

Self Harm Presentations to Hospitals in West Australian 0-18 year olds:

What do NOCC Outcome Measure Profiles add to the Understanding of Trajectory?

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Deliberate Self Harm (DSH)

- Evidence suggests that DSH in adolescents has increased over the last 15 years (Hawton et al., 2003)
- One of the risk factors for suicide is previous DSH
- According to the WA Auditor-General's Report into Deliberate Self-Harm in Youth (2001)
 - there has been a lack of systemic responsibility for assessing suicide prevention interventions
 - a barrier to this has been that until recently, there have not been tools used across all settings and services which would allow effectiveness of interventions to be measured.

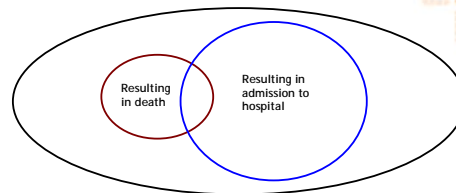


Present Study

- NOCC instruments may provide us with a way of measuring interventions for this group.
- Indicators linked to DSH in adolescents include depression, substance abuse, troubled relationships with family and peers and poor school performance (Brunner et al., 2007; Hawton & Harriss, 2008)
- Present study
 - Describe the DSH adolescent population in WA
 - Explore what our NOCC data can tell us about this group



Self-harming behaviours



- The present study predominantly focuses on inpatient admissions involving deliberate self harm
- Hospitalised self-harm represent only a subset of self-harming behaviours



Method

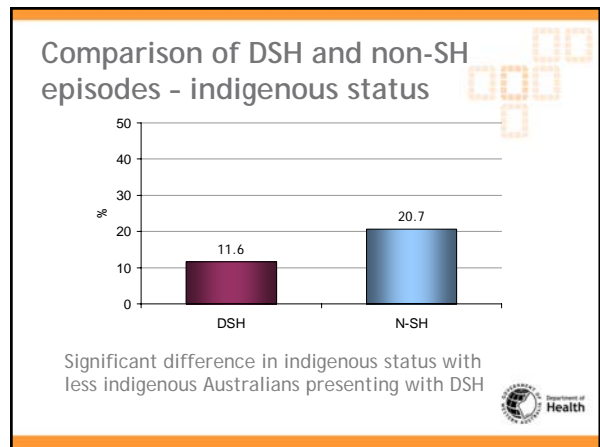
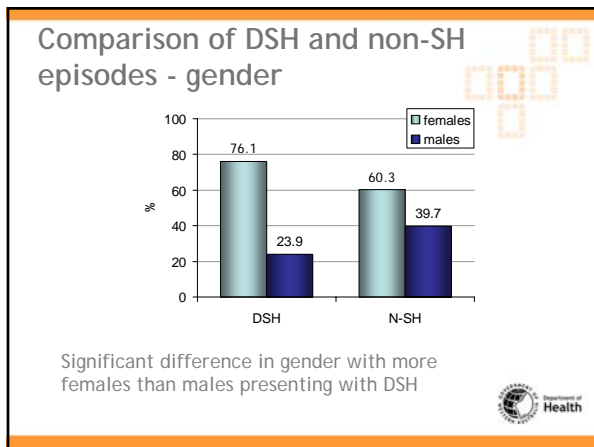
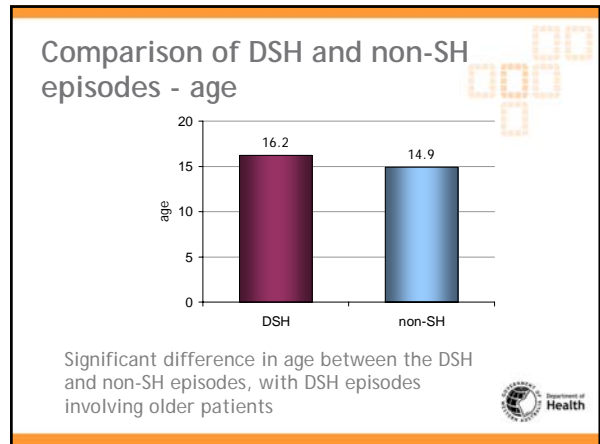
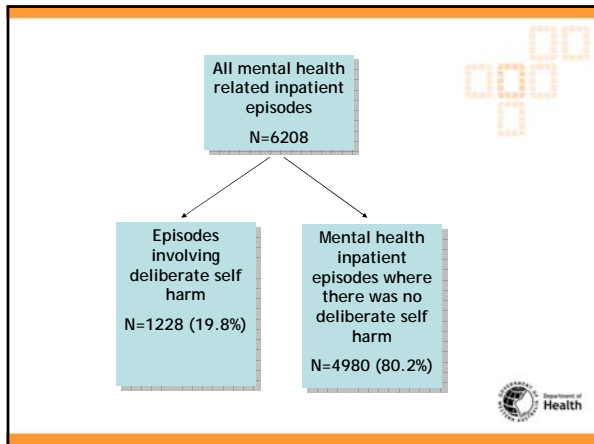
- Inpatient data extracted from the Mental Health Information System for the years 2005, 2006 & 2007
- Selected only CAMHS-aged clients
- Only young people who had been discharged were included
- Planned readmissions were excluded
- N=6208 mental health related inpatient admissions



