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A retrospective case note review of young people in transition from adolescent medium secure units to adult services

Abstract

Purpose There is substantial evidence that young people moving from child and adolescent mental health services to adult services are more likely to experience poor transitions. However, little is known about the care-pathways of young people transitioning from forensic services. This retrospective case note review sought to examine the clinical characteristics, transition pathways and psychosocial indicators of transition outcomes amongst young people in forensic medium secure services discharged to adult services.

Design/methodology/approach The electronic records of 32 young people who transitioned from six adolescent medium secure units in England to adult services between May 2015 and June 2016 were examined.

Findings Approximately 65 percent of young people were between 18 and 19 years at the time of transition and the average waiting time from referral to discharge was six months. Sixty-three percent of young people transitioned to community placements and adult medium secure services. Four pathways describing the journey into and out of adolescent medium secure services were identified in a subsample of 12 young people. Twenty-five percent of young people with neurodevelopmental problems moved to specialist services.

Practical implications The results suggest that diagnosis, severity of offence and clinical background are associated with transition pathway. Promoting a person-centred approach and gradual independence of the young person may improve current practice.

Originality value These results inform existing policy and clinical practice in an effort to reform transition guidelines around young people's needs during transition times. Further studies in adolescent forensic services are needed to understand complex neurodevelopmental problems and comorbidities.

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Keywords Medium secure units; Adolescents; Transition pathways; Comorbid mental health problems; Clinical characteristics; Person-centred approach

Introduction

Transition of care in mental health services has been identified as an international priority (Nguyen *et al.*, 2017). It is well established that poor transition outcomes from child and adolescent mental health services (CAMHS) to adult settings are associated with poor mental health (Singh and Tuomainen, 2015). A number of studies report the current divide between services, characterised by lack of joint working and shared transition protocols (Leavey *et al.*, 2019). Age boundaries constitute major barriers to developmentally appropriate care as young people reaching 18 years of age are required to move to adult services. However, the lack of interface between CAMHS and adult services amplifies the problem. Emotional and developmental readiness to move to adult-oriented services and the lack of provision to prepare young people for this life-changing transition exacerbates their mental health symptoms (Livanou *et al.*, 2017). Services rely on arbitrary national age criteria which often disregard ongoing developmental needs (Davis, 2003; McGorry *et al.*, 2013).

Adolescence is a critical period for the emergence of mental health problems due to the occurrence of numerous social and emotional changes (Duran-Bonavila *et al.*, 2017; Signorini *et al.*, 2017). Young people in secure services encounter additional difficulties compared with community youth transitioning to adult services, such as developmental trauma, maladaptive coping strategies, attachment difficulties and other risk factors (Liddiard *et al.*, 2019). This cohort of young people presents with complex and multiple needs, including comorbid mental health problems, which may escalate during periods of transition (Livanou *et al.*, 2019). Furthermore, they are more likely to be looked after children (LAC) and/or have experienced inconsistent parenting (Wright *et al.*, 2016). Therefore, the period of 'letting go' of key professionals from child and adolescent secure services needs to be well-prepared considering such vulnerabilities. From an attachment theory perspective, moving away from secure services may break attachments between young people and staff leading to an experienced abandonment or rejection and subsequently, increased susceptibility to relapse (Seager, 2014). Despite this, delayed and/or abrupt transitions for young people discharged from medium secure units have been reported in previous studies (Livanou *et al.*, 2019).

Transitions from adolescent medium secure units in the UK are channelled by medicolegal processes, which further complicate transitions. However, most research studies have focused on transitions of care from mainstream CAMHS rather than forensic services (Appleton *et al.*, 2019). Liddiard and colleagues (2019) highlight that poorly planned and executed transitions may lead to increasing rates of self-harming, readmission and relapse, yet few studies have included child and adolescent and adult secure services (Wheatley *et al.*, 2013).

Systematically <u>identifying the specific needs and characteristics of young people</u> during transition periods will foster more tailored and informed care and will aid in the process of developing needs-based transition guidelines. Previous studies in mainstream CAMHS have highlighted that barriers such as waiting times account for poorer transition outcomes (Singh and Tuomainen, 2015). However, there is very limited knowledge about transition processes and outcomes across forensic settings to inform clinical practice.

