

## **Factors Affecting Adherence to Treatment among Mental Health Patients: A Case Study of Clients with Mood Disorders at the Mental Health Wellness Clinic in Harare**

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### **Abstract**

*This study investigated the factors affecting adherence to treatment among mental health patients. A qualitative analysis of clients with mood disorders attending the Mental Health Wellness Clinic in Harare was conducted. The study employed the case study research design where semi-structured interviews, focus group discussions and key informant interviews were utilised to collect data from a sample of patients recruited through convenience sampling. Data was thematically analysed and organised into themes informed by the research objectives and questions. Findings from the research highlight that the patient related factors affecting adherence to treatment among the patients with mood disorders include client insight, denial and client's attitude. These are mainly attributed by the patient themselves. In addition, the study also indicated several environmental factors affecting compliance with treatment such as finance, stigma, lack of social support and religious and cultural beliefs. These can emanate from the patient's micro and macro environment. Furthermore, results from the study indicate five medical-related factors which affect compliance to treatment and these include doctor-to-patient relationship, medication side effects, treatment regimen and accessibility to mental health services. These mainly emanate from the health service provision part of the treatment process. Results also provided an opportunity for a treatment adherence model that could be used to increase compliance. Future studies on the statistical significance of such a model concerning compliance are strongly recommended.*

**Keywords:** adherence, pharmacotherapy treatment, mood disorders, mental health.

### **Introduction**

Various Western and Oriental researchers have conducted a myriad of studies on factors affecting adherence among mental health patients. However, this research area gets scantier when it comes to regional studies in Africa and even worse in Zimbabwe. Major psychiatric disorders, primarily

mood disorders, are a rising public health concern that attribute 14% to the global burden of diseases, but the management of these disorders has been challenging mainly due to non-adherence to medical treatment (Semahegn et al., 2020). According to the World Health Organization (WHO) (2013), psychiatric disorders represent a leading cause of morbidity and mortality worldwide, with approximately 970 million individuals suffer from a diagnosed psychiatric disorder. It is therefore important to understand the factors leading to non-adherence in order to effectively manage the treatment outcomes.

In Thailand, data from the National Epidemiology of Psychiatric Comorbidity Survey indicated that 14.3% of Thai nationals had been diagnosed with a psychiatric disorder. The most commonly diagnosed psychiatric disorders in Thailand include anxiety disorder, major depressive disorder, substance-use disorders, and schizophrenia, respectively (Department of Mental Health, 2018). In 2010, the prevalence of schizophrenia in the Thai population aged 15 to 59 years was approximately 8.8 per 1000 people (Department of Mental Health, 2018).

A study in America has estimated the rate of long-term medication therapy compliance was between 40% and 50% and it is further estimated that 50% of chronic psychiatric patients are not taking medication as prescribed after six months (Rafii, Fatemi, Danielson, Johansