

## Original Research Article

# Perception of parents on barriers and facilitators of treatment outcomes among children and adolescents attending psychotherapy services in a primary health care centre in Belize

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## ABSTRACT

**Background:** The study assessed the perception of parents on barriers and facilitators treatment outcomes among children and adolescents attending psychotherapy services in a primary health care centre.

**Methods:** A cross sectional descriptive study using both quantitative and qualitative methods. The quantitative method used retrospective review of records of 65 children and adolescent clients who accessed psychotherapy services between January 2022 and December 2023 at Port Loyola Health Centre in Belize city. The qualitative method used in-depth interviews of twenty parents of the patients randomly selected from the clinic registers. Univariate and bivariate analyses was used for the quantitative data while thematic analysis was used for the qualitative data.

**Results:** 25 (38.5%) of the patients completed their treatment and 34 (52.3%) dropped out, with half dropped out after the first visit. The identified parental perceived barriers and facilitators are organized into four main themes. The first theme was related to knowledge and understanding of mental health problems by the parents which showed that respondents had good knowledge about mental health problems. The second theme identified attitudes towards treatment as a major factor to completion of treatment. The third theme was related to structural factors like transportation cost and parents' work schedule identified as key barriers. The fourth theme was related to inconvenient appointment time and lack of flexibility in the scheduling of appointment at the clinic.

**Conclusions:** The study highlights key areas of interventions to minimize barriers to completion of treatment among children accessing mental health services.

**Keywords:** Barriers, Children and adolescents, Facilitators, Parents, Perception, Treatment outcomes psychotherapy

## INTRODUCTION

The World Health Organization's 2022 World mental health report estimated that approximately 13% of the world's population live with a mental disorder at any given time, with 15.6% of those affected residing in the WHO Region of the Americas.<sup>1</sup> Anxiety and depressive disorders were the most prevalent mental disorders, with rates of 31% and 28.9%, respectively.<sup>1</sup> Early estimates

indicate a significant increase in anxiety disorders (28%) and depressive disorders (26%) resulting from the COVID-19 pandemic.<sup>1</sup> Mental health disorders have been reported to contribute significantly to reduced productivity, sickness absences, disability and unemployment, and the total costs of mental ill-health in many countries is very high.<sup>2</sup>

It is estimated that between 1 in 4 and 1 in 5 adolescents in the English-speaking Caribbean experience symptoms of mental health problems which is higher than the global estimate of one in seven adolescents, accounting for 13% of the global burden of disease in this age group.<sup>3-5</sup> Depression, anxiety and behavioural disorders are among the leading causes of illness and disability among adolescents.<sup>3,5</sup>

In spite of the high prevalence of mental health disorders among children and adolescents, the treatment gap is very high with less than 30 percent of them having access to mental health services.<sup>6</sup> Integration of mental health services into primary care has been identified as the most viable way of closing the treatment gap and ensuring people get the mental health care they need.<sup>7</sup> However, children that do receive services are at risk of dropping out of treatment with between 30 to 65 percent of them terminating prematurely from treatment because of various barriers.<sup>8,9</sup>

Children and adolescents with mental health conditions most of the times depend on their parents who are the key gatekeepers to initiate and complete treatment.<sup>10</sup> Parents have been shown to be highly influential in adolescents' help-seeking and service use for mental health.<sup>11</sup>

Belize's mental health service is described as community-based with most services delivered in mental health clinics situated in primary healthcare facilities, and a few are located within community hospitals. The country's primary health care system is widely distributed and can be found in all district towns and outlying areas; however, the integration of the mental health component varies among districts.<sup>12</sup>

The study aims to identify the pattern and outcomes of treatment among children and adolescents accessing psychotherapy services in a primary health care centre and the perception of their parents on the barriers and facilitators of completion of treatment.

