

Original Research Article

Pattern of presentation and treatment outcomes among patients attending psychotherapy services in a primary health care centre in Belize

ABSTRACT

Aims: To determine the pattern of mental health presentation and outcomes among patients accessing psychotherapy services in a primary health care centre.

Study design: This is a cross sectional descriptive study with mix of qualitative and quantitative methods.

Methodology: The quantitative method used retrospective review of records of 157 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 10 patients randomly selected from the clinic registers. Factors associated with treatment outcomes (discharged/ dropped out) were determined using bivariate analysis with chi-square test and p value < 0.05 was considered statistically significant. The qualitative data was analysed using content analysis and the result organized into themes.

Results: Depressive episodes (51%) and anxiety disorder (33%) are the most frequent diagnosis. Most patients (40%) were referred by other health workers, followed by self-referral (20.5%). Sixty-nine (43.8%) of the clients were discharged [those who successfully completed planned psychotherapy intervention], 11 (15%) still in the program, 45 (28.8%) dropped out and 19 (12.3%) were referred for further mental health services. Discharge is significantly associated with age, number of follow up visits, diagnosis and being employed, while drop out is associated with low level of education. Confidence in the service provider, insight, stigma and socioeconomic factors also determined treatment outcomes.

Conclusion: The study supported the existing literature advocating for the integration of psychotherapy into primary health care which is essential to improving access to mental health services.

Key words: Pattern, presentation, treatment outcome, psychotherapy, primary health care centre

1. INTRODUCTION

The World Health Organization's 2022 World mental health report estimates 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.¹ Anxiety and Depressive Disorders were the most prevalent mental disorders, with rates of 31% and 28.9%, respectively. Early estimates indicate a significant increase in anxiety disorders (28%) and Depressive disorders (26%) resulting from the COVID-19 pandemic.¹ 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.² Yet despite the potential to successfully treat mental disorders, only a small minority of those in need receive even the most basic treatment.^{1,2} Integrating mental health services into primary care has been identified as the most viable way of closing the treatment gap and ensuring that people get the mental health care they need. Primary care for mental health has been found to be affordable, and the investments in the integration of mental health into primary care can bring important benefits.³ Most of the individuals with psychiatric morbidity in the community are usually seen at the primary care level.^{4,5} Many patients with common mental health disorders generally prefer psychological therapy to medication if possible. However, many patients who would benefit from psychotherapy are unable to access it, often because of limited availability in public health facilities or because of financial barriers when such services are provided singularly by private health facilities.⁶ The functional and financial effects of untreated psychiatric disorders within primary care have led to the development of novel service delivery models to improve access to high-quality, evidence-based mental health treatments.⁷ The integration of formal psychotherapeutic services into primary care has been reported to result in a 20% to 30% decrease in medical costs.⁶ Belize's mental health program 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 (PHC) 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.⁸ In order to address the shortage of mental health practitioners in the country, training of psychiatric nurse practitioners (PNP) was introduced in 1991 and later the WHO mental health Gap Action Programme (mhGAP) was rolled out aimed at integrating mental health into primary health care. This has helped the country to make significant steps towards shifting from institutional to community-based care and has resulted in an increase in the availability and accessibility of mental health care.⁸ This is similar to the strategy being employed in other countries in the same Latin and Central America region- Brazil, Honduras, Jamaica, Guatemala, Panama and Nicaragua, among others to improve community health services through integration of mental health into primary health care.⁹

Psychotherapy is one of the mental health services in the mental health program in Belize. However, access to psychotherapy services is very limited, especially in the public health facility due to the small numbers of psychotherapists in the country. Accurate figures for the prevalence of mental health disorders in Belize are unavailable since no epidemiological study on Mental Health has been conducted in the country.⁸

Several studies have investigated the pattern of psychiatric referrals globally, but less is known about referral for psychotherapy services.

The study aimed to assess the pattern of mental health presentation and treatment outcomes and associated factors among patients accessing psychotherapy services in a primary health care centre in Belize city.