Furthermore, young people with neurodevelopmental problems and learning disabilities (LD) and/or emerging personality disorders, who are overrepresented in forensic services, present with complex needs and should follow distinct care-pathways addressing their vulnerabilities (O'Connell and Petty, 2019). These groups are likely to present with worsening symptoms during transition times considering associated psychological theories such as Theory of Mind (ToM), which suggests that they may not have the emotional and social skills required to understand complex phenomena (Korkmaz, 2011). However, current adult care provision often disregards such needs (O'Connell and Petty, 2019).

The current research

To date, no study has examined the clinical characteristics and transition pathways of young people discharged from adolescent medium secure units to adult services across England. A consideration of national data is necessary to inform transition policy and practice decisions. In order to address these gaps, the present multi-site study included nationwide data from six adolescent medium secure units to retrospectively examine transitions to adult care. This study aimed to extend knowledge and understanding of the characteristics and transition pathways by examining transition processes and outcomes to identify similarities and/or differences.

Consistency in data was expected throughout all nationally funded adolescent units as services work closely together to ensure effective liaison and resolution of any issues. The cases were not expected to differ significantly in terms of clinical presentation, as inpatient adolescent medium secure units use standardised admission criteria, admitting a particular subgroup of young people with complex and multiple needs. However, differences relating to social determinants and transition destinations were anticipated since discharge destination depends heavily on risk presentation and clinical diagnosis. Gender differences based on clinical presentation and transition destination were also expected considering that females are more likely to present with emerging borderline personality disorder symptoms and males with psychosis (Livanou *et al.*, 2019).

The aims of the present study were to:

 determine the numbers of young people transitioning from adolescent secure services to adult services; (2) describe the characteristics of the sample; (3) identify transition pathways and patterns and explore whether clinical history or diagnoses were determinants of these; (4) increase understanding on gaps in service provision and transitional logistics; (5) identify the model of functioning in adolescent medium secure during transition times.

Ethics

This study was approved in January 2016 by the Health Research Authority (HRA) as part of a larger educational project and qualified as an NIHR CNS Portfolio study and all participating sites provided letters of access for on-site data extraction. Considering the retrospective nature of the study, young people were not able to provide consent for their medical records to be retrieved. However, access was granted through Internal Governance procedures imposed by Research and Development (R&D) policy at each NHS Trust. Meetings with clinical directors, responsible clinicians and R&D officers facilitated this process. The information was protected, and anonymised and local collaborators were present during data collection and case retrieval. All data were stored in a password-protected and encrypted computer.

Methods

Participants

This study consisted of case note reviews using annual discharge information for young people transitioning to adult services across six adolescent medium secure hospitals in England. Patients discharged from May 31st 2015 to 1st June 2016 between the ages of 17 and 19 were included.

The transition age boundary according to a national mapping exercise study for adolescent medium secure units is 18 years old (Livanou *et al.*, 2019). However, young people may remain in CAMHS until their 19th birthday where it is deemed clinically appropriate or where a receiving placement cannot be found in time. Additionally, a suitable transition destination is required to be identified for young people in forensic CAMHS, in line with Section 117 of the Mental Health Act which protects the rights of every young person regarding necessary Aftercare. This study focussed particularly on transitions from forensic CAMHS to adult secure and community services, therefore young people discharged to other CAMHS were not included.

Materials

A predefined structured framework was used to extract data from the young people's hospital records. This proforma was initially designed and successfully implemented in the TRACK study, which was one of the largest UK studies on transitions from CAMHS to adult mental health services (AMHS) in non-forensic contexts (Singh *et al.*, 2008). For the TRACK study, two proforma questionnaires were designed separately for actual and potential referrals to adult services. The proforma was adjusted to the needs of this cohort due to the lack of validated measures in adolescent forensic contexts. This tool was piloted and amended with the lead participating site, with certain questions relevant to mainstream CAMHS removed or adjusted for the needs of this case note review. For example, items such as *"interventions delivered"* and *"details of any unsuccessful referrals"* were removed and new items about *"offending history"* and *"trauma history"* were added. Items were modified and discussed with clinicians to ensure construct validity. The information held in clinical records and the data availability varied considerably for each young person, as more than half had moved across and within numerous services from an early age.