## METHODS

### *Study population and setting*

The study was conducted at Port Loyola Health Centre, in the central health region located in Belize City, in Belize district. The city with an estimated population of about 66,000 people has three primary health care centers (polyclinics) and a referral hospital. Mental health services are provided in the hospital and two of the primary health care centers including the study site. There are two psychiatrists, 6 psychiatric nurse practitioners and one clinical psychotherapist in the public health facilities in the city.<sup>12</sup> The clinic provides various types of psychotherapy, mostly Cognitive Behavioural Therapy (CBT) depending on the patient's particular illness and circumstances and preference.

### *Study design*

The study was cross sectional descriptive and used both quantitative and qualitative methods. The quantitative method used retrospective review of records of new clients who accessed psychotherapy services between January 2022 and December 2023 at Port Loyola Health Centre in Belize city. The qualitative method used in-depth interviews of twenty parents/caregivers of children and adolescents seen at the clinic who were randomly selected from the clinic records (ten each among those who completed their treatment and who dropped out). The two year period was selected because this was the period when health services in the study site were fully restored and functional post COVID-19 pandemic.

### *Data collection and analysis*

The clinical records of the all the 157 patients seen at the clinic during the study period were reviewed, and the record of 65 children and adolescent's patients among the patients was further analysed for the study. Data were extracted using a form designed by one of the authors to capture relevant information from the psychotherapist records of patients. The data included the sociodemographic profile and the detailed clinical presentations - source of referral, diagnosis, duration of illness before presentation, follow up visits, treatment provided. The diagnosis was established according to International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) classification and cross referenced with Diagnostic and Statistical Manual of Mental Disorders (DSM 5). Three treatment outcomes of the psychotherapy services were considered in the study; discharged, dropped out and ongoing (still accessing service at the time of the study). A patient is discharged when the agreed treatment goal established between the psychotherapist and the client at the beginning of the process has been achieved.

The in-depth interview for the qualitative component of the study was conducted through phone calls using a semi structured interview guide. The interview guide was created in the light of previous research, to identify the perception of the parents/caregivers on the barriers and facilitators of completion of psychotherapy services by their children and adolescents. Thirty patients (fifteen who completed their treatment and fifteen who dropped out) were randomly selected from the clinic records and their parents/caregivers were included in the study. However, only the first twenty parents/caregivers of ten children and adolescents who completed their treatment and ten who were lost to follow up who gave verbal consents after explaining the purpose of the study when contacted were interviewed. The interviews were audiotaped and transcribed verbatim.

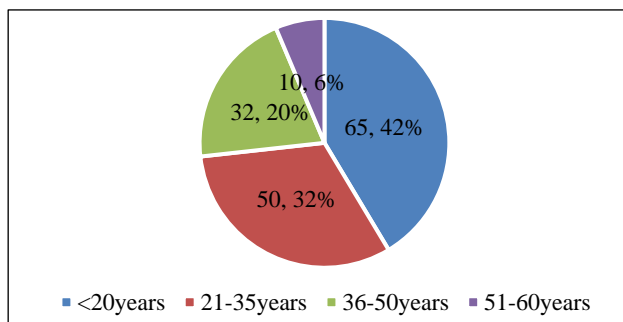
The data entry was done using EPI-data version 3.1 and analysis was done using SPSS software version 23. Analysis was done at univariate and bivariate levels.

Univariate analysis findings were presented using frequency (n) and percentage (%) distribution tables. Association between outcome (discharge/drop out) and selected sociodemographic characteristics and clinical variables - diagnosis, follow up visits were determined using chi-square test and p value <0.05 was considered statistically significant. The qualitative data were analyzed using thematic analysis and the results organized into themes.

## RESULTS

### *Sociodemographic profile and consultation characteristics of patients*

Figure 1 shows the age distribution of 157 patients seen at the clinic over the study period. Sixty-five (42%) of all patients seen were children and adolescents (less than 20 years of age) and ranged from 6 years to 19 years.