2. MATERIALS AND METHODS

2.1. Study design: The study was cross sectional descriptive and uses both quantitative and qualitative methods. The quantitative methods used retrospective review of records of 157 new clients who accessed psychotherapy services between January 2022 and December 2023 at PortLoyola health centre in Belize city. The qualitative method used in-depth interviews of 10 individuals who were randomly selected from the clinic records (5 who completed their treatment and

5 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.

2.2. Study population and setting.

The study was conducted at Port Loyola primary health centre, in the central health region located in Belize city, in Belize district. The city has estimated population of about 66,000 people and has three primary health care centers (polyclinics) and a referral hospital. Mental health services are provided in the hospital and 2 of the primary health care centers including the study site. There are two psychiatrists, 6 psychiatry nurse practitioners and one clinical psychotherapist in the public health facilities in the city.⁸ There are however an estimated 25 psychotherapists in the private health facilities in the city. Psychotherapy sessions at the public health facilities are free unlike the private service providers where patients pay between 40-65 USD per session. The clinic provides various types of psychotherapy and mostly Cognitive Behavioural Therapy (CBT) depending on the patient's particular illness and circumstances and preference.

2.3 Data Collection and Statistical Analysis

The clinical records of the 157 patients seen at the clinic during the study period were reviewed. 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 followings:

1. Sociodemographic data including age, sex, marital status, level of education, employment status
2. 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.¹⁰ The outcome of the psychotherapy services in term of discharged, loss to follow up, those still accessing service(on going) and those referred to the PNP or psychiatrist for

medication. A patient is discharged when the agreed treatment goal established between the psychotherapist and the clients at the beginning of the process has been achieved.

The in-depth interview for the qualitative component of the study was done using a semi-structured interview guide conducted through phone calls. Twenty patients (ten who completed their treatment and ten who dropped out) were randomly selected from the clinic records. However only the first ten patients (five who completed their treatment and five who were lost to follow up) who gave verbal consents after explaining the purpose of the study when contacted were interviewed. The interview guide was created, in the light of previous research, to identify the perception of the patients to mental illness and the barriers and motivation for either completing the follow up session or dropping out. 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 bivariate analysis using chi-square test and p value < 0.05 was considered statistically significant. The qualitative data were analyzed using content analysis and the result organized into themes.

3. RESULTS AND DISCUSSION

3.1 RESULTS

3.1 Section A: Sociodemographic profile and consultation characteristics of patients.

Table 1 shows the socio demographic profile of the patients with 52(33%) of the 157 patients being less than 18 years and 63(40%) were between 18 and 35 years with age range of 6-58years and mean age of 25.81 ± 11.44 . A total of 102(64%) were female and 36(23%) had primary education and

68(43%) had tertiary education while 89(57%) were employed. Eighty-eight (56%) were single, 28(18%) were married, 22(14%) in civil union and 19(12%) were living separately from their spouses.

Table 1 Socio demographic profile of the patients(n= 157)

Age(years)	N(%)
<18	52(33)
18-35	63(40)
36-59	42 (27)
Means (SD)= 25.81±11.44	
Sex	
Male	55(36)
Female	102 (64)
Educational status	
primary	36(23)
secondary	53(34)
Tertiary	68(43)
Occupational status	
Unemployed	68(43)
Employed	89(57)
Marital status	
Single	88(56)
Married	28(18)
Civil union	22(14)
Separate	19(12)

Table 2 shows the clinical characteristic and outcomes of the patients. The most frequent diagnosis was depressive episodes 80(51%) followed by anxiety disorder 52(33%) and childhood disorder 12 (8.2%). One of the patients with a depressive episode was a post-partum woman which is the only reported case of pregnant or postpartum woman seen at the clinic during the study period. The duration of illness before presentation for medical care ranged from 1 week to 8 years with 63(40%) presenting less than one month of the onset of the illness, 22 (14%) presented between 1-6 months

of onset and 41(26%) presented more than 24 months after the onset of the illness. The mean duration of illness before presentation was 8.12 ± 16.9 months.

