ABS on a monthly basis, including the variables broken down by age cohorts. This enables the derivation of an unemployment rate by age cohort. Monthly estimates extend back to 1978.

Male suicide is greater than female

Since 1979, there has been a total of 81,539 suicides in Australia. Of these, males represent 77.78% of total, with females 22.22%. This gender difference is reasonably consistent across all age cohorts.

In terms of youth suicides (those aged between 15 and 24 years), since 1979, there has been a total of 13,235 suicides in Australia, accounting for 16.2% of total suicides. Of these, males account for 80.51% and females 19.49%.

As seen in Fig A, the gap between the number of male and female suicides has declined since the late 1980s, with female suicides in 2015 representing 28.13% of total youth suicides.

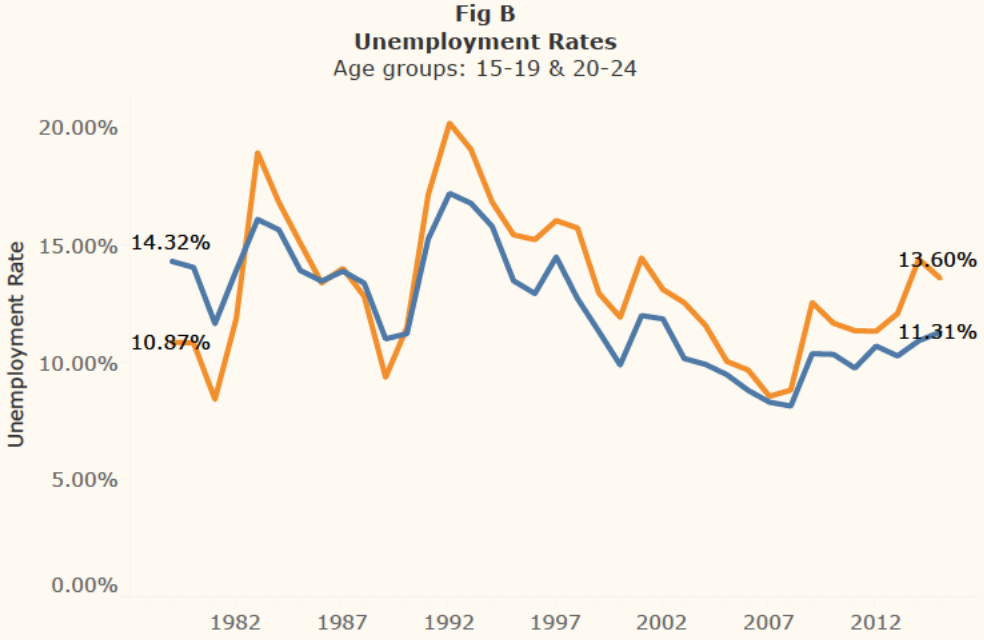


Source: ABS. Calculations by Benchmark Analytics.

Unemployment rates

In contrast to suicide rates, the unemployment rates between males and females have been reasonably similar. Since 1979, the average monthly unemployment rate for males aged 15-24 is 13.21%, compared to a female average of 12.20%.

As seen in Fig B, male unemployment has been consistently higher than female unemployment, particularly since the early 1990s recession. Male youth unemployment hit an annual peak of 20.2% in 1992. The female unemployment rate peaked that same year at 17.21%.



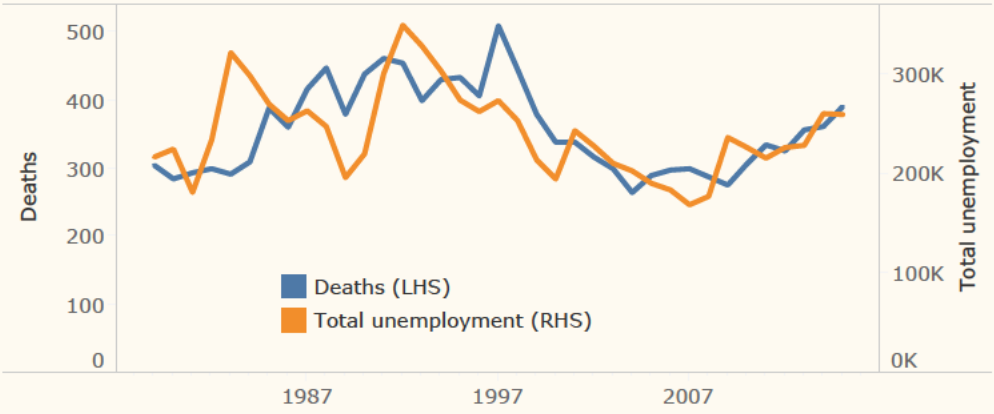
Source: ABS. Calculations by Benchmark Analytics.