**Figure 1: Age distribution of patients (n=157).**

### *Clinical characteristics and treatment outcomes*

Table 1 shows the clinical characteristic and treatment outcomes of the patients. The most frequent diagnosis was depressive episodes 33(50.7%) followed by anxiety disorder 11 (16.9%), childhood disorder 12 (10.7%), post-traumatic stress disorder (PTSD) 6 (9.2%) and sexual abuse 5 (7.7%). The duration of illness before presentation for medical care ranged from 1 week to 5 years with 33(50.7%) presenting less than one month of the onset of the illness, 15 (23.1%) presented between 1-6 months of onset and 5 (7.7%) presented more than 24 months after the onset of the illness. The mean duration of illness before presentation; mean (SD) was 6.5 (11.23) months. Twenty-two (33.8%) % of the patients were referred by health professionals; 19 (29.2%) by social workers, 15 (23.1%) by parents/family, 7 (10.8%) by the school and 2 (3.1%) were self-referral. Seventeen (26.2%) has only one psychotherapy session, 30 (46.1%) had between two and five sessions and 18 (27.7%) had six or more sessions and the mean (Standard Deviation) is 4.1(3.01) sessions with a range of 1-12 sessions.

Forty-three (66.2%) of the patients were managed using cognitive behavioural therapy while 22 (33.8%) had both cognitive behavioural therapy and medication provided.

**Table 1: Clinical characteristics and treatment outcomes of patients (n=65).**

	Frequency, N (%)
<b>Diagnosis</b>	
Depressive disorder	33 (50.7)
Anxiety disorder	11 (16.9)
Post traumatic stress disorder	6 (9.2)
Childhood disorder	7 (10.7)
Sexual abuse	5 (7.7)
Sibling rivalry	3 (4.6)
<b>Source of referral</b>	
Self	2 (3.1)
Family/parents	15 (23.1)
Health professionals	22 (33.8)
School	7 (10.8)
Social workers	19 (29.2)
<b>Duration of illness before presentation (month)</b>	
<1	33 (50.7)
1-6	15 (23.1)
6month-11	9 (13.9)
12-24	3 (4.6)
More than 24	5 (7.7)
Mean (SD)= 6.5 (11.23)	
<b>Number of psychotherapy sessions</b>	
1	17 (26.2)
2-5	30 (46.1)
>6	18 (27.7)
Mean (SD)= 4.1 (3.01) sessions	
<b>Type of treatment provided</b>	
CBT alone	43 (66.2)
CBT with drugs	22 (33.8)
<b>Treatment outcome</b>	
Discharge	25 (38.5)
Dropped out	34 (52.3)
Ongoing	6 (9.2)

A total of 25 (38.5%) of the patients were discharged which occurred when the agreed goal established between the psychotherapist and the clients at the beginning of the process has been achieved while 34 (52.3%) dropped out before the completion of their psychotherapy plan. Among those who dropped out, 17 (50%) dropped out after the initial first visit to the clinic. A total of 6 (9.2%) of the patients were still attending the clinic during the study period.

Table 2 shows the results of association between sociodemographic and clinical characteristics and treatment outcomes. It shows more female completed treatment than male with 19 (44.2%) of female completing the planned psychotherapy session and 24 (55.8%) dropped out compared to 6 (37.5%) of male completing treatment and 10 (62.5%) dropped out though the difference is not statistically significant,  $p>0.05$ . The proportion of patients who completed their treatment reduced with increased level of education though not

statistically significant. Twelve (50%) of patients with primary level of education compared to 3 (33%) among those with tertiary level of education. The various diagnoses, duration of illness before presentation and source of referral show no association with the treatment outcomes. Among those who were treated with cognitive

behavioural therapy (CBT) alone, 12 (56.7%) completed their treatment and discharged compared to 4 (18%) among those treated with Cognitive Behavioral Therapy (CBT) and drugs and was found to be statistically significant ( $p < 0.05$ ).

