A case control and follow up study of ‘Hard to Reach’ young people who suffered from multiple complex mental disorders

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Key Practitioner Messages

- HTRYP presented with more disadvantage and psychopathology than those YP attending standard community mental health teams (CMHT).

- HTRYP may benefit from a flexible, individualized, resource intense service that includes an outreach capability to maximise engagement, assessment and intervention planning. The HTRYP who engaged with IP, received a package of care with low use of medication and low admission rates to inpatient beds compared with those YP attending regular CMHT.

- For some HTRYP at 2 year follow up, the absence of unstable accommodation together with positive change in both mental state and social function at follow up review could be considered as positive outcomes in contrast to the poor prognosis that is usually associated with the term ‘Hard to Reach’.

- Perhaps the term ‘Hard to Reach’ would be more appropriate as a descriptor of an aspect of current circumstances for some individuals with complex mental disorders rather than a descriptor of both poor engagement with services and poor longer term prognosis.

- Despite multiple attempts by the Innovations Project, some HTRYP could not be engaged.

BACKGROUND
Mental disorders are a major cause of ill health, in young people (YP) (WHO, 2009). Of those aged up to 18 years one in ten have a mental disorder but only half access services and only a fifth specialist child and adolescents mental health services (CAMHS) (Ford, Goodman, & Meltezer, 1999). The burden of disease increases by 2.5 times between the ages of 10 to 14 years and 19 to 24 years (Gore et al., 2011). The main identified causes for this are neuropsychiatric disorders, these include (most prevalent listed first); unipolar depression, schizophrenia and bipolar disorder (Gore et al., 2011). Of adult mental disorders, 75% emerge before the age of 25 years (Royal College of Paediatrics and Child Health, 2003). These ‘chronic diseases of the young’ have high rates of long term morbidity and mortality (McGorry, 2009). Hence, timely and successful access to mental health services in adolescence and early adulthood is a public health priority (Davies, 2013; NIHCE 2016).

Older adolescents and young adults negotiate multiple transitions in most aspects of their life such as further education or employment, moving out of home, forming relationships and becoming independent. In the presence of other psychosocial stressors vulnerable young adults can fail to make these transitions, which may result in a range of adverse consequences impacting on their mental health (Reder, McClure, & Jolly, 2000; Social Exclusion Unit, 2004). These include homelessness, lack of training or education, poor health (Social Exclusion Unit, 2004), anti-social behaviour, substance misuse (Fonagy, Target, Cottrell, Phillips, 2000) and crime (Social Exclusion Unit, 2004). However, mental health service provision for older adolescents and young adults is often inconsistent and not adequately supportive during this period (Department of Health, 2002). At least until recently fewer than 25 % of mental health services had documented evidence of specific transition arrangements from CAMHS to adult mental health services (AMHS) (Singh, 2009). Indeed, 30 to 60% of YP attending CAMHS services may be ‘lost to follow up' when transitioning to AMHS (Singh, 2009). Therefore, consideration of facilitators and barriers is important when considering service development for YP (Hendry & Polson, 2007; Watson, Parr, Joyce, May, & Le Couteur, 2011).
This study focuses on ‘Hard To Reach’ Young People (HRTYP), defined in published literature as at risk, disadvantaged, marginalised and sometimes homeless YP, who often slip through the healthcare systems and may mistrust or are unwilling to engage with service providers (Doherty, Stott, & Kinder, 2004). They may have multiple and complex needs, the highest risks to self or harm to others (Scottish Office Department of Health, 2012), are reported to have poor prognosis and yet slip through the healthcare system or are offered services that are ill equipped to meet their needs (Bevington, Fuggle, Fonagy, Target, & Asen, 2013).

Repeated UK NHS plans (e.g. National Service Framework 2002, Five Years Forward View 2014) emphasize the central role of primary care in providing services for those in greatest need (Department of Health, 2002). Models of youth mental health and primary care collaboration have been explored (Kramer, Iliffe, Miller, Gledhill, & Garralda, 2013) but not particularly in HTRYP.

Descriptions of innovative, developmentally informed services for HTRYP exist: Adolescent Mentalization Based Integrative therapy - AMBIT (Bevington et al., 2013), MAC-UK Charity (Jerrom, 2013), MyPlace Support team (Watson, Connelly, O’Halloran, & Walker, 2013), Headspace (McGorry et al., 2007). However, whether populations served by novel services actually differ from those attending standard care, the treatment offered different in type or intensity and whether novel services represent a significant advance on standard care, is unknown?
This study compares the social and mental health characteristics of YP attending a novel service (The Innovations Project 15 to 25 years (IP)) and outcomes against a matched sample referred to standard care.