Procedures

Local collaborators were asked to identify all patients who had moved to adult services during the discharge period. Young people's information was electronically retrieved by the principal research (ML) on-site and shared or discharge protocols were provided where available. In cases where the relevant information could not be accessed electronically, paper-format records were used. Determining the number of young people who transitioned depended on this process and some cases or records could be missed. Furthermore, despite records being stored on a computerised system, two sites had not updated their systems and data relied on the responsible clinician's memory and notes. The average time of accessing these cases was approximately six to twelve months.

Analysis

Each case was studied individually. Information of interest was extracted to complete the proforma and was quantified to collect information such as demographics, diagnosis, family background, and transitional pathways. Descriptive statistics were used to present frequencies and annual rates of transitions along with demographics, diagnoses, offence index, transition destination, transition pathway, parental mental health, educational status, previous history of abuse, and length of stay. Results were analysed using STATA (14.1) software.

Results

Between May 31st 2015 and June 1st 2016, 32 patients were discharged to custody, the community, adult mental health hospitals and adult community services. These patients had reached 18 years or were between 17.5 and 18 years. One young person moved to an adult high secure unit before their 18th birthday due to high-risk presentation and safeguarding concerns. The mean number of transitions to adult services for that year across units was 5.3 (SD=1.4, *Mdn*=5). The number of transitions per unit ranged between 4 and 7 and did not differ greatly across hospitals. Table I summarises the demographic, social and clinical characteristics of the sample.

Education

All young people in our sample were attending education courses, as this is compulsory for young people in medium secure units. Healthcare staff reported that many young people disengaged from education once they turned 18 years, reflected in clinical records as "disengaged".

Length of stay

For five young people, the relevant information could not be found in their records and the responsible clinicians could not retrieve discharge dates. Length of stay in adolescent medium secure units was provided for the remaining 27 young people. The average length of stay was 19 months (SD=16, Mdn=14) and ranged between 1 and 72 months.

Index offence

Fifty-four percent of the young people had assaulted either a family member or a staff member from previous placements in psychiatric hospitals and 14 percent had committed a sexual assault. Eleven percent of young people had committed a burglary, 7 percent a robbery, 7 percent arson, 4 percent property damage and 4 percent attempted murder. It should be noted that almost all this cohort had offended previously, and the reported figures do not include other recorded offenses.

Transition delays

Five young people were discharged to adult services 1 to 10 weeks before their 18^{th} birthday and waiting time was unclear for one young person. The average waiting time from referral to adult services to discharge from the adolescent medium secure units was six months (SD=4, *Mdn*=5) and ranged between one and 16 months.

Transitions from previous placement to adolescent medium secure units

Eleven young people were referred from a psychiatric hospital to adolescent medium secure units and ten young people were referred from the Children and Young People's Secure Estate (CYPSE); either a Young Offender Institution (YOI), Secure Children's Home (SCH) or Secure Training Centre (STC). Four transferred from low secure hospitals and three from Psychiatric Intensive Care Units (PICUs), including one adult PICU. One young person was referred from court and another from a residential placement. One young person was in residential services prior to moving to an adolescent medium secure unit. Two young people were referred from outpatient CAMHS as they were living in the community.

Transitions from adolescent medium secure units to adult placement and community settings

Twelve young people transitioned to community placements including Early Intervention Services (EIS) aimed for individuals with first episode of psychosis. Eight young people moved to adult medium secure hospitals, one to a low secure unit and another young person to high security. Three young people went back to prison and three were discharged to locked rehabilitation services. Two young people transferred to an educational facility. Two young people transitioned to psychiatric hospitals. See Figure 1.

Transitional patterns in care-pathways

Twelve of the 32 young people shared four distinct care pathways from previous placement, to adolescent medium secure service to the discharge placement; the remaining young people had distinct care pathways without sharing common characteristics (see Figure 2). Timelines could not be estimated, as the information for each placement destination was not provided in their records.