**Table 2: Association between sociodemographic, clinical characteristics and treatment outcome.**

Treatment outcomes				
Variables	Completed (25) N (%)	Dropped out (34) N (%)	Chi- square ( $\chi^2$ )	P value
Sex				
Male	6 (37.5)	10 (62.5)	0.2135	0.644
Female	19 (44.2)	24 (55.8)		
Educational status				
Primary	12 (50)	12 (50)	1.181	0.554
Secondary	10 (37)	17 (63)		
Tertiary	3 (33)	6 (67)		
Diagnosis				
Depressive disorder	15 (53.6)	13 (46.4)	5.76	0.217
Anxiety disorder	4 (40)	6 (60)		
PTSD	3 (50)	3 (50)		
Childhood disorder	2 (28.6)	5 (71.4)		
Sexual abuse	1 (11)	8 (89)		
Duration of illness before presentation (month)				
<1	14 (46.7)	16 (53.3)	3.55	0.467
1-6	7 (53.8)	6 (46.2)		
6-11	2 (22.2)	7 (77.8)		
12-24	1 (33.3)	2 (66.7)		
more than 24	1 (20)	4 (80)		
Source of referral				
Self	1 (50)	1 (50)	0.778	0.941
Family/friends	6 (40)	9 (60)		
Health professionals	6 (33.3)	12 (66.7)		
School	3 (42.8)	4 (57.2)		
Social worker	8 (47)	9 (53)		
Treatment provided				
Cognitive behavioral therapy (CBT) alone	21 (56.7)	16 (43.3)	8.41	*0.0037
Cognitive behavioral therapy (CBT) with medications	4 (18)	18 (82)		

\* $p < 0.05$

### **Perception of parents/caregivers on the barriers and facilitators of drop out and completion of treatment**

The result of the qualitative method on the perception of parents/caregivers on the barriers and facilitators of drop out and completion of treatment is organized into four themes: (1) Knowledge and understanding of mental health problem; (2) Attitude towards treatment (3) Structural factors and (4) flexibility with clinic appointment

#### **Knowledge and understanding of mental health problem**

Many of the respondents including parents/caregivers of children who dropped out had good knowledge and

understanding of the mental health problem and its effect on their children. This is responsible for the help seeking behaviour and utilization of psychotherapy services in the clinic.

*‘I knew the mental health effect of what happened to my granddaughter, so I made every effort to take her the counselling sessions. I felt the need to make sure she fully recovered as soon possible.’ [Grandmother 1]*

*“I know how trauma can affect someone’s life. So, I know it was important to get her the help she needed. And she needed all the support she could get.” [Mother 1]*

*“My daughter asked for counselling. She wanted it. So ... I believe she saw the benefit in it and made the effort to show up.” [Mother 2]*

*“I knew my grandson needed therapy. So, I made sure we were there every week.” [Grandmother 2]*

### **Attitude towards treatment**

The attitude of the parents/caregivers towards treatment was identified as facilitators and barriers to completion of treatment. Parents who recognized the importance completing the psychotherapy sessions did all they could to ensure their children completed their treatment. However, some parents who because their children made some improvements, did not complete the treatment even though were aware of the need to complete treatment.

*‘I needed to make sure my daughter was doing well mentally. There were some big changes going on in our life and I could not ignore the fact that she was affected by the changes. I made all the necessary arrangement needed for her to be there and completed the treatment even when getting better I ensured she finished the appointments ... be it with getting taxi and with my schedule.’ [Mother 3]*

*‘Due to my work, it was hard for me to get her out of school and get her to counselling. But I must say that the two sessions of therapy she had did help her. I saw a difference after those two sessions even though she didn’t complete the planned sessions. And I am happy to say she is still doing okay.’ [Mother 4]*

*“I took my granddaughter to most of her sessions, because I saw the benefit in it. She too was open to getting counselling.” [Grandmother 3]*

*“I felt he was doing okay or better. So I did not continue to bring him to counselling.” [Father 1]*

### **Structural factors**

Most of the parents of the children and adolescents who dropped out identified structural factors like transportation cost and their work schedule as major barriers.

