MONASH University
Medicine, Nursing and Health Sciences

# What happens to depressed adolescents? A beyondblue funded 3–9 year follow up study

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# Adolescent depression

- Around 20% of young people experience depression by age 18
  (Birmaher et al., 1996)
- 2:1 ratio (female:male)
- Impairment on social, emotional and academic / occupational functioning
- Increases the risk of affective disorders in adulthood
  (Harrington & Dubicka, 2001)

# Depression recurrence

- **Clinical:** 54% recurrence in 3 yr f/up (McCauley et al., 1993)
  69% recurrence in 7 yr f/up (Rao et al, 1995)
- **Community:** 45% over 7yrs (Lewinsohn et al., 1999)
- **Meta analysis:** Recurrence of 40% by 2 yrs
  70% by 5 years (Birmaher et al., 1996)

# Follow up studies: Recurrence & Predictors

- Rao et. al, 1995 – 7 yr follow up study
  - 64% of adolescents with recurrent depression had comorbidity
  - Low socio-economic status was a predictor of recurrent depression
- Dunn & Goodyer, 2006 – follow up study (mean 7.8yrs)
  - Similar rates of recurrence in clinic & community samples
  - Clinic group had significantly longer index episode
  - Time to recurrence predicted by: early psychiatric history, being female, depression severity, and comorbidity at index episode

# Objectives

## Aim of our study:

- To assess long-term mental health outcomes & adjustment in young people who experienced adolescent depression.
- To examine predictors associated with remission & recurrence.

# Methodology

- Participants were young people who were assessed & offered treatment for adolescent depression (unipolar) 3-9 years ago, & their parents
- Outpatient treatment in 2 clinical studies run by CDPP
- Randomly allocated to treatments depending on program
  - Berriga House: Supportive counselling, cognitive-behavioural therapy (CBT) (adolescent focussed) CBT adolescent and parent focussed (12-14 sessions)
  - Time for a Future: CBT, antidepressant medication, and combined CBT & antidepressant medication (12 sessions / weeks)

# Methodology

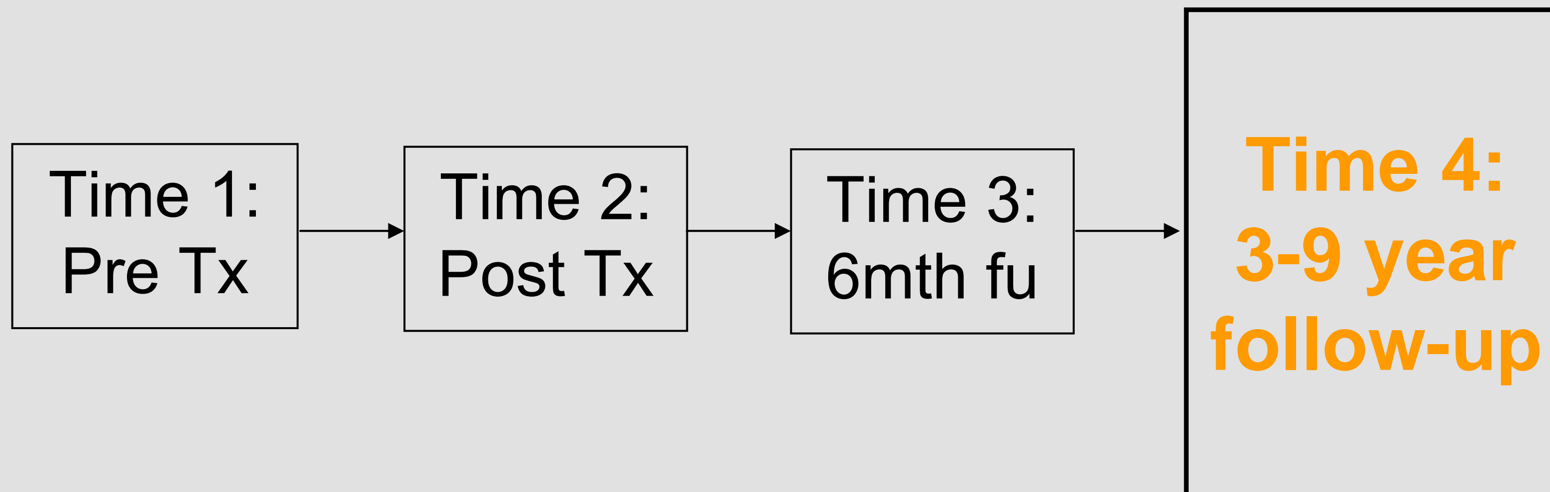
- **Follow up:** Young people and their parents contacted via mail