METHODS

AIMS

The three project aims included

Comparison one: to compare the sample of YP who attended IP and a sample of YP matched for age and discharge date who attended a community mental health team (CMHT) using the baseline demographics recorded at the first assessment (Time Point 1 (TP1))

Comparison two: to identify and compare the indices for severity, complexity, engagement and response to treatment in a sample (matched on gender, education and socio economic status) of IP and CMHT at TP1 and pre-discharge (TP2).

Comparison three: to assess and compare the mental state and social function of a sub-set of YP (matched on primary diagnosis and severity of mental illness) from the IP and CMHT 24 months after discharge (TP3).

The Services

Innovations Project (IP)
The IP (Camilleri, LeCouteur, McArdle, Thick, Newbury-Birch, 2013; Camilleri et al., Jan2012) was a new multidisciplinary team, funded by the local Strategic Health Authority, to provide an assessment and flexible intervention service for HTRYP not accessing local community mental health services. IP was based within an inner city area, walk-in health centre, in the North East of England, over a one year period (from January to December 2011). This primary care community setting was chosen to facilitate access for vulnerable YP. The IP team consisted of a child and adolescent psychiatrist (NC), and an assistant psychologist supervised by a senior consultant child and adolescent psychiatrist (PMcA).

All referrals meeting the IP inclusion criteria were offered a mental health assessment. If at assessment a YP was found to be suffering from multiple complex mental disorders, he/she was offered a therapeutic intervention (Figure 1).

Comparison Group

This included YP, 15 to 25 years, who attended a Community Mental Health Team (CMHT) based in North East England between January to December 2011. The CMHT consisted of four services; a Child and Adolescent Mental Health Service (CAMHS), an Adult Access Team, an Adult Crisis Team and an Affective and Psychosis Team. The comparison group was identified from the total sample of YP who attended CMHT using a 1 in 3 sampling technique. The sample was then matched in three ways i. age and month of discharge, (comparison 1). ii. Gender, highest level of educational attainment and socio economic status (comparison 2). iii. Primary diagnosis and level of severity of mental disorder as recorded by the Health of the Nation Outcome Scales for Child and Adolescent Mental Health (HoNOSCA) (comparison 3) Figure 2.
Outcome Measures and Diagnostic Questionnaire

Health of the Nation Outcome Scales for Child and Adolescent Mental Health (HoNOSCA) (Gowers et al., 1999) and Children’s Global Assessment Scale (CGAS) (Schaffer et al., 1983) are routinely collected in community NHS mental health services by the clinician at assessment (TP1) and repeated again prior to discharge (TP2). The HoNOSCA provides an overall score for mental disorders, behaviour and social function over the past two weeks (Gowers et al., 1999). The CGAS scored as a single index/number is widely used and clinically meaningful measures of overall severity of disturbance in YP (Schaffer et al., 1983).

The Mini International Neuropsychiatric Interview for Schizophrenia and Psychotic Disorders Studies for Children and Adolescents (MINI-KID) is a reliable and valid instrument used to describe psychopathology according to DSM-IVTR and ICD-10 diagnostic criteria (Sheehan et al., 2010). It was used to substantiate the clinical diagnosis at TP1 and TP3.

The Index of Multiple Deprivation (IMD) was chosen as a direct measure of poverty, created by the British Department for Communities and Local Government (DCLG) (DCPLG 2007). It ranks areas from least to most deprived on seven different dimensions of deprivation and yields an overall composite measure of deprivation, with higher scores indicated more deprivation. (Data.Gov.UK, 2010).

Data collection

Retrospective electronic patient record data on demographics, diagnosis, treatment and outcome measures HoNOSCA (Gowers et al., 1999) and CGAS (Schaffer et al., 1983) at baseline (TP1) and discharge (TP2) were collected from the case notes. Additional information on details of service input
(days waiting for initial assessment, number of sessions offered, attendance rate and contact time with young people) were also collected.