*‘It was getting very expensive with transport cost to take him to Belize City from our house so he couldn’t complete the treatment.’ [Mother 5]*

*“It was difficult for me to get time off from my job to go pick him up at school and bring for counselling.” [Father 2]*

*‘We could not make the second session. We needed to arrange for an adult to accompany him and taxi to transport them for safety reasons.’ [Grandmother 4]*

*‘Due to the nature of my work, it was hard for me to get her out of school and get her to counselling.’ [Mother 6]*

### **Flexibility with clinic appointment**

Major health system barrier identified by the respondents was inconvenient appointment time and lack of flexibility in the scheduling of appointment at the clinic. The clinic being a primary health care centre opens Monday to Friday and 8 am to 5 pm and appointment are scheduled within this period. This makes it difficult for those who either need to go to school or because of the nature of their work not able to meet up. This also applicable to the online appointment. The clinic has only one psychotherapist and may be responsible for the lack of flexibility in the appointment schedule because of workload.

*“We could not make the second session and it became hard to set up another appointment, so we stopped going.” [Mother 7]*

*‘We tried online but it was hard to get an appointment after school hours. Eventually we stopped trying when we couldn’t get an appointment after school hours’ [Mother 8]*

*‘The online sessions were hard to keep up with because sometimes it conflicted with other activities’ [Father 3].*

## **DISCUSSION**

### **Pattern of presentation and treatment outcomes**

The most frequent mental health disorders identified in the study among the children and adolescents seen in the clinic was depressive episodes, anxiety disorders and other childhood disorders. This is similar to other studies which reported depression, anxiety and behavioral disorders among the leading causes of illness and disability among adolescents globally.<sup>3,5</sup> Consistently, anxiety and depression were reported to account for almost fifty per cent of mental health disorders among adolescents in countries in the Latin America and Caribbean region.<sup>13</sup> A systematic review on the prevalence of mental health and behavior problem among adolescent in English speaking Caribbean where Belize belongs estimated between 20%-25% adolescents experience symptoms of mental health problem which is higher than global estimates of 14%.<sup>3</sup> This highlights the importance of sensitization, screening, and provision of appropriate services for adolescents in the region. The study identified higher prevalence of mental health disorders among girls than boys which is similar to findings from a study in Brazil and a systematic study on common mental disorders prevalence in adolescents.<sup>14,15</sup>

About half of the children and adolescents who accessed psychotherapy services dropped out of the planned



sessions. Similarly, in previous studies done in the UK, USA, and Finland, dropout rate from psychotherapy services among children and adolescents has been reported to be a significant problem, affecting 40-75 percent of the cases that receives outpatient care.<sup>16,17</sup> Adolescents have been found to be at greater risk of dropping out from therapy than adults and studies have suggested the need for identification of the determinants of dropout and implementation of appropriate strategies because of the severe consequences of premature termination of treatment among the population.<sup>18,19</sup> The consequences of dropout from mental health service include worsening of the conditions and likelihood of their unwillingness to seek treatment in the future.<sup>16,17,19</sup> Dropout has been reported to often occur after intake or very early in the course of treatment and dropout rate after the first psychotherapy session was reported to be from 20 percent to 57 percent.<sup>16-18,20</sup> This is similar to the finding in this study where fifty percent of the drop out occurred after the first psychotherapy session.

Dropout rate in the study was found to be less among those who were managed with Cognitive Behaviour Therapy (CBT) alone compared to those managed with CBT and medication. This is similar to the finding in a study in previous studies which reported that dropout occurred significantly less frequently in the CBT group.<sup>20,21</sup> However a study in Turkey reported 70% of adolescent treated with a combination of medication and psychotherapy continued with their treatment compared to 62% among those managed with CBT alone.<sup>22</sup>

Generally, the treatment gap for mental disorders among children, adolescent and adult population especially across the region of the Americas has been reported to be very large, yet many people do not continue in treatment past the first one or two appointments.<sup>23,24</sup> Thus, an important goal identified is to implement appropriate interventions to ensure the continuity of care of those who initiate treatment.<sup>23,24</sup>