then phone contact and invited to participate

participation generally involved face-to-face interview

- Dual clinician model where young person and parent(s) involved

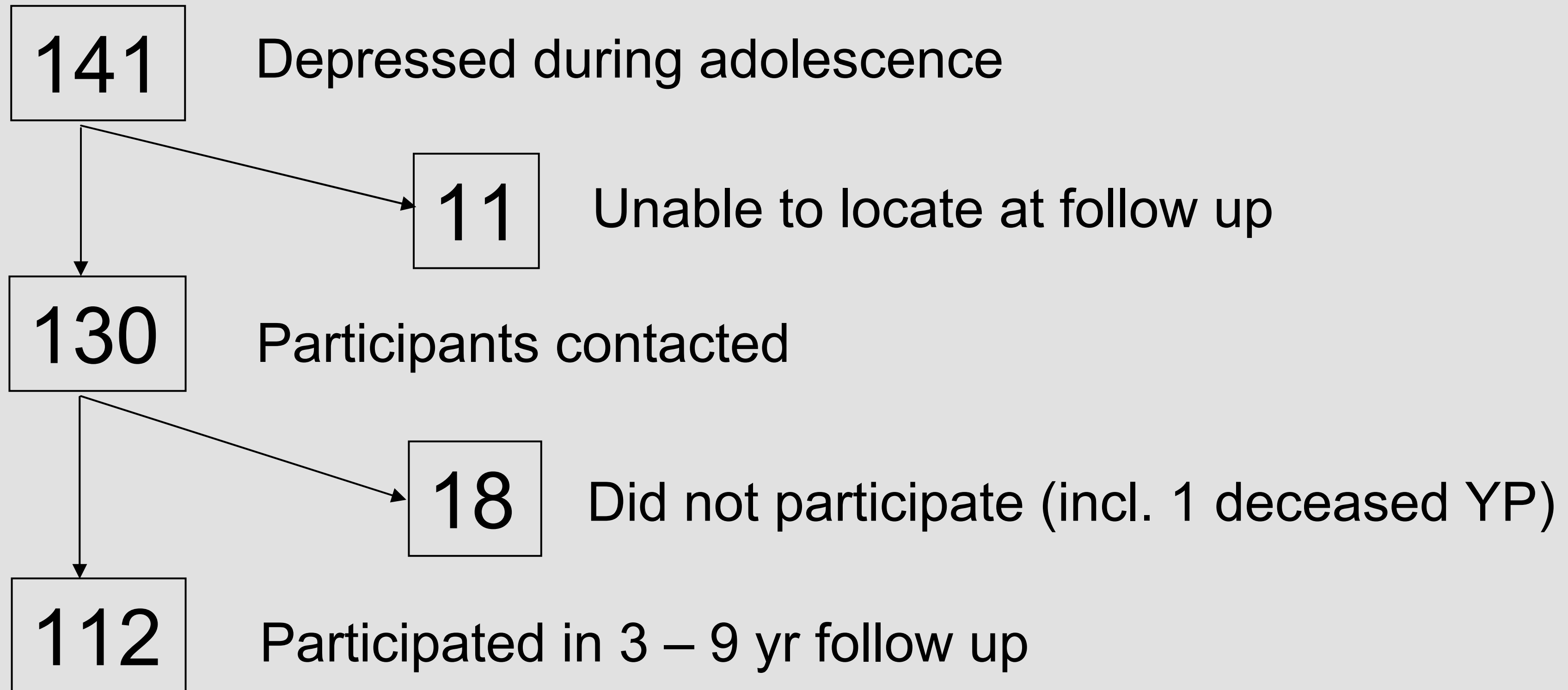
# Methodology



# Methodology

- **Assessment:**
  - Semi-structured diagnostic interview:
    - > Index episode: Kiddie-Schedule of Affective Disorders and Schizophrenia (K-SADS)
    - > Follow up: Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I)
  - Self report measures of:
    - > depression (Reynolds Adolescent Depression Scale - RADS)
    - > anxiety (Revised Children's Manifest Anxiety Scale - RCMAS)
    - > self-efficacy (Self-Efficacy Questionnaire – Depressed Adolescents)
    - > family functioning (Family Assessment Device – FAD)
  - Clinician rated scales: Global Assessment of Functioning (GAF) Global Assessment Relational of Functioning (GARF)