Relationship between youth suicide and unemployment

It makes intuitive sense that in times of high unemployment, more young people will experience mental health effects associated with not having adequate work. The opposite should be the case with a strong labour market.

By plotting on a chart, the actual number of youth suicides each year against the monthly average number of unemployed youth, a visual relationship appears apparent, particularly since 1997. See Fig C, noting the chart uses two scales.

Fig C
Number of suicides & number of unemployed
Age groups: 15-19 & 20-24



Source: ABS. Calculations by Benchmark Analytics.

This relationship is evident in Fig D which plots the youth unemployment rate against the youth suicide rate for each year since 1979. A regression line (best-fit line) is used to assess the statistical significance of the relationship.

The line of best-fit in Fig D has an R-squared value of 37.9% and a p-value less than 0.01%. These results show a definite statistical relationship between the two variables.

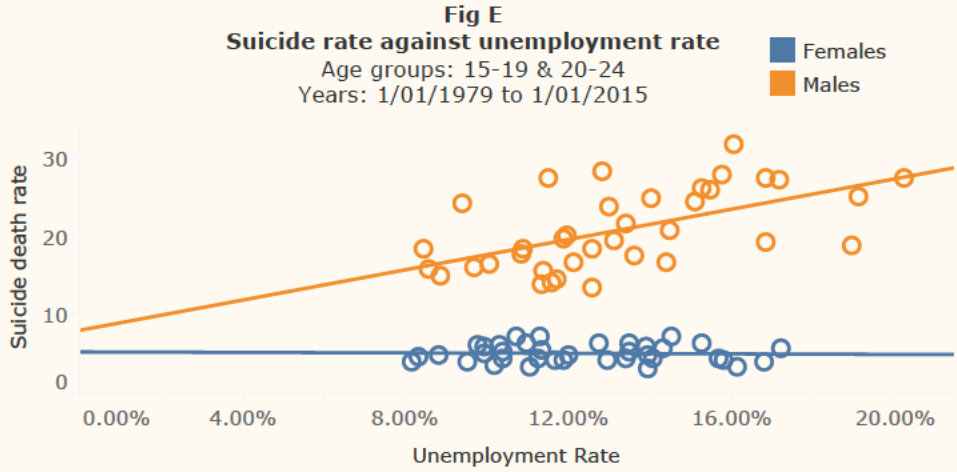
Fig D
Suicide rate against unemployment rate
Age groups: 15-19 & 20-24
Years: 1/01/1979 to 1/01/2015

Source: ABS. Calculations by Benchmark Analytics.

Fig E shows the same analysis as Fig D, but splits the data between male and female. Here we observe a material difference between genders.

For females, there appears no positive statistical relationship between suicide death rates and the female unemployment rate. The line of best-fit below for females, has an R-squared of just 0.11% and a p-value of 84%.

In contrast, there does appear to be a significant positive relationship between male suicide and the male unemployment rate. The line of best-fit for males in Fig E reveals an R-squared of 32.73% and a p-value of 0.021%. With such a low p-value, the probability of randomly achieving that correlation is very remote.



Source: ABS. Calculations by Benchmark Analytics.

Conclusion

The data presented in this submission shows that male youth suicide is considerably higher than female, although the gap has narrowed since the late 1980s. The NSW Government should prioritise suicide prevention programs towards males.

The data also shows that male suicide is associated with the unemployment rate, suggesting that policy makers should use unemployment as a key indicator of suicide risk, and adopt economic programs that promote low male unemployment.

While the data analysed is national data, the conclusions are relevant to the NSW jurisdiction.

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