



Transition of Service Users from Child to Adult Mental Health Clinic in Lagos Nigeria

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Authors' contributions

Author OO conceptualized the study. All the authors contributed towards the study design, data collection, statistical analysis and the final manuscript.

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ABSTRACT

Adolescence is a potentially stressful period characterised by various developmental changes. Disruption in provision and utilisation of mental health services during the transition from adolescence to adulthood has dire implications on clinical outcomes. There is dearth of data on the transition of service users from child to adult mental health services in Africa. This study determined the rate and correlates of drop out from treatment during the transition from child and adolescent clinic to the adult out-patient clinic at a public mental health care facility in Nigeria. Using a retrospective cohort study design, clinical records of adolescent patients transferred to the adult clinic of a public psychiatric hospital after attaining adulthood were reviewed. Relevant clinical and socio-demographic data were documented in a pro-forma and analysed with SPSS 16. More than a third (37.1%) of the cohort dropped out of treatment during transition from the child and adolescent clinic to the adult clinic. Factors associated with disengagement from services during the transition period included male gender ($p= 0.004$), age <19 years at implementation of transfer ($p<0.001$) and previous traditional or spiritual treatment in the pathway to care ($p= 0.015$). On

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regression analysis, male gender ($p=0.003$), traditional or spiritual pathway to care ($p=0.004$) and transfer from child clinic before 19 years ($p<0.001$) were independently associated with drop-out from follow-up after transition to the adult clinic. The findings highlight the need for interventions targeted at minimising disruption in mental health service utilisation during transition from adolescence to adulthood. The transition process should be customised to address the specific and peculiar mental health needs of each adolescent.

Keywords: Transition; adolescence; mental health service; follow-up; Nigeria.

1. INTRODUCTION

Psychiatric disorders commonly onset in childhood or adolescence and persist through adulthood [1]. Consequently, young mental health service users often need to transit from child to adult mental health services as they reach adulthood. The demands of healthcare transition occur concurrently with the vast developmental, biological, social and psychological changes associated with adolescence. Health service transition has been defined as a purposeful, planned process that addresses the medical, psychosocial and educational or vocational needs of adolescents and young adults with chronic disorders as they move from child-centred to adult-oriented health care systems [2,3].

Various models of transition have been described in the literature including a 'seamless clinic', 'lifelong follow-up within the paediatric setting' and 'follow-up care within adult settings' [3-4]. The latter refers to the model of transition whereby adolescent service users are routinely transferred to adult services after attaining adulthood. A seamless clinic begins in childhood or adolescence and continues into adulthood, with child and adult professionals jointly providing ongoing care as appropriate. On the other hand, some services continue lifelong follow-up care within the paediatric setting for certain categories of patients, for example, patients with mental retardation [5].

Whereas, transition is ideally defined as a planned purposeful process, transition often occurs as an unplanned event, in reality. The few research on this subject found that most services lack clearly articulated policy guiding the transition of young service users from child to adult psychiatric clinics, and clinicians often lack the expertise in managing this process [6]. Other problems associated with the transition from child to adult psychiatric services include the lack of effective communication channel between child and adult services, as well as a reduction in the

total scope of services and resources available in the adult clinic, compared with what the patient earlier enjoyed at the child clinic [3-6]. Sometimes, there may be no equivalent adult service able or willing to take on the long-term health care of young people with complex disabilities [5]. Due to these difficulties, the interface between child and adult mental health care is daunting and challenging for many adolescent patients [3,7]. Consequently, many young service users are 'lost to follow-up' in the interface between transition from child to adult mental health care due to a high rate of drop-out from treatment and disruption in service provision [7-11].

There is scarcity of research on the outcomes of service users transiting from child to adult mental health services in Nigeria. Such data are vital in planning services and relevant interventions for young service users transiting from child to adult mental health service. This study therefore assessed the pattern of transition of patients from child to adult mental health services at a selected psychiatric facility in Lagos, south-west Nigeria. Specifically, we determined the rate of drop out from treatment among service users during the transition from the child and adolescent clinic to the adult out-patient clinic at the selected facility. The factors associated with dropping out from clinic during the transition process were also determined.