# Sample




- **86% response rate of those contacted**

# Participants vs Non-Participants
# (n=112) (n=29)

- **COMPARABLE on (at time 1 – Pre treatment):**
  - Sex & age
  - Self and parent-reported symptomatology
  - Family functioning
- **Participants DIFFERED from non-participants:**
  - Lower family SES
  - More likely to live with their biological parents
  - Single rather than comorbid diagnosis
  - Greater maternal self-report depressive symptoms

# Demographic results at follow-up (N = 112)

| | |
|---|---|
| **Age (years)** | 17 – 24 years<br>M = 20.7 (SD=1.4) |
| **Female** | 65.2% (n=73) |
| **Highest education completed:** | |
| Some secondary school | 6.4% |
| Secondary school | 42.6% |
| Tertiary qualification | 51.1% |
| **Employed** | 71.4% |
| **In a relationship** | 45.4% |
| **Children** | 8.7% |
| **Living arrangements:** | |
| Both biological parents | 30.5% |
| Blended household | 5.7% |
| Single parent | 21.9% |
| Friends/Siblings/Partner/Alone | 41.9% |

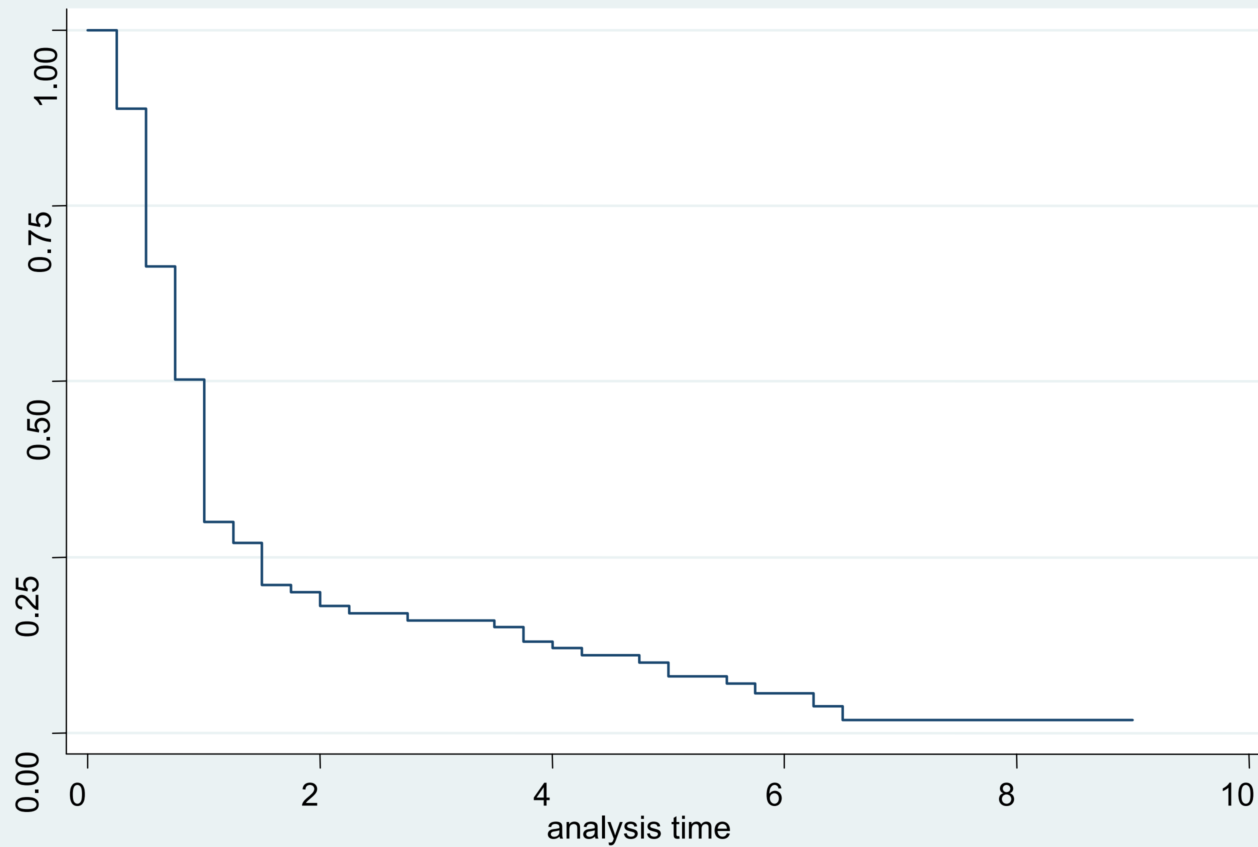
- **Follow up period**

**M=5.71 yrs (3.10 – 8.11yrs)**

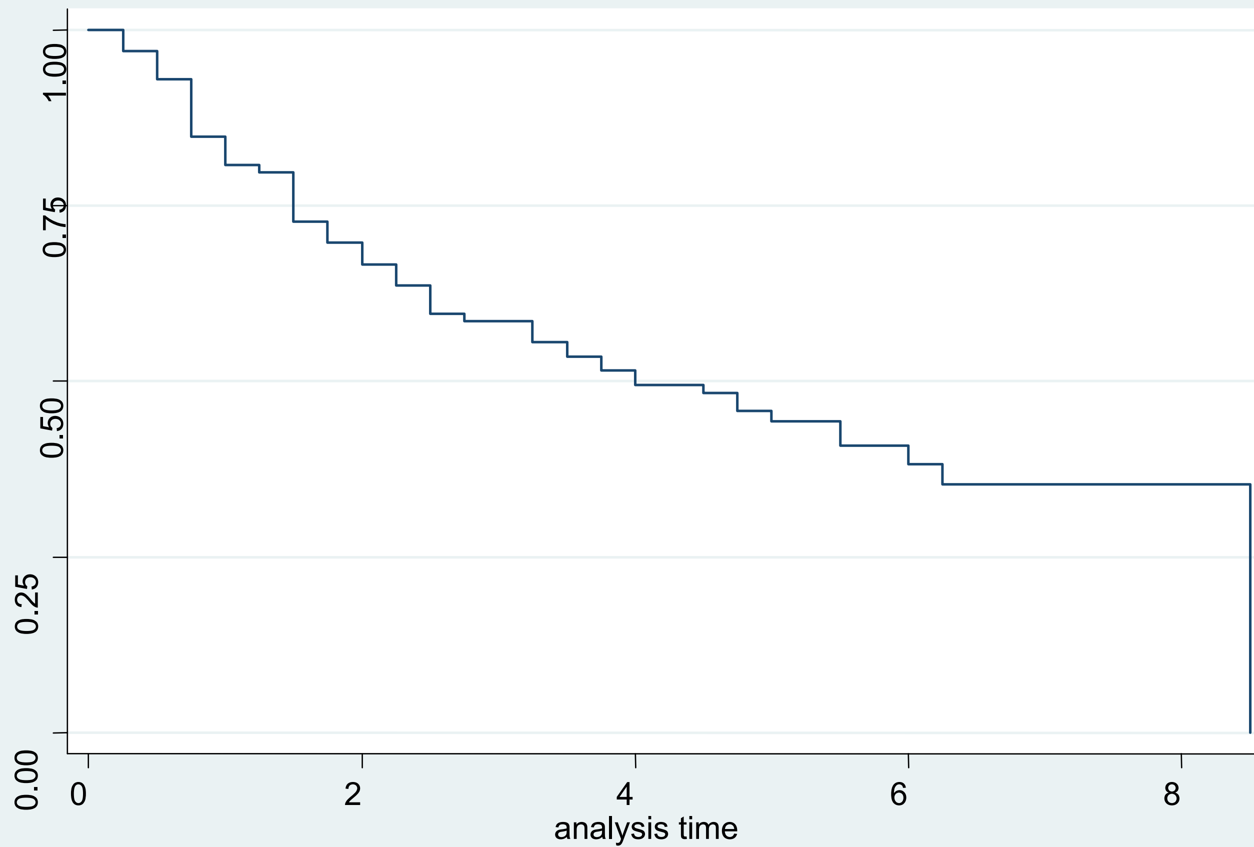
# Clinical results at follow-up

- 32% of sample were depressed (MDD most common)
- 57% experienced ≥1 further episodes of depression
- 5% experienced ongoing persistent depression (did not recover)
- 27% attempted suicide ≥1 times
- 14% hospitalised for psychiatric reasons ≥1 times
- 4 in 5 (79%) developed a psychiatric dx outside mood disorders
- 70% of those who had a recurrence had a comorbid dx
  - Most common: anxiety disorders, substance and alcohol disorders, eating disorders.