For the 24 month post discharge follow up outcome (TP3), two of the team (NC) and (ACP), child and adolescent psychiatrists conducted follow up reviews. To minimise bias through the lack of blinding, the appointed co-researcher (ACP) was new to all YP. Also, the YP from both samples were allocated, using an unbiased every second case rule, to create a systematically selected sample. The follow up review consisted of a 90 minutes face to face interview based on a series of pre specified questions on mental state and social function directed by a standardised proforma specifically created for this project. Lastly the MINI-KID (Sheehan et al., 2010), HoNOSCA (Gowers et al., 1999) and CGAS (Schaffer et al., 1983)) were completed by the researchers (NC and ACP). When consensus of the scoring measures or questionnaire was not reached (for the assessments carried out jointly) the researchers would discuss to achieve consensus. Ratings of the CGAS score never varied by more than 10 points (1 decile), the total HoNOSCA score by no more than two points.

Governance

NHS ethical approval was gained in June 2013 (ref: 13/NE/0150) with amendment approved in April 2014. Caldecott approval together with research and developmental approval in the relevant NHS organisations was also gained.

Statistical methods and analysis
Nominal and ordinal data were tabulated and compared by the Pearson’s Chi Squared Test or Fischer Exact Test. Continuous data were summarised using means and 95% confidence intervals and normality assessed using the Shapiro-Wilk test (Shapiro & Wilk, 1965). The independent two sample t-tests was used to assess difference between two services and paired t-tests were used for between two time points. Due to the small sample size in the 24 month follow up (TP3), continuous data were summarised using medians and ranges. Wilcoxon signed rank test was used to test for difference within the group and Wilcoxon-Mann-Whitney test for difference between the two samples. All data were analysed using SPSS version 21.

RESULTS

Forty referrals were received by the IP service from a variety of agencies. Four referrals did not meet the age criteria. An assessment was offered to 36 young people and of these five refused. The remaining 31 (86%) young people all met the criteria for HTRYP. Of these, severe were judged not to be suffering from complex mental disorders and were signposted to other local community services and nine repeatedly missed appointments and were discharged following repeated attempts at engaging these YP. Fifteen (48%) were then offered individually tailored therapy, (Figure 1).

Comparison One: Baseline demographics at first assessment

At baseline (TP1) demographic data were available on most (the frequency of available data ranged from 84 to 100%) of the HTRYP, similar to the CHMT population (n=342), and to the selected one in three sample of CMHT attenders (n=115). No significant differences in age, gender, education, employment rates and accommodation status was found between the the selected (n=115), and the non-selected sample (n=227) of controls (Table 1).
At TP1, there were no significant differences between the two samples (HTRYP n=36 and CMHT n=115) in terms of age, gender, ethnicity or patterns of relationships (Table 1). The mean age of the HTRYP was 18.6 years, CMHT 19.5 years, majority were female (HTRYP 58.3% vs CMHT 60.9%), most were White British (HTRYP 83% vs CMHT 94%). However, the HTRYP experienced significantly more deprivation (mean 42.7 vs 23.1, t=-5.6, p=<0.0001), higher rates of unemployment (69% vs 29%, χ²=16.7, p<0.0002) and homelessness (53% vs 9%, χ²=23.8, p<0.001) and achieved poorer educational attainment (university 3% vs 34%, χ²=27.5, p<0.001) compared to the CMHT sample.

Further the HTRYP (72.1%) had significantly (χ² = 5.30, p=0.021) more previous contact with mental health services than CMHT (54.4%) and this was reported as unsatisfactory in 27 HTRYP. HTRYP were also less likely to have been referred from primary care (χ² =59.3, p<0.001): CMHT (69%) compared to the HTRYP (22%). Referrals to the IP service were made from a variety of different services, GPs, primary care hosted walk-in centre and local authority.

Comparison Two: Comparison of clinical severity and response pre-discharge

For this analysis the two samples (HTRYP n= 31, CMHT n=71) were matched on gender, education and socio-economic status. Complete data on service input were available from both samples. HoNO-SCA was available at baseline for 100% HTRYP and 87% CMHT (n=62) and at TP2 for 48% HTRYP (n=15) (all those who were offered therapeutic intervention) and 56% CMHT (n=40). CGAS scores were available on all HTRYP at TP1 and 48% HTRYP (n=15) at TP2, whilst 25% of YP who attended the CMHT had CGAS scores recorded at TP1 (n=18), 10% at TP2 (n=7).
Rates of mental disorders

At TP1 the HTRYP sample (n=31) had a higher median number of diagnoses (median n=3, interquartile range (IQR) 2 to 4) compared with the matched sample of CMHT (n=71) (median n=1, IQR 1 to 2), W_4= 31.6, p<0.001, Table 2. They also suffered more psychopathology (HTRYP HoNOSCA mean score: 19.1 and CMHT mean score: 11.2 t=5.53, p= <0.001), and functional impairment, (HTRYP CGAS mean score: 51.0, CMHT mean score 58.9, t=−2.0, p= 0.05).