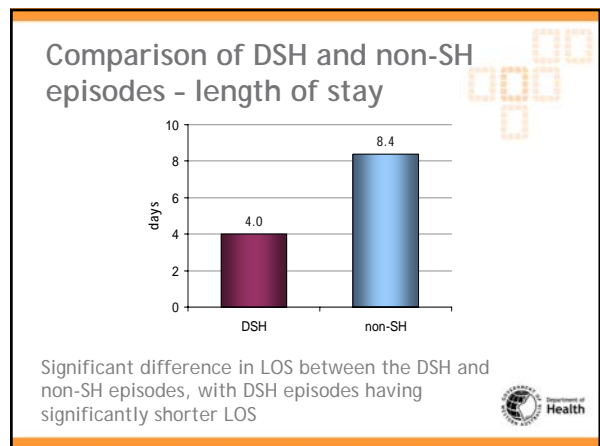
Method

- Episodes involving deliberate self harm were identified using external cause codes
- External cause codes relating to DSH are:
 - X60 to X84 - *intentional* self harm and the method used e.g. poisoning, hanging, firearms, sharp objects, crashing motor vehicle
 - Y87.0 - late effects of *intentional* self harm
 - E95 - ICD-9 equivalents
- If these were present, the episode was flagged as involving DSH
- Does not include codes for accidental injury or where injury of undetermined intent





- ### Comparison of DSH and non-SH episodes - diagnoses
- DSH
 - Other (75.7%) – predominantly injury, poisoning codes
 - Mood disorders (8.4%)
 - Stress and adjustment disorders (7.5%)
 - Non self-harm episodes
 - Mood disorders (19.0%)
 - Substance abuse disorders (18.4%)
 - Stress and adjustment disorders (14.9%)

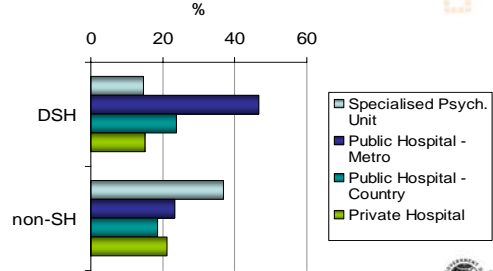


Comparison of DSH and non-SH episodes - readmissions

- 27.9% of all episodes were followed by a further inpatient admission in this three year period. This did not differ according to whether the initial episode involved DSH
- However, time to readmission was significantly shorter for the DSH compared to N-SH episodes (92.1 vs. 142.6 days)
- Of those who were readmitted, 36.1% of N-SH episodes resulted in a readmission within 28 days, compared to 44.0% for DSH episodes