2. METHODS

2.1 Study Location

The study was conducted at the Federal Neuro-Psychiatric Hospital Yaba, Lagos, Nigeria. The Federal Neuro-Psychiatric Hospital Yaba was established as an asylum in 1907 and has evolved into a tertiary Psychiatric institution in Nigeria. The Hospital is located in the Lagos mainland Local Government Area, within the Lagos metropolis, with an annexe in Oshodi. The Child and Adolescent centre of the Hospital was

established in 1999, and is currently located within the hospital annexe in Oshodi. Currently, about 10 to 15 new patients present to the Child and Adolescent centre weekly, while about 100 children attend the out-patient clinic for follow-up in a week. The adult out-patient clinic is located within the main hospital complex in Yaba. About one thousand patients attend the adult out-patient clinic weekly.

At the study location, patients are transferred from the child and adolescent clinic to the adult clinic when they attain the age of 18-19 years. However the time of implementation of the transfer is variable, such that some patients are older than 19 years before their transfer to the adult clinic are implemented. The process of transition involves educating the patient and the caregiver on the need to be transferred to the adult clinic based on the attainment of the chronological age of 18 years. Information is also provided about the adult clinic and subsequent appointments are scheduled for the adult clinic. Thereafter, the clinical records of the patients are transferred to the adult clinic by the health records unit.

2.2 Procedure

Ethical approval was obtained from the Research and Ethical Committee of the Federal Neuro-Psychiatric Hospital, Yaba. The case-notes of all patients who were transferred from the child and adolescent clinic to the adult clinic of the Federal Neuro-Psychiatric Hospital Yaba on account of attaining adulthood, within a 5 year period (2003 to 2008), were retrieved from the department of medical records and reviewed retrospectively. To be included, patients must have attended the child clinic for at least two years before transition, and the patients must have been transferred to the adult clinic for at least 2 years before the review. Case notes with missing pages or incomplete information regarding the variables of interest were excluded. At the time of review, all patients had been transferred from the child clinic for at least 2 years.

Data were collected with a pro-forma designed by the researchers based on a literature review of the research subject. The pro-forma abstracted socio-demographic data of the patients such as age at index presentation, gender, religion, level of education, and family type. Other variables obtained included psychiatric diagnosis, duration of illness before presentation, pathway to care, age at transfer to

the adult clinic, pattern of clinic attendance before and after the transfer to the adult clinic. The main outcome of interest was drop-out (Yes or No) from follow-up appointments at the adult clinic after the transfer of the patients from the child clinic.

Patients who stopped attending clinic appointments after being asked to transfer to the adult clinic or after their first visit to the adult clinic, and failed to return to the clinic throughout the period reviewed, were operationally defined as having 'dropped out of treatment during transition' from child to adult clinic.

2.3 Statistical Analysis

The data were analysed with the statistical package for social sciences (SPSS version 17). Descriptive statistics such as frequencies, mean and standard deviation were generated for relevant socio-demographic and clinical independent variables. The dependent variable was drop-out from follow-up appointments at the adult clinic after the transfer of the patients from the child clinic (outcome dichotomised as Yes or No). Chi-square was used to test association between categorical independent variables and the dependent variables. Logistic regression analyses tested independent relationships between variables and the outcome of interest.

3. RESULTS

Out of the 130 patients who were transferred from the child and adolescent to the adult clinic within the period reviewed, the case notes of 116 patients (89.2%) met the inclusion criteria and thus constituted the study sample. There were more males (62.1%) than females in the study sample (Table 1). The age of the patients at index presentation to the child and adolescent clinic ranged from 7-18 years with a mean age of 15.37 (± 1.81) years. The majority of the patients (72.4%) were from monogamous families, and had completed primary school (73.3%).

Duration of illness was greater than one year before presentation to the child clinic in 1 out of 3 attendees (36.2%). More than half of the patients (55.2%) had patronised traditional or spiritual healers before presenting to our facility (Table 2). Psychotic disorders (42.2%) and seizure disorders (30.2%) were the most common diagnostic categories among the participants. One out of three patients (32.8%) continued to

attend the child and adolescent clinic beyond the age of 19 years at which transfer is usually implemented.