Thirty-two (20.5%) of the patients were self-referral, while 26(16.4%) were referred by family member mostly parents and friends, 63(40%) referred by other medical professional both mental health professional and other health professional from health facilities, 21(13.6%) were referral by their employers. One of the referrals among the health professionals was from a Nurse from the Maternal and child health unit of the clinic.

A total of 30(19%) of the patients had 1 or 2 follow up sessions, while 78(50%) had between 3 and 5 follow up sessions and 49(31%) had 6 or more follow up session with range of 1- 12 sessions and mean of 3.41 ± 2.54 sessions.

One hundred and eleven (71%) patients were managed using Cognitive Behavioural therapy only while 46 (29%) had both Cognitive Behavioural therapy and medication provided.

A total of 69(43.8%) 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 45(28.8%) dropped out before the completion of the psychotherapy plan. Among those who dropped out, 34(76%) dropped out before the first appointment following the initial first visit to the clinic. A total of 24 (15.1%) of the patients were still attending the clinic during the study period while 19(12.3%) were referred to either psychiatrist or psychiatry nurse practitioner for further mental health services.

Table 2: Clinical Characteristics and Outcomes of patients (n=157)

Diagnosis	Frequency n(%)
Depressive disorder	*80(51)
Anxiety disorder	52(33)
Schizophrenia	2(1.4)
Substance induced disorder	9(5.5)

Bipolar affective disorder	2(1.4)
childhood disorder	12 (8.2)
Source of referral	
Self	32(20.5)
Family/parents	26(16.4)
*Health professionals	63(40)
Employers	21(13.6)
Social workers	15(9.5)
Duration of illness before presentation	
<1month	63(40)
1-6month	22(14)
6month-11month	19 (12)
12-24months	12(8)
more than 24 months	41(26)
Mean(SD)= 8.12±16.9 months.	
Number of follow up visits	
1-2session	30(19)
3-5 session	78(50)
>6 sessions	49(31)
Mean(SD)= 3.41+2.54 sessions.	
Type of treatment provided	
CBT alone	111(71)
CBT with drugs	46(29)
Outcome	
Discharge	69(43.8)
Dropped out	45(28.8)
Ongoing	24(15.1)
Referred to other mental health professional	19 (12.3)

*One post-partum woman ** one nurse

3.2 Factors associated with successful completion of psychotherapy.

Table 3 shows the results of bivariate analysis done using chi square test to assess sociodemographic and clinical characteristics that are associated with being discharged following successful psychotherapy consultations.

Successful outcome increased with age and statistically significant, $\chi^2=10.87$, $p=0.0043$. Nineteen 19(42%) among those less than 18years completed their treatment compared to 26(58%) who didn't, while among those aged between 36-59years, 26(75%) completed treatment compared to 8(25%) who didn't. Likewise, more women were discharged compared with men though not statistically significant with 43(63%) of women in the study discharged compared to 26(57%) of men who were discharged though not statistically significant. There was association between clinical diagnosis and discharge with discharge highest among those with anxiety disorder 42 (71%) compared to those with depressive disorder 17 (44%) and other disorders, $\chi^2 =5.44$, $p=0.019$). Being employed, and the number of follow up sessions were associated with discharge. Forty-two (72%) among those who were employed were discharged compared to 19(43%) among those not employed ($\chi^2 = 10.425$, $p=0.0013$) Successful outcome increased with the number of follow up visits. Four (15%) among those who had 1-2 follow up session/visits were discharged while 28(72%) among those who had 3-5 follow up visits and 37(77%) of those who had six or more sessions were discharged, $\chi^2=31.11$, $p=0.006$. Discharge was highest among patients with self-referral, 22(71%) , followed by those referred by other health professional 28 (62%), then those referred by family/ friends mostly parents 9(57%) though not statistically significant.