Clinical Care provided

There were no differences between the mean number of days from initial referral to initial assessment (TP1) between the HTRYP (13.8 days) and the CMHT sample (12.2 days, t= 0.61, p= 0.55) nor between the mean number of sessions offered to each service (HTRYP 10.9: CMHT 9.6, t= 0.58, p= 0.52). However, fewer attended scheduled sessions (HTRYP 55.9%, CMHT 69.1%, t= -2.17, p= 0.004), generally attributable to initial differences in engagement. The mean number of minutes the IP clinical staff spent (in the form of direct or indirect contact) with each YP, was significantly greater in HTRYP (1537.9 minutes 95% CI 873 to 2202) than in CMHT (518 minutes 95% CI 303 to 734), (t= 3.79, p= <0.001).

Most YP received a talking therapy (HTRYP=65%; CMHT=55%). However, HTRYP were less likely to received cognitive behavioural therapy (CBT) (n=3 compared to n=27, Fishers Exact p=0.004) than supportive psychotherapy (n=19 compared to n=14, \(\chi^2= 17.0, p<0.001\)). Fewer HTRYP, n=6 (19%) than CMHT attenders, n=41 (58%) received psychotropic medication (\(\chi^2= 12.8, p= 0.003\)) and psychiatric hospital admission (CMHT YP n=9 (13%) and the HTRYP, n=0).
Comparison Three: Outcome 24 months after discharge

A sub sample of 28 HTRYP and 54 CMHT (matched for age, date of discharge, gender, education, SES, primary diagnosis and baseline HoNOSCA score) were identified for the follow-up 24 months follow up review. Sixteen (57%) HTRYP were retraced and 13 (46%) consented to attend a review appointment. Twenty three (43%) YP from the CMHT sample were retraced and nine (17%) consented to take part. Retracing, contacting and consenting YP to attend for a follow up review proved to be very challenging, (Figure 5).

Insert Figure 5 here.

Clinical Change in social function

At TP3, the HTRYP traced were from more deprived backgrounds than CMHT controls (W=22.5, p=0.033). There were no significant changes in group median IMD scores for either group between observed between TP2 and TP3.

There was considerable variability within both groups at follow up. No HTRYP was in unstable accommodation at follow up, whilst three YP from CMHT still were. From TP1 to TP3, four (31%) HTRYP had improved their highest level of attained education, compared to two (22%) CMHT YP). For the HTRYP the employment rate increased from one (8%) at TP1, to four (31%) by TP3, whilst the employment rate in the CMHT sample went up from two (22%) to five (56%). The rate of alcohol use disorder in the HTRYP sample declined from eight (62%) YP at TP1 to one (8%) at TP3, compared to five YP (56%) to four (44%) in the CMHT sample.

Clinical Change in mental state (Outcome measures)
There was a statistically significant decline in HoNOSCA scores ($t = 4.8$, $p < 0.001$) and rise in CGAS scores ($t = -3.6$, $p < 0.002$) from TP1 to TP2 in both samples (n=65). There was also a statistically significant improvement from baseline (TP1) to follow up review (TP3) ($W=15$, $p=0.24$). As there was no change in the CMHT scores ($W=9$, $p=0.674$), this, was attributable to statically significant improvement in HTRYP. HoNOSCA scores from TP1 to TP3 ($W=13$, $p=0.31$).

Also, between TP2 and TP3 the HTRYP continued to improve significantly; mean HoNOSCA scores (n=15) declined by 7.8 points ($t = 5.0$, $p < 0.001$) and the mean HTRYP CGAS score (n=15) changed by 17.9 points ($t = -5.0$, $p < 0.001$), Figure 3. By comparison the CMHT changes were modest: HoNOSCA by 2.3 points (n=40, $t = 2.9$, $p = 0.007$) and CGAS scores by 1.7 points (n= 7, $t = -0.2$, $p = 0.84$), Figure 4.

Among the 22 YP reviewed at follow up the median CGAS score was 77.0 (range 41 to 91). 13 (59%) had a CGAS score of 71 or over at TP3 described as ‘…. transient reactions to psychosocial stressors; with no more than slight impairment in social, occupational or school functioning’ (Schaffer et al., 1983). However, there was no statistically significant between group differences at TP3, $W=37.0$, $p=0.15$.