Table 1. Socio-demographic characteristics of the subjects (N=116)

Variables	N	%
Age at presentation to child clinic		
<10 yrs	4	3.5
10-12 yrs	6	5.2
13-15 yrs	35	30.1
16-18 yrs	71	61.2
Gender		
Male	72	62.1
Female	44	37.9
Family type		
Monogamous	84	72.4
Polygamous	32	27.6
Religion		
Christianity	96	82.8
Islam	20	17.2
Educational level		
Primary or less	31	26.7
Secondary uncompleted	72	62.1
Secondary completed	13	11.2

Of the 116 patients who constituted the study sample, 43 (37.1%) dropped out of treatment during transition from the child and adolescent to the adult clinic according to the operational definition earlier stated. Table 3 shows that male patients had significantly higher rates of drop-out from services following transition to the adult clinic ($p=0.004$). Furthermore, patients who had sought traditional or spiritual treatment before presenting to our facility had significantly higher drop-out rates after transfer to the adult clinic ($p=0.015$). Patients older than 19 years before transfer to the adult clinic were less likely to drop-out from treatment ($p<0.001$).

On regression analysis, male gender ($p=0.003$), traditional or spiritual pathway to care ($p=0.004$) and transfer from child clinic before 20 years ($p<0.001$) were independently associated with drop-out from follow-up after transition to the adult clinic (Table 4).

4. DISCUSSION

This study determined the rate and correlates of drop-out of patients from treatment during transition from the child and adolescent clinic to the adult clinic of a Nigerian psychiatric Hospital. In consonance with previous studies, we found a

high rate of drop-out from treatment in the interface between child and adult mental health services [10-12]. Heslopp et al. [13] found high rates of non-compliance with treatment plan among adolescents transiting from children to adult services. This was associated with lack of planning and coordination of the transition process. Similarly, McDonagh and Viner [10] reported that the majority of adolescent patients are lost to follow-up care in the process of transiting from paediatric to adult services.

Table 2. Clinical characteristics of the subjects (N=116)

Variables	N	%
Duration of illness at presentation to the child clinic		
<1 month	34	29.3
1-6 months	34	29.3
7-12 months	6	5.2
>1 year	42	36.2
Pathway to care		
Traditional/Religious	64	55.2
Orthodox	34	29.3
Nil treatment	18	15.5
Diagnostic categories		
Psychotic disorder	49	42.2
Affective disorder	9	7.7
Organic mental disorder	15	13.0
Intellectual disability	7	6.0
Autistic disorder	1	0.9
Seizure disorder	35	30.2
Age at transfer to adult clinic		
18-19 years	78	67.2
>19 years	38	32.8

Our result showed that patients whose transition from the child and adolescent clinic to the adult clinic was not implemented until after the usual exit age of 19 years were less likely to drop-out of care. This is attributable to the fact that such patients and their families had ample time to plan and make necessary adjustments to the transition process. However it could also reflect the attainment of a greater level of maturity by the patients. Though adolescents are usually legally defined as becoming adults after attaining the chronological age of 18 years, the mental age or intellectual capacity of some adolescents with mental health problems may not be sufficiently developed to cope with the degree of independent functioning expected at the adult clinic even after attaining the chronological age of 18 years. Flexibility with the timing of the

transfer process in consideration of the individual circumstances of the patients, rather than setting an abrupt quit date has been recognised as a vital element in ensuring a successful transition from child to adult services, bearing in mind that adolescents with mental health problems represent a heterogeneous group of people with diverse abilities and competencies [3,10]. Another study showed that the use of rigid age cut-offs to delineate service boundaries is associated with a high rate of discontinuity with treatment during transition from adolescent to adult health services [11].

We also found that male patients were more likely to drop out of treatment during the transition process from the child to adult clinic. This finding suggests that there may be need for more interventions targeted at male service users in order to ensure continuity with treatment after transition. Male service users may become

more self-opinionated during adolescence, and caregivers may find it more difficult convincing them to attend clinic. Patients who had patronised traditional or religious healers prior to presenting for orthodox treatment were more likely to drop out from treatment at the interface between child and adult services. This suggests that the pathway to psychiatric care could predict persistence of service users in treatment following transition from child to adult services.

There is a crucial need for mental health services to rise up to the challenge of minimizing the 'loss' of young service users in the transition between child and adult services [10]. One of the recommended steps towards actualizing this is to step up transitional care into a multi-dimensional multidisciplinary process that addresses the psychosocial, educational, vocational and other support needs of adolescents as they move from children to adult services [6,12,14-16].