#### ***Knowledge and understanding of mental health problem***

Most of the respondents including parents/caregivers of children who dropped out had good knowledge and understanding of the mental health problem and effect on their children. This insight is responsible for the help seeking behaviour and intake for psychotherapy services in the clinic. This is consistent with previous studies that found that parents who had knowledge of mental health problems and recognized the need for help for the children were more likely to seek help and access mental health services for their children than those who do not recognize a problem or its negative impact.<sup>25,26</sup> Parents' views about the causes of mental health problems in their children affect their decision to seek professional help and the likelihood of using mental health services.<sup>27,28</sup>

#### ***Attitude towards treatment***

In the study, the attitudes of the parents/caregivers towards treatment of their children and adolescents was identified as facilitators or barriers to completion of treatment. Parents who recognized the importance of completion of treatment did all they could to ensure their children completed their treatment. However, some of the parents who because their children had made some improvement did not complete the treatment even though they were aware of the need to complete the treatment. Parental attitudes surrounding mental health and mental health services have been shown to influence help-seeking decisions-in particular, beliefs that mental health problems are caused by child's personality or relational issues or that their children emotional and behavioural difficulties are intentional.<sup>29-31</sup> Likewise parents' perception that when the problems get better with some improvement, means their children have had enough treatment even before completion of planned treatment and have been associated with premature termination of treatment.<sup>26,32,33</sup>

#### ***Systematic-structural factors***

Parents of children and adolescents who dropped out identified transportation cost and work schedule as major barriers to their treatment. Structural reasons such as payment for services, inconvenient services, or transportation costs have been reported by parents in many studies as factors associated with drop out from mental health services.<sup>27,32</sup> However, psychotherapy services in our study are free and payment for services was not identified as a barrier in the study. Consistent with the study, work schedule conflicts and not having enough time have been reported by parents as barriers for receiving mental health services for their children.<sup>34,35</sup>

Socio-economic disadvantage and lack of financial protection has consistently been linked to increased risk of dropout.<sup>36</sup> Studies have reported low parental social economic status more common among the early drop out from mental health service than those who completed their treatment, though this was not assessed in our study.<sup>36,37</sup> Extending financial protection and coverage for mental health illness has been suggested as a strategy to reduce drop out among patients accessing mental health services.<sup>24</sup>

#### ***Appointment schedule flexibility***

A major health system barrier identified by the respondents in the study was inconvenient appointment time and lack of flexibility in the scheduling of appointment at the clinic. Difficulty in getting flexible appointments and inconvenient appointment times was reported by parents as barriers to receiving mental health services for their children.<sup>27,37-39</sup> Consistent with our study, inadequacy of mental health providers in clinic to

accommodate all children who need services have been found to be responsible for difficulty in getting suitable or flexible appointment for children.<sup>34,38,39</sup>

How parents and caregivers perceived the barriers they faced was found to be a predictor of treatment outcome with parents who perceived obstacles to treatment as a large barrier were found to be less likely to seek services than parents who do not view the same obstacle with the same severity.<sup>38</sup> A world mental health survey in selected countries of the Americas reported structural barriers play a larger role in preventing individuals from getting into treatment than continuing treatment.<sup>23</sup> However attitudinal reasons were the overwhelming reasons for treatment dropout and the most common reason reported was that the problem got better.<sup>23,40</sup>

## CONCLUSION

The study identified treatment outcomes among children and adolescents and parental perceptions on barriers and facilitators to completion of treatment and provides important implications to mental health system in the country. The study highlights key areas of potential interventions to minimize barriers to completion of treatment among children accessing mental health services. There is need for parents to be engaged in the care of their children from the first clinic visit to provide them with the clinical conditions of their children, the expected duration of treatment and address attitudinal factors that may lead to dropout. There is also need for more flexibility in scheduling the clinic appointment and improve on the use of telemedicine. Households with children and adolescents with mental health disorders should be included in the social assistance program in the country to address the financial barriers they face which contribute to poor access to treatment.

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