Comparison of DSH and non-SH episodes - hospital type

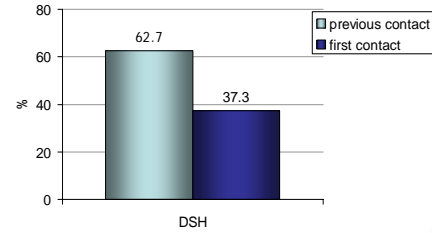


Method of DSH

- Poisoning (72.7%)
- Sharp objects (20.2%)
- Hanging (2.7%)
- Females were significantly more likely to use poisons and males, sharp objects or hanging
- Indigenous Australians were also more likely to use sharp objects or hanging
- No difference in method by age group (7-14 vs. 15-18 years)



Previous contact with mental health services

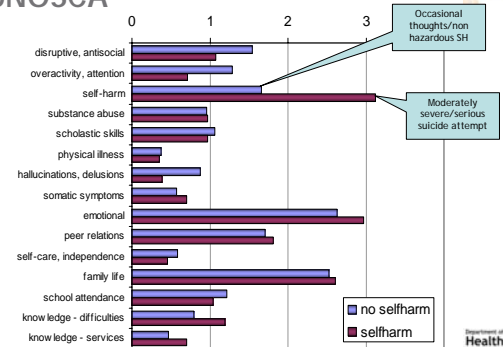


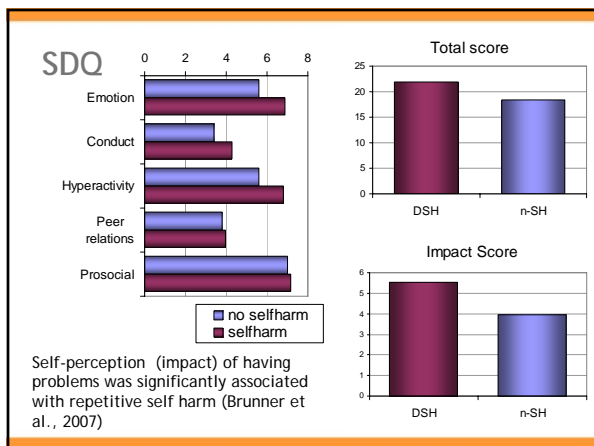
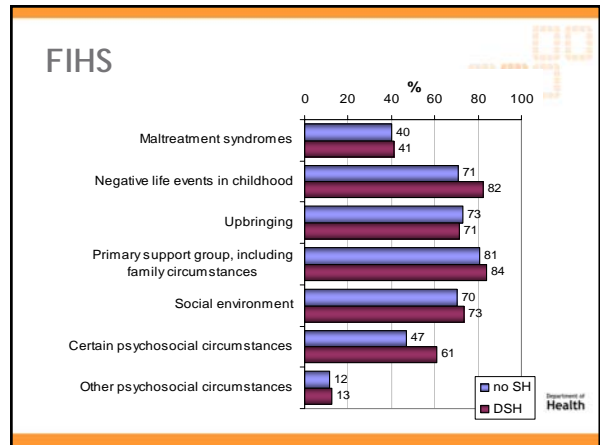
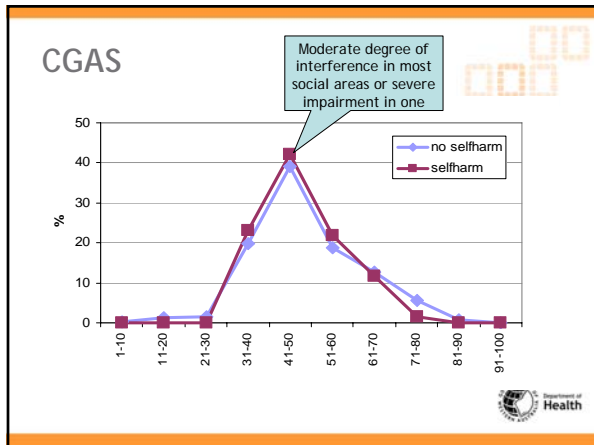
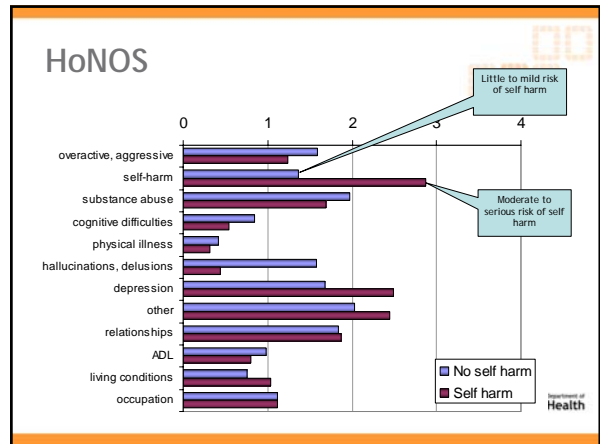
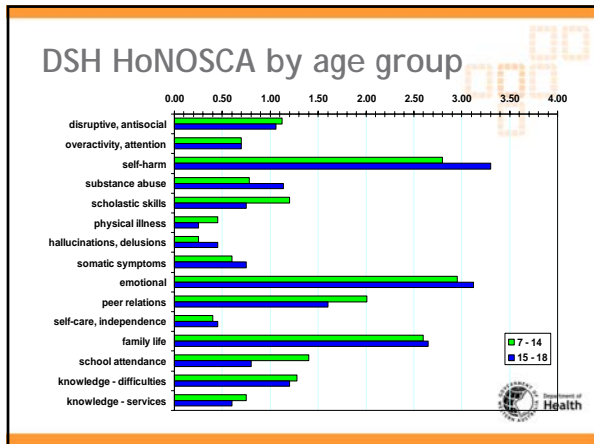
Outcome measures