In terms of treatment methods, discharge was higher among those treated with cognitive behavioral therapy (CBT) alone, 49(64%) compared to 20(53%) among those treated with cognitive behavioural therapy and medication, though not statistically significant.

Table 3: Association between sociodemographic and clinical characteristics and successful completion of treatment

	Successful completion of psychotherapy		
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Age(years)	Yes (69) N(%)	*No (45) N(%)	chi-square (χ^2)	p value
<18	19(42))	26(58)		
18-35	24(69)	11(31)	10.87	*0.0043
36-59	26(75)	8(25)		
Sex				
Male	26(57)	19(43)	0.235	0.629
Female	43 (63)	26(37)		
Level of education				
primary	28(65)	15(35)	0.803	0.668
Secondary	28 (59)	19(41)		
Tertiary	13(55)	11(45)		
Occupation				
Unemployed	19(43)	26(47)	10.425	**0.0013
Employed	50(72)	19(28)		
Marital status				
Single	41(78)	15(22)		
Married	15(70)	11(30)	4.38	0.23
Civil union	9(57)	13(43)		
Separate	4(67)	6(23)		
Diagnosis				
Depressive disorder	17(44)	21(56)		
Anxiety disorder	42(71)	17(29)	6.75	**0.019
Duration of illness before presentation				
<1month	24(55)	19(45)		
1-6month	9(44)	11(56)		
6month-11month	6(60)	4(40)	2.96	0.57
12-24months	12 (67)	7(33)		
more than 24 months	18(80)	4(20)		
Source of referral				
Self	22(71)	9(29)		
Family/friends	9(57)	6(43)	6.28	0.178
Health professionals	28(62)	17(38)		
Employer	6(60)	4(40)		

Social worker	4(33)	9(67)		
Number of follow up visits				
1-2session	4(15)	23(85)	31.1	**0.006
3-5 session	28(72)	11(28)		
≥6 sessions	37(77)	11 (23)		
Treatment provided				
Cognitive Behavioral Therapy (CBT) alone	49(64)	28(36)	0.961	0.327
Cognitive Behavioral Therapy (CBT) with medications	20(53)	17(47)		

*excludes those referred and those with ongoing treatment ** p<0.05

3.3 Factors associated with dropout among patients.

Table 4 shows the results of bivariate analysis done using chi square test to assess sociodemographic and clinical characteristics that are associated with drop out among patients. There was significant association between age and drop out/loss to follow up among the patients, $\chi^2=17.34$, $p=0.00017$. Twenty-six (50%) of patients among those less than 18 years dropped out compared to 11(17%) and 8(20%) among those 18-35 years and 36-59 years respectively. Likewise, the dropout rate decreased with increased level of education, 15(41%) among those with primary education dropped out compared to 19(36%) and 11(16%) among those with secondary and tertiary education respectively and found to be statistically significant, $\chi^2=8.804$, $p=0.012$. Among the male patients seen, 19(35%) of them compared to 12(26%) among the female dropped out. Twenty-six (39%) among patients who were not employed compared to 19(21%) among patients who were employed dropped out and was found to be statistically significant, $\chi^2=7.74$, $p=0.0055$. Seventeen (38%) among patients treated with cognitive behavioral therapy with medications compared to 28(25%) among those treated with only cognitive behavioural therapy dropped out.

Table 4: Factors associated with drop out among patients.

	Drop out			
Age(years)	Yes (45) N(%)	*No (112) N(%)	Chi-square(χ^2)	p value
<18	26(50)	26(50)		
18-35	11(17)	52(83)	17.344	*0.00017
36-59	8(20)	34(80)		
Sex				
Male	19(35)	37(65)		
Female	26(26)	75(74)	1.18	0.277
Marital status				
Single	15(17)	73(83)		
Married	11(38)	17(62)	8.54	0.074
Civil union	13(60)	8(40)		
Separate	6(33)	14(67)		
Level of education				
No formal				
Primary	15(41)	22(59)	8.804	*0.012
Secondary	19(36)	34(64)		
Tertiary	11(16)	56(84)		
Occupation				
Unemployed	26(39)	41(61)	7.74	*0.0055
Formal employment	19(21)	71(79)		
Diagnosis				
Anxiety disorder	21(27)	58(73)		
Depressive disorder	19(33)	34(67)	1.289	0.25
Schizophrenia	0	2(100)		
Substance induced disorder	5(75)	2(25)		
Bipolar affective disorder	0	2(100)		
Childhood disorder	0	14(100)		
Duration of illness before presentation				
<1month	19(31)	43(69)		
1-6month	11(50)	11(50)	3.54	0.465
6month-11month	4(29)	15(71)		