Table 3. Factors associated with drop-out from follow-up during transition to the adult clinic

Variable	Drop out during transition			X ²	p
	Yes (N=43) n (%)	No (N=73) n (%)	Total		
Age at transfer to adult clinic					
18-19 years	38 (48.7)	40 (51.3)	59	13.851	<0.001
>19 years	5 (13.2)	33 (86.8)	38		
Gender					
Male	34 (47.2)	38 (52.8)	72	8.388	0.004
Female	9 (20.5)	35 (79.5)	44		
Family type					
Monogamous	31 (36.9)	53 (63.1)	84	0.004	0.953
Polygamous	12 (37.5)	20 (62.5)	32		
Educational level					
Primary or less	16 (51.6)	15 (48.4)	31	5.198	0.074
Secondary uncompleted	21 (29.2)	51 (70.8)	72		
Secondary completed	6 (46.2)	7 (53.8)	13		
Previous treatment					
Orthodox/Nil	13 (25.0)	39 (75.0)	52	5.885	0.015
Trado-Religious	30 (46.9)	34 (53.1)	64		
Diagnosis					
Seizure disorder	13 (37.1)	22 (62.9)	35	1.657	0.646
Organic mental disorder	4 (26.7)	11 (73.3)	15		
Mood/psychotic disorder	24 (41.4)	34 (58.6)	58		
Autism/mental retardation	2 (25.0)	6 (75.0)	8		

Table 4. Regression analysis of the factors associated with drop-out from follow-up during transition to the adult clinic

Variable	B	S.E	Wald	P	OR	95% CI
Traditional/Spiritual pathway to care	1.368	0.475	8.294	0.004	3.926	1.55-9.96
Male gender	1.489	0.501	8.834	0.003	4.431	1.66-11.83
Transfer at age<19 years	2.117	0.580	13.333	<0.001	8.303	2.67-25.86

Most guidelines recommend that the transition should be a planned process, rather than an event, flexibly tailored around the service-user's need [3,16,17]. It has been advocated that services must closely engage the adolescent to identify their fears, preferences and the support they need to become more independent as they move to adult services [3]. A clear transition care pathway must be mapped out with designated key workers and excellent links across child and adult health services. Patients and their families should be informed as early as possible when they are expected to exit child services. Furthermore, the timing should be flexible, individualised, negotiated and agreed upon by all the parties involved; adolescents should not be moved until they have acquired the necessary skills to function effectively in adult services [18]. Evidence also support the integration of certain components into the transitional care process; including an orientation 'program' whereby meetings are scheduled to provide opportunities for the adolescent to visit the adult health team before the transfer, development -appropriate psycho-educational sessions and skills training to facilitate the development of self advocacy, assertiveness, effective communication, thereby enhancing their ability to negotiate adult services independently [3,19,20]. Preparatory visits help to reduce the anxiety of the user and facilitate adjustment to the new service. Other recommended elements include training programme in adolescent health and transitional care for members of the mental health team, provision of a key worker per individual to supervise a seamless transition, administrative support including a medical summary during the 'handing over' process and ensuring that effective links are in place between children's and adult's services [3,10,20].

Our study was limited by its retrospective nature which precluded direct interviews with service users to ascertain the actual experiences accounting for their dropping out of treatment during the transition process, and the barriers impeding the continuity with treatment. In addition, patients could have dropped out during transition to the adult clinic as a result of other factors unrelated to the transition process. However, the sample consisted of patients who had complied with clinic appt for at least 2 years at a child clinic, and dropped out of clinic at the point of transition. Furthermore, the study provides valuable data from a previously under-researched population.

5. CONCLUSION

In conclusion, our result corroborates previous findings in other parts of the world that the interface between child and adult mental healthcare is associated with drop-out from treatment. There is need to improve the current transition process so as to minimise the loss of young services users to follow-up. Further research is required to explore the needs, barriers and transition experiences of young people transiting from paediatric to adult mental health services. These may inform the development of appropriate local guidelines targeted towards a seamless transition from child to adult mental health service.

CONSENT

It is not applicable because of the retrospective study design.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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