DISCUSSION

This study compares HTRYP attending a new community clinical service (IP) with a sample of YP who attended regular CMHT. The IP was designed for disadvantaged YP with multiple complex
mental disorders, unable or unwilling to attend local CMHT provision. The IP identified a cohort of YP with more disadvantage, psychopathology and more unsatisfactory past contact with mental health services (Camilleri. N. et al., 2013) compared with the CMHT group. The high rates of undiagnosed neurodevelopmental disorders and substance misuse in the HTRYP (Table 2), may have contributed to their ambivalence about standard services and to difficulty engaging them.

A larger proportion of HTRYP than previously reported (Bebbington et al., 2009) suffered from more than one disorder. Those HTRYP treated in the IP improved statistically and clinically over time (TP1 to TP3) (Bird et al., 1987; Brann & Coleman 2010; Schorre & Vandik, 2004), when compared to the CMHT YP and other UK CAMHS (Garralda, Yates, & Higginson, 2000; McArdle & Gillet, 1997; The CAMHS clinical academic group, 2010) and with less medication and fewer admissions. Also, while small numbers precludes firm conclusions, the reported educational and accommodation gains were encouraging, the continuing gains between discharge and follow up suggest the possibility that the intervention represented a “turning point effect’ towards a more resilient path (Rutter M. (2013)).

The intervention package included supportive psychotherapy (SP) characterised by active engagement, empathy, patient validation, coaching and problems solving, described as more likely to engage ambivalent YP (Lynch, Trost, Salsman, & Linehan, 2007; McArdle & Gillet, 1997). This pragmatic individualised tailored approach, supplemented by considerable time through a dedicated outreach member of staff working across agency boundaries with the YP seemed crucial in facilitating engagement. These findings suggest that CMHTs could include an outreach component and staff within the team specifically allocated to work with HTRYP in the community catchment area.
The longitudinal follow-up of patients in this research project provided some opportunity to observe the longer term trajectory of these YP. Tracing and re-contacting both samples of YP at TP3 proved to be a considerable resource and time intense challenge, partly explicable by the number of transitions the YP were negotiating (Reder et al., 2000; Social Exclusion Unit, 2005). Alerting YP to the possibility that they might be re-contacted in the future to review outcomes and service provision, may facilitate re-recruitment and thus reduce the attrition rates observed in this study.

A significant proportion of YP repeatedly missed appointments. However a somewhat surprising finding was that some YP who repeatedly missed appointments at TP2, agreed to attend a follow up review at TP3, including a comparatively higher proportion of HTRYP (n=13 of the 16 contacted) than CMHT (n=9 of the 23 contacted), Figure 3. Perhaps the relatively lower refusal rate by the HTRYP from the IP compared to the CMHT YP to attend follow up review might also in part be a reflection of the level of engagement these YP had with the IP in 2011. There are likely to be many factors involved: differences in the YP’s levels of initial engagement, in service input, in the therapeutic intervention, level of social deprivation and lesser mobility of HTRYP. It is important to mention that at follow up, one YP (from the CMHT sample) (Figure 3) was recorded as a suicide whilst still in care of mental health services. Suicide is the leading cause of death in YP aged 15 to 25 years (Australian Bureau of Statistics, 2010). This finding emphasis the fact that this cohort of YP are a high risk cohort, who require adequately equipped services to meet their mental health needs.

These findings highlight a major shortcoming of the use of the term ‘Hard to Reach’ (HTR) as defined previously in the literature (Hendry & Polson, 2007; Pain, Francis, Fuller, O’Brien, & Williams, 2002; Social Exclusion Unit, 2005). A key aspect of the definition ‘HTR’ refers to the social circumstances and context for the YP at the time of assessment. Indeed for this research project the term ‘HTR’ did not adequately describe the group who were referred to IP. Perhaps ‘HTR’ should be
considered as a descriptor of current status or a risk factor which may change over time. This rather more optimistic stance appears to have some support from the findings of this small research sample.

The number of participants in the follow up samples was small and only tentative clinical and research observations were possible. A substantial proportion (n=13, 59%) of YP who were successfully followed up, reported to be doing well and at follow up review (from the CGAS scores) appeared to be doing well, and suffering from no more than slight impairment in their social functioning. From these findings it appears that regular reviews and treatment offered by a mental health service to a sample of YP who are suffering from complex mental disorders and accompanying poor social function, may provide the scaffolding needed for some YP to maintain improvement up to two years follow up (Gore et al., 2011; McGorry, 2009; Patel, Flisher, Hetrick, & McGorry, 2007).