12-24months	7(50)	6(50)		
more than 2 years	4(10)	37(90)		
Source of referral				
Self	9(27)	24(73)		
Family/friend	6(25)	19(75)	3.26	0.52
Health professionals	17(28)	45(72)		
Employer	4(20)	17(80)		
Social worker	9(57)	7(43)		
Treatment provided				
Cognitive Behavioral Therapy (CBT) alone	28(25)	84(75)	1.25	0.262
Cognitive Behavioral Therapy (CBT) with drugs	17(38)	28(62)		

*Included those with ongoing treatment and referred for further treatment.

The result of the qualitative method to identify drop out and completion of treatment are organized in themes. Among those who completed their treatment the following themes emerged; adequate insight and confidence in the service provider while among those who were lost to follow up the following themes emerged; lack of insight, socio-economic factor and stigma.

Theme 1: Insight which refers to the capability of psychiatric patients to recognize and accept that they are suffering from a mental illness was identified as a major factor identified to be responsible for compliance to treatment.

Among those who completed the follow up visit was quoted:

'I am familiar with the process and my condition. I knew the benefits of the process. I felt good after each session, and I felt stronger too. Between the sessions, I continued to face my challenges and that also made me feel the need to show up. I needed to process things and I was given ' [Female 36 years]

“ I had anxiety and depression and I needed help to manage that. I liked the support, and I learned a lot about myself. Sometimes the anxiety comes back and sometimes I feel down but I know what causes it and how to manage it’ [Female 59years]

However, among those who dropped out from their treatment, demonstrated lack of insight. One of them was quoted:

‘I did not believe that I need counselling. I only went because my employer strongly recommended it. I don’t believe I have a problem’ [Female, 47 years]

Theme 2: Confidence in the service provider was also identified as factor that promoted follow up visits.

Some of the patients who completed the treatment were quoted:

‘ The clinic helped me out and I was comfortable with my psychotherapist . I looked forward to my weekly hour of therapy. I am doing good most of the time and some days I feel like I need to come back but I am trying to push through.’ [female, 52 years]

‘I completed my counselling because I was comfortable doing it and talking to my psychotherapist. She listened to me and make me feel accepted. Our talks taught me a lot about myself’. [male, 33 years]

‘I followed through with my therapy because I felt better after each session. That feeling kept me motivated to keep going and I learn how to control my anxiety’[Female 25 years]

Theme 3: Stigma was identified as a barrier to patients from attending the required follow up sessions. One of the patients who dropped out was quoted:

'I couldn't handle it. I got the time off from work to get counselling but just going there was too hard for me. What would people say or think of me if they saw me going there...they will say I am crazy. I couldn't do it. But the one session was good. You made me feel comfortable. [male, 22years]

Theme 4: Socioeconomic factors were also reported as a barrier to completing treatment because of the concern of missing their work and fear of losing their jobs if taking too much excuse from work.