- Only 180 (14.7%) of DSH patients were admitted to a psychiatric unit, therefore only a relatively small number of the total group had outcome measures collected (101)
- A proportion admitted to adult units, where only a HoNOS was collected



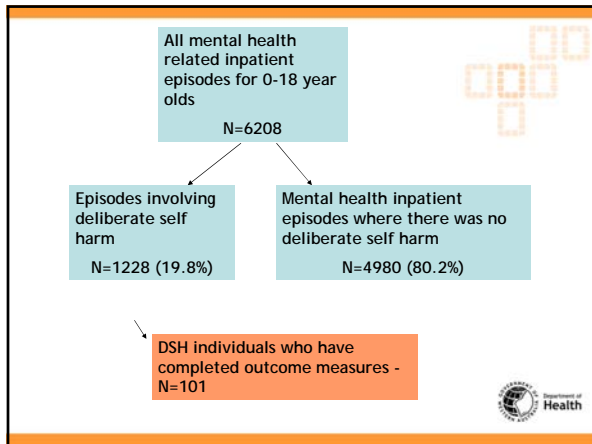
HoNOSCA





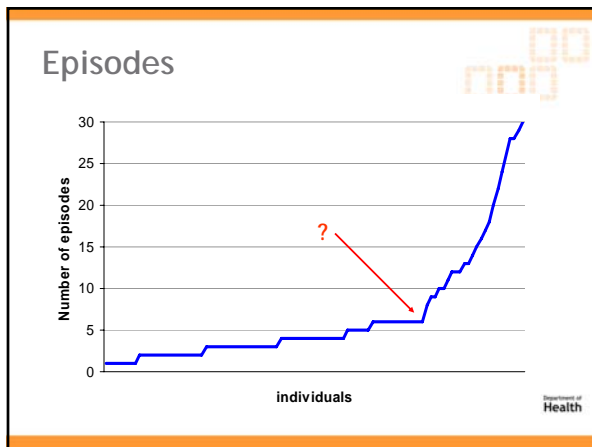
Episode history

- All mental health contact data for the 101 young people with outcome measure data admitted during this period was extracted - both ambulatory and inpatient episodes from 1990 to Jun 08