Limitations of the research project

Limitations included the small sample size, although by definition one arm of this sample was 'hard to reach' and therefore likely to be hard to recruit and retrace. Also, despite procedures to minimise the potential for bias, the TP3 was not blind. No formal reliability testing for the data collection was carried out but a part time trained clinical researcher was employed to carry out the double data checking. Lastly, despite reporting aspects of service provision, no investigation was made about service costs or health economics evaluation.

Next Steps
A large scale prospective case control longitudinal study, which includes clinical and cost effectiveness evaluations should be undertaken in order to investigate what might be the most resource efficient and cost effective ways of reducing the immediate and long term burden of mental health in YP.

ACKNOWLEDGEMENTS:

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Table 1. Descriptive data of personal demographics for HTRYP and CMHT

<table>
<thead>
<tr>
<th></th>
<th>HTRYP (n=36)</th>
<th>CMHT (n=115)</th>
<th>Statistic</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>21 (58.3%)</td>
<td>70 (60.9%)</td>
<td>$\chi^2_{1}=0.074$</td>
<td>p=0.786</td>
</tr>
<tr>
<td>Age</td>
<td>18.6yrs (95% CI 17.8-19.5)</td>
<td>19.5yrs (95% CI 19.0–20.0)</td>
<td>$t_{149}=-1.74$</td>
<td>p=0.084</td>
</tr>
<tr>
<td>White British</td>
<td>30 (83%)</td>
<td>108 (94%)</td>
<td>$\chi^2_{1}=1.702$</td>
<td>p=0.342</td>
</tr>
<tr>
<td>Single</td>
<td>18 (50%)</td>
<td>83 (72%)</td>
<td>$\chi^2_{1} = 2.413$</td>
<td>p=0.120</td>
</tr>
<tr>
<td>No Pregnancies</td>
<td>12 (57%)</td>
<td>42 (60%)</td>
<td>$t_{77}=1.35$</td>
<td>p=0.182</td>
</tr>
<tr>
<td>No Children</td>
<td>27 (75%)</td>
<td>69 (60%)</td>
<td>$t_{116}=-0.82$</td>
<td>p=0.414</td>
</tr>
<tr>
<td>IMD</td>
<td>42.7 s.d.16.5</td>
<td>23.1 s.d.15.5</td>
<td>$t_{142}=-0.56$</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Employed</td>
<td>10 (31%)</td>
<td>66 (71%)</td>
<td>$\chi^2_{2}=16.696$</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Stable Accommodation</td>
<td>17 (53%)</td>
<td>98 (91%)</td>
<td>$\chi^2_{1}=23.812$</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td></td>
<td></td>
<td>$\chi^2_{4}=27.485$</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Primary</td>
<td>5 (14%)</td>
<td>1 (1.4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>20 (56%)</td>
<td>22 (31%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td>3 (8%)</td>
<td>24 (34%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>1 (3%)</td>
<td>24 (34%)</td>
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</tr>
</tbody>
</table>

$\chi^2$: Pearson’s Chi squared Test, t: Test Statistic, 95% CI: Confidence Intervals, S.D. Standard deviation
Table 2. Presenting diagnoses and co-morbidities of YP in both samples

<table>
<thead>
<tr>
<th>Frequency of all Diagnoses</th>
<th>HTRYP n=31 (%)</th>
<th>CMHT n=71 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Mental Illness</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Psychosis</td>
<td>0 (0%)</td>
<td>6 (8%)</td>
</tr>
<tr>
<td>Affective disorders (inc. Bipolar Disorder)</td>
<td>14 (45%)</td>
<td>42 (59%)</td>
</tr>
<tr>
<td>Anxiety disorders/ PTSD/OCD/Adjustment Disorders</td>
<td>20 (65%)</td>
<td>30 (42%)</td>
</tr>
<tr>
<td>Personality Disorders</td>
<td>12 (39%)</td>
<td>5 (7%)</td>
</tr>
<tr>
<td>Eating Disorders</td>
<td>2 (6%)</td>
<td>8 (11%)</td>
</tr>
<tr>
<td>Alcohol and Substance Misuse</td>
<td>18 (58%)</td>
<td>4 (6%)</td>
</tr>
<tr>
<td>Neurodevelopmental Disorders (ASD, ADHD), Oppositional Defiant and Conduct Disorder</td>
<td>14 (58%)</td>
<td>9 (13%)</td>
</tr>
<tr>
<td>Attachment Disorder</td>
<td>6 (19%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>