One of the patients who dropped out was quoted :

' I enjoyed my sessions. I saw how it was helping me. I was helped me through a very difficult time, and I know I was to continue but with my job but I can't keep asking for time off so that is why I stopped. [male, 22 years]

'I did three sessions. I was unable to make the fourth session due to work. After that I was unable to get an appointment that was not conflicting with my work hours. So, I went somewhere else." [male, 24years]

The most frequent diagnosis in the study was depressive episodes of 51% followed by anxiety disorder of 33% and childhood disorder, 8.2% and substance induced disorder 5.5%. The prevalence of depression and anxiety are much higher than what has been reported in various studies. The categories of mental health disorders recorded in the Belize Health Information System (BHIS) for 2018-2021 were anxiety disorders (45%), depressive episodes (22%) and schizophrenia and related disorders (8%).⁸The WHO 2022 world mental health report identified anxiety and depressive disorders as the most prevalent mental disorders, with rates of 31% and

28.9%, respectively.¹In studies done in Chile, Belgium and USA, the most prevalent mental disorders presenting in primary care settings are depression, 5% to 20%, generalized anxiety disorder, 4% to 15% , harmful alcohol use and dependence, 5% to 15%, and somatization disorders, 5% to 11%.^{11,12} A study in Jamaica among clinic outpatients reported approximately 30% of participants had moderate or severe depression symptoms and 18.6% had moderate or severe anxiety symptoms¹³while in a study in Peru among all outpatient visits for psychiatric disorders, those identified as anxiety/ depressive disorders represented approximately 6 out of 10 visits in women, and 4 out of 10 visits in men.¹⁴In the study only one case of depression in a post-partum woman was seen among all the cases over the study period. This suggests gaps in awareness and access to perinatal mental health in the study site or country at large. Even though there is no epidemiological data on burden of mental health among pregnant and post-partum women in Belize, data from other countries in the Central America region and beyond reported prevalence of depressive symptom of between 20 and 60% among pregnant and postpartum women.^{15,16} Mental health disorders are associated with many poor outcomes for women's maternal and physical health and the emotional and cognitive development of infants and children during their sensitive growth periods.^{17,18,19} The studies indicated that detection, treatment, and referral of perinatal depression by obstetrical providers are seriously lacking and need to be addressed.^{15,16}Similarly, a study in UK reported that approximately half of women requiring perinatal mental health care do not receive treatment despite having routine contact with midwives and health visitors.¹⁷ It noted that that perinatal mental health service provision appeared less important to the midwives and health visitors referral decision-making than how maternity/health visiting services were delivered.¹⁷ The studies recommended incorporating screening for perinatal depression and referral service into the routine perinatal care so as to improve access to perinatal mental health services.^{15,16,17}

In the study, 43.8% of the patients were discharged following treatment which occurred when the agreed goal established between the psychotherapist and the clients at the beginning of the process

has been achieved. This is higher than was reported in a study in Portugal where about 35% of participants had successfully completed the psychological intervention.¹⁸ A review of psychological treatment for anxiety and depression over a period of two years between 2017-18 in UK found 50.8% of the patients recovered fully¹⁹, while a study in Austria on predictors of successful referral by a psychotherapeutic outpatient unit and subsequent outcome of psychotherapy reported a success rate of 50-60%.²⁰

There was association between clinical diagnosis and discharge with discharge highest among those with anxiety disorder compared to those with depressive disorder in the study. This is similar to finding in a study in Portugal which reported positive association between consultations discharge by the psychologist and the diagnosis.¹⁸

The number of follow up sessions were associated with discharge. This is similar to other studies which found greater number of consultations indicate greater probability of success in the intervention process. The average number of follow up session in this study was 5 sessions while the average number of consultations considered to ideal is between 5 and 8 sessions.^{20,21}

Being employed was found to be associated with discharge, 72% of those who were employed were discharged compared to 43% among those not employed. This is similar to studies which reported association between successful outcome and being employed and socio-economic status of the patients.^{22,23}

There was significant association between discharge and age where successful outcome increased with age, with 43% among those less than 18 years and 75% among those who were between 36-59 years. This is similar to studies which found age to be a predictor of success of psychological intervention.^{18,24}

Discharge was highest among patient with self-referral, 71% followed by those referred by other health professional 62% those referred by family/ friends mostly parents 57% though not statistically significant. This is unlike a study which found that referrals from general practitioner had the best

outcome with psychotherapy for anxiety/depressive disorder and self-referral was reported to have the least treatment completers.²⁵