Episode history

- All mental health contact data for the 101 young people with outcome measure data was extracted - both ambulatory and inpatient episodes from 1990 to Jun 08
- Average number of episodes was 4.8 (min 1, max 30)
 - 2.3 inpatient episodes per person
 - 2.4 ambulatory episodes
- Average age at which the first contact with a mental health service occurred was 13.9 years

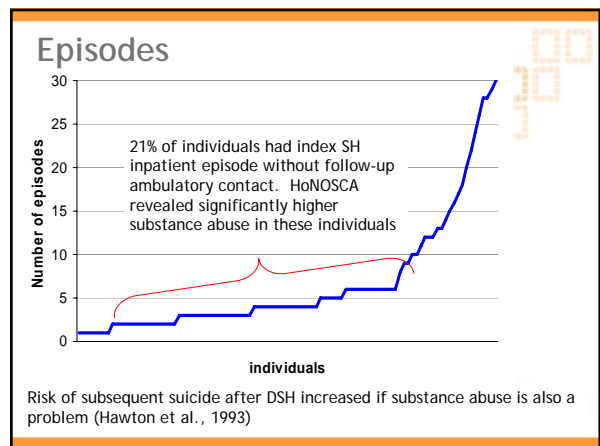


Comparison of high vs. usual frequency presenters

- Banding of this data shows two distinct group - those with 6 or less episodes (n=73) and those with 7 or more (n=28)
- No significant difference in age at first contact with mental health services (14.1 vs. 13.4 years for usual vs. high group)
- Or year of birth (1990 vs. 1989)
- Or gender

Comparison of high vs. usual frequency presenters

- No difference in total and individual item HoNOSCA scores between the two groups
- Higher proportion of personality disorders in the high frequency presenter group and less stress and adjustment disorders, but this difference was not statistically significant
- Tendency for there to be a higher proportion of adult inpatient unit admissions compared to C&A unit admissions episodes in the high frequency presenter group ($p=0.07$)



Summary of Trajectory

20% of hospital admissions recorded in the mental health information system were for DSH. **These patients were older, female, and less likely to be aboriginal. They were likely to have LOS on average half of those of the N-SH group. They were likely to have a shorter time to readmission.** They were more likely to be seen at a public metropolitan area hospital.

2/3 of the DSH group had previous contact with mental health. On average **first contact was at 13.9 years of age.**

Over the eight year period the **average number of episodes of care for the DSH group was 4.8:** 2.3 of these inpatient, 2.4 outpatient.

There were two distinct groups: 6 or less episodes, and 7 or more episodes



Summary of NOCC Information

- **Clinician ratings indicated more emotional difficulties and greater self harm;** less disruptive/antisocial behaviour, overactivity/inattention, hallucinations/delusions for the DSH group. **Older DSH patients admitted had higher ratings for self harm and younger for peer relationship difficulties.** (Honosca, Honos)
- **Global assessment did not show differences for the two groups (DSH vs N-SH).**
- **There were more FIHS factors present,** more negative events in childhood and other psychosocial circumstances for the DSH group



Summary of NOCC Information

- **SDQ's indicated significantly more self rated emotional symptoms,** higher total scores, and higher impact scores for the DSH group
- ***There were no differences in the clinician ratings of the DSH high admission pathway group and the DSH typical admissions pathway group, on individual items or total items***



Future Work

- Comparison of regions
- Using discharge NOCC scores to assist in examining intervention effectiveness
- Higher completion rates for NOCC instruments may lead to the emergence of differences between usual frequency and high frequency admissions DSH profiles
- Outcome measures in episodes leading up to inpatient DSH episode – triggers, patterns of scoring that might predict serious self harm?