Determinants of discharge destination

The results suggest that young people who shared clinical characteristics and backgrounds were more likely to share transitional pathways. Out of 12 young people who moved to community placements, only five had a family history of mental health problems. Three females moved to psychiatric or adult forensic services. Only one Black British young person out of the 12 moved to an adult medium secure hospital and 11 White British young people moved to adult forensic and/or psychiatric facilities. Sixty-three percent of females transitioned to community services despite the severity of the offence. Four LAC transitioned Young people in transition

to psychiatric or secure services. Ten young people with previous trauma history transitioned to adult secure hospitals or other psychiatric facilities, such as PICUs. Nine out of the 12 young people who moved to adult secure or other psychiatric hospitals presented with four or more comorbid mental health problems and learning difficulties. Eight young people with multiple comorbid mental health disorders transferred to adult medium secure hospitals whilst only four of 12 young people who moved to community placements had four or more comorbid mental health problems. Seventeen young people committed an assault and nine of them transferred to community settings, and the remaining to hospitals.

Four of nine young people who were LAC or where social services were involved, moved to adult low or medium secure hospitals, suggesting a link between being in contact with social care and future institutionalisation. However, there was a link between offence type, specifically sexual offending, and parental mental health. Three of the four young people who presented with sex-offending had a parent with mental health problems and two had been in contact with social services.

Discussion

The findings of this study highlight the complexities and multiple needs of young people discharged from medium secure units to adult and community settings and suggest a link between diagnosis, severity of offence and transition pathway. Results showed young people with sexual offences, comorbid mental health problems, psychosis and who are in contact with social care were more likely to transition to adult secure services.

Transition pathways

The majority of the sample transferred to adolescent medium secure units from custody and psychiatric hospitals, in line with previous research (Dimond and Chiweda, 2011). Incarcerated young people with milder symptoms may remain in youth justice settings where

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their symptoms are less likely to be understood, thus their needs may go unrecognised (Almond, 2012). Young people must present with both high-risk and a mental disorder to be liable for detention under the Mental Health Act in forensic hospitals (Livanou *et al.*, 2017). Accordingly, the severity of the mental disorder seems to determine young people's carepathway.

Whilst over 70 percent of the sample had a neurodevelopmental disorder and/or a learning disability, only 25 percent transitioned to specialised services. Previous research has revealed that AMHS lack appropriate specialised care to meet the specific needs of this group due to lack of available attachment-focused treatments and trained staff (Signorini *et al.,* 2017). The therapeutic climate of psychiatric settings is an important factor influencing patients' treatment outcomes (Middelboe *et al.,* 2001). Consequently, young people are often accommodated in adult secure services or other psychiatric facilities which lack a developmental perspective (Wheatley *et al.,* 2003) and may fail to acknowledge their neurodevelopmental complexities.

Social determinants of discharge destination

Six out of 16 young people with trauma history moved to community placements which suggests that this risk factor may determine transition outcomes. However, it is well-established that young people in secure services and custody are more likely to experience trauma early in life (Wright *et al.*, 2016). Half of the sample were known to have experienced sexual abuse or witnessed domestic violence during childhood. Research findings suggest that lack of family attachment and inconsistent care giving are risk factors to youth mental health (Patel *et al.*, 2007). Twenty-two percent were LAC, which is in line with Beyond Youth Custody (2016) reports about detained children, and had experienced inconsistent parenting, multiple transitions in foster homes, and social services involvement in their care.

Research suggests that adolescent sexual offenders are more likely to be socially isolated, to come from dysfunctional families and to have experienced parental rejection (Marshall *et al.*, 1993). The results from the present study may corroborate previous findings considering poor parental mental health and being a LAC. However, there are differences in sexualised behaviour between males and females. In the current sample, only males had a sexual offence whilst one female presented with sexualised behaviour towards staff. From an attachment theory perspective, sexual offending and sexualised behaviour demonstrate a difficulty in developing intimacy and forming relationships underlined by secure attachment. Transitioning away from key staff is difficult for this group of young people, particularly as engagement and rapport build over time (Livanou *et al.*, 2019). Young people seem to be sensitive to adult environmental changes and can respond with maladaptive coping mechanisms (Wheatley *et al.*, 2013). Previous research has shown that attachment-focussed models of care are promising for patients undergoing hospital transitions (Liddiard *et al.*, 2019).