In terms of treatment methods, discharge was higher among those treated with cognitive behavioral therapy (CBT) alone 64% compared to 53% treated with cognitive behavioural therapy and medication, though not statistically significant. This is similar to findings in studies which reported that psychotherapy is effective with or without medications and that adding medications does not significantly improve outcomes from psychotherapy alone.^{21,26}

Confidence in the services provider was one of the enabling factors that was reported in the study by patients who completed their treatment and were discharged. This is supported by studies which reported that the quality of care as well as rapport and interrelation between the psychiatric personnel and the patients have a marked effect on compliance with treatment, keeping follow-up appointments and utilize health services clinic attendance.^{27,28} Similarly, a review article on the factors influencing dropout from individual psychotherapy reported therapeutic relationship to be essential to completion of treatment.²⁹

In the study 28.8% of the patients dropped out before the completion of the psychotherapy plan. Among those who dropped out, 76% dropped out before the first appointment following the initial first visit to the clinic. This is similar to a study in US which reported over 70% of all dropouts from outpatient mental health care occurred after the first or second visits.³⁰ The dropout rate is lower than findings from previous studies which reported dropout rate of between 32.6% and 60%.^{31,32}

There was significant association between age and drop out/loss to follow up in the study with 50% of patients among those less than 18 years dropped out compared to 17% and 20% among those 18-35 years and 36-59 years respectively. This is similar to other studies which found association between younger age and drop out.^{23,32} Likewise, 39% of patients who were not employed compared to 21% of patients employed dropped out and found to be statistically significant similar to the

findings in other studies in Spain and Nigeria which reported association between dropout and unemployment and low socioeconomic status have.^{22,23}

In the study 35% of male compared to 26% of female dropped out similar to other studies which found male gender to be associated with drop out/loss to follow up.^{23,32}

Insight which refers to the capability of psychiatric patients to recognize and accept that they are suffering from a mental illness was identified as a major factor identified to be responsible for compliance to treatment. This is similar to a finding in a systematic review which reported lack of insight as a predictor of non-adherence to treatment program among patients studied.³³

In this study, level of education was found to be associated with drop out among the patient, with drop out being highest among those with primary level of education and reduced with increased level of education. Education and awareness are essential to degree of insight among patients with mental health disorders. Similarly, a study reported low education to be associated with elevated odds of dropout from treatment with mental health professionals.³⁰

Stigma was identified as a major barrier for completing follow up section during the in-depth interview in the study. Similarly, stigma has been found in various reviews to lead to the underutilization of mental health services and negative impact on help-seeking in studies from Latin America and the Caribbean.³⁴ In the Caribbean traditionally, poor mental health and expressing emotions has broadly been culturally and socially stigmatized, associated with shame, personal weakness, and a lack of commitment to God, which acts as a barrier to seeking mental health support.³⁵

- 4. CONCLUSION:** The study supported the existing literature advocating for the integration of psychotherapy into primary health care which is essential to improving access to mental health services. Implementation of appropriate awareness, education and social behavioural change program and use of computerized Cognitive Behavioural Therapy (cCBT) and or tele-health where feasible are helpful to improving utilization of services.

Limitation of the study. The findings from the study is from data from a clinic and the results may not be generalizable to other psychiatric outpatient populations . However, the use of both quantitative and qualitative methods provided a more comprehensive and nuanced understanding of the factors that determine the treatment outcomes. This is the first study in Belize on this topic and the findings provide relevant information that can be used to develop tailored strategy to improve quality of mental health services and improve on treatment outcomes among patients.

Recommendation: Belize has abolished users fees in all public health institution and also expanding the coverage of the National Health Insurance (NHI) scheme to improve access to primary health services and achievement of universal health coverage. There is need to include psychotherapy in the package of essential primary health care services for the NHI scheme and in all public health institution, which will strengthen integration of mental health including perinatal mental health into primary health care services and close the treatment gap and ensure that people get the mental health care they need.

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