# Kaplan-Meier analysis: Mean Time To Recovery



# Kaplan-Meier analysis: Mean Time to Recurrence



# Time to recovery: Cox hazards regression

| Measures | Hazard Ratio | p = | Number of obs |
|---|---|---|---|
| RADS T2 | .9787099 | 0.005 | 84 |
| RADS T3 | .9813713 | 0.012 | 80 |
| RCMAS T2 | .9765757 | 0.012 | 90 |
| RCMAS T3 | .9780369 | 0.006 | 80 |
| SEQ-DA T2 | 1.034892 | 0.024 | 88 |
| FAD YP T2 | .5744434 | 0.013 | 85 |
| GAF T2 | 1.050876 | 0.000 | 93 |
| GAF T3 | 1.047494 | 0.001 | 82 |
| FAD mother T3 | .4984848 | 0.011 | 63 |

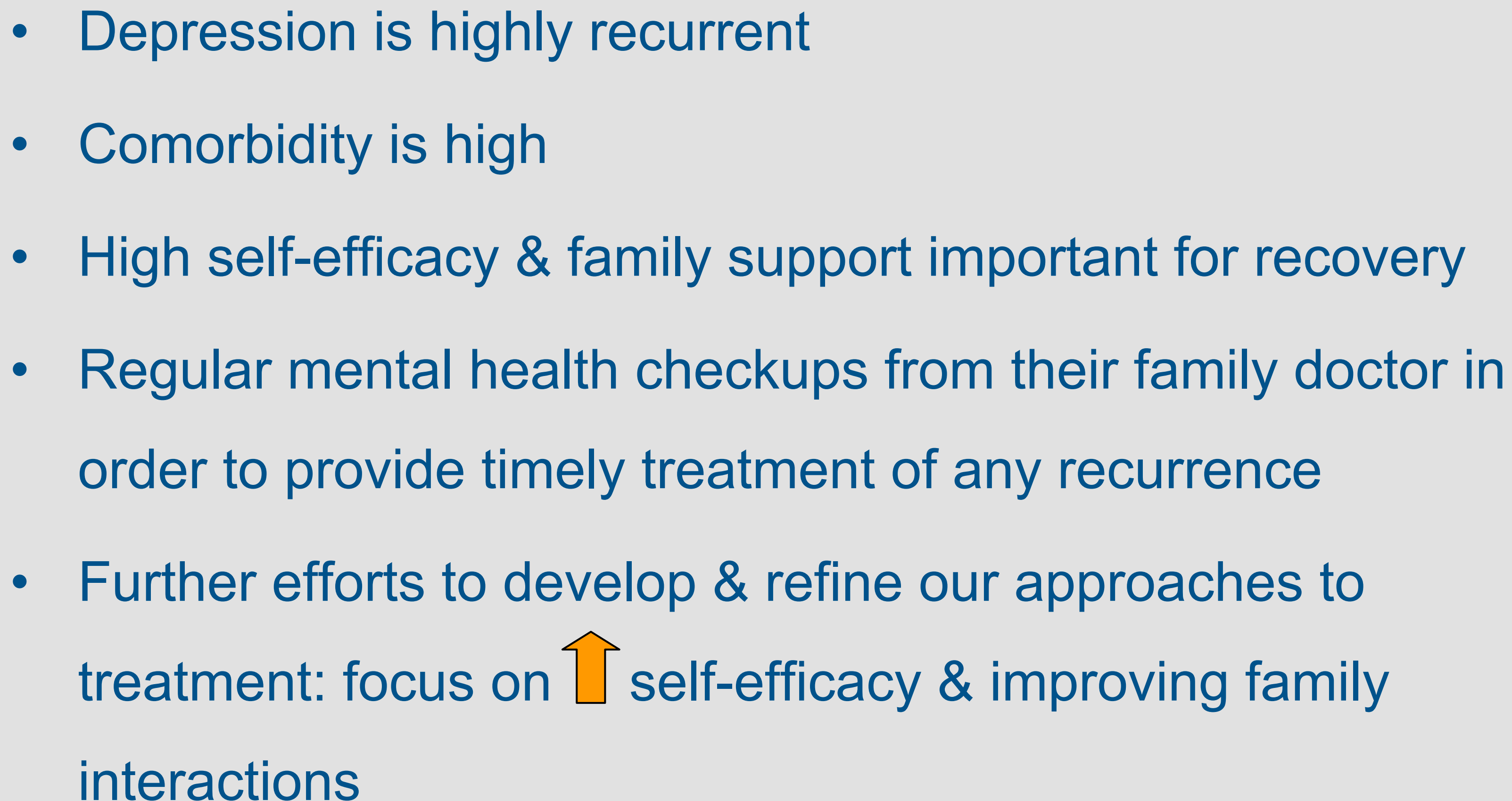
# Summary

- In the short-term intervention is helpful, however we don't have any evidence that counselling has a better or worse outcome than medication in the long-term

- On a positive note, most recover and there is a group of young people who remain so.

- Possible markers for resilience were those with high self-efficacy and family support

# Summary



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