Length of stay and continuity of care

Length of stay in adolescent medium secure units varied widely across the group. However, the majority of the sample remained in medium secure units for approximately two years. Adolescent medium secure units are highly supportive and structured environments which provide containment for young people. Dimond and Chiweda (2011) refer to *relational security* as an essential element of building relationships between forensic mental health professionals and young people, and these relationships have been found to be central during the transition process (Wheatley et al., 2013). Yet, these secure relationships are discontinued once young people move to adult services.

Clinical characteristics of young people

Psychosis was the most prevalent mental disorder in this sample of young people. LD were overrepresented in the sample (over 70 percent), along with Post Traumatic Stress Disorder (PTSD) and symptoms of self-harm. Previous research has illustrated that psychosis is more prevalent among males than females and, similarly, males outnumbered females in the current sample (Lader *et al.*, 2003). However, majority of the sample presented with psychiatric comorbidity, aligning with the existing literature (Lader *et al.*, 2003).

Self-harming was evident in both sexes in the current sample and was integral to most of the young people's developmental history, with males engaged in self-harming behaviour as much as females. However, research findings show that adolescent male offenders with mental disorders in detention have lower self-harming rates than females (Livanou et al., 2019). Yet, the self-harming rates amongst males in the present study could be explained due to differences in settings and presentation of mental health problems and histories, which are more severe and complex compared with other establishments. Another possible explanation is that self-harming amongst males may be overlooked in prison settings either due to social biases, toxic masculinity or males being less likely than females to receive mental health treatment generally, despite their greater odds for attempting suicide in these settings (Gates *et al.*,2017).

Autism was prevalent in this group, including Asperger's syndrome. However, this group of young people receives mental health care due to the presence of other comorbid mental health problems. Previous research has highlighted that young people with neurodevelopmental problems, LDs and emerging personality disorders are at risk of falling through the gaps between services (Lader *et al.*, 2003). Whilst young people moving from adolescent secure care receive continuity of care in adult mental health services, we should question the quality of the transition process and the care subsequently received.

Importantly, neurodevelopmental needs or emerging personality disorders may not be addressed.

Strengths and Limitations

A challenge in the current study was accessing and retrieving records of young people in forensic services, which contain highly sensitive information. There were also substantial amounts of missing or inconsistent information (e.g. discharge dates), which is a recurring issue with using clinical records for research as they can be subject to selection bias, and confounding and missing data (Myers and Stevens, 2016). Importantly, the annual cohort moving from adolescent medium secure units to adult services was small. However, the study sample represents national data from all six adolescent medium secure units across England. For the purposes of this study, eligible participants were only those who reached or exceeded the age transition boundary to move to adult services. The caseload in adolescent medium secure units differs significantly from those in inpatient CAMHS in terms of admission and referral numbers. For instance, the Wells Unit admitted 55 people between 2006 and 2011 (Dimond and Chiweda, 2011). Consequently, the sample is deemed generalisable to the population transitioning from all adolescent medium secure units in England.

Conclusions

Young people included in the present study were identified by local collaborators and administrative staff. A standard national data collection schema would significantly facilitate data retrieval and increase data reliability. The lack of central databases contributes to poor quality services because it impedes commissioners' and service providers' understanding of the magnitude transition difficulties (Singh *et al.*, 2008).

Empirical research suggests that young people with complex neurodevelopmental problems and other comorbidities present with multiple needs and vulnerabilities which require individualised and specialised care-pathways (O'Connell and Petty, 2019). However,

due to lack of follow-up with these young people by referred services or through longitudinal studies, it is not known whether mental health problems improved, if community care was supportive or whether they presented with violent behaviour. This can be achieved through ongoing coordination between adolescent and adult services, identified key workers from child services to support parallel care, gradual orientation of the young person to adult services and early preparation (O'Connell and Petty, 2019). Promoting a person-centred approach and gradual independence of the young person may improve current practice and disentangle the current complexities involved in transitions.

Future research should aim to understand the impact of transitions and subsequent care received by young people to inform this process and to help overcome any detrimental effects that poorly managed transitions may have.

Conflict of interest The authors declare that they have no conflict of interest.

Implications for practice

- Young people with neurodevelopmental needs may require more support and specialised pathways during transition periods.
- Clinical diagnosis and severity of offence may impact the transition pathway of young people in medium secure units.
- Longitudinal studies are needed to identify predictors of poor transitions and follow up young people discharged from adolescent forensic services to understand their experiences to improve current processes and outcomes.
- The transition process should be developmentally-attuned and psychologicallyinformed by considering key attachments made between young people and staff during their placement in hospital.

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Figure 1 Transitional pathways of 32 young people moving from six medium child and adolescent mental health services between May 31st 2015 and June 1st 2016

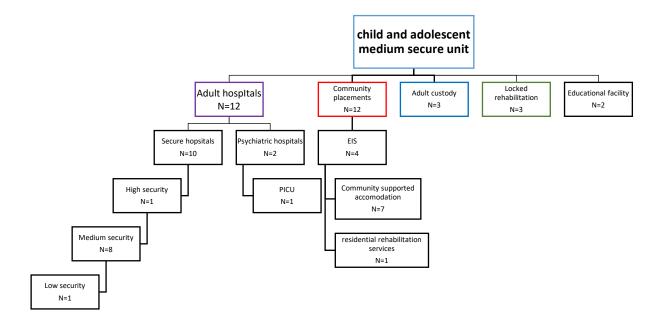


Figure 2 Pathways from adolescent medium secure units to adult placement and community settings for 12 young people

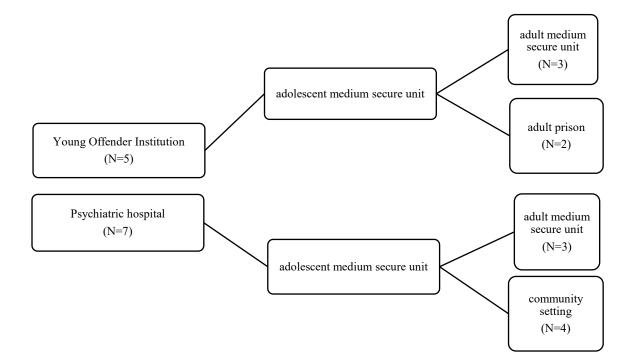


Table I Socio-demographic and clinical characteristics of 32 young people across six adolescent medium secure units in England discharged to adult services between 2015 and 2016

Demographic characteristics Gender	(N=32)	n (%)
Females	8	25
Males	24	75
Ethnicity		
White British	20	62.5
White Scottish	2	6.3
White other	1	3.1
Black British	5	15.6
Black African	1	3.1
South Asian	1	3.1
Mixed	1	3.1
Arab	1	3.1
Age at time of discharge		
17.5-18 years	9	31
18.1-19.5 years	19	65.5
19.5-20 years	1	3.4
Education 12 th Grade courses	13	40.6
GCSE Math and English	3	9.4
College courses	4	12.5
Disengaged	3	9.4
Music classes only	1	3.1
Part-time due to ADHD and	1	3.1
Tourette's syndrome		_
Remedial education	1	3.1
Not recorded	5	18.8
Social determinants		
Trauma		
Sexual abuse	12	37.5
Domestic violence	4	12.5
Not abused	16	50
Parental mental health problem		
Yes	17	53.1

No	15	46.9
Clinical diagnosis		
Depressive and bipolar disorder	3	9.4
Psychosis	14	43.8
Schizoaffective disorder	8	25
PTSD	9	28.1
Eating disorders Obsessive Compulsive	2	6.3
Disorder	2	6.3
Learning disability	13	40.6
Autistic Spectrum Disorder	7	21.9
Asperger's syndrome	3	9.3
Attention Deficit Hyperactivity	2	6.3
Disorder		
Antisocial Personality Disorder Borderline Personality	2	6.3
Disorder	6	18.8
Self-harming	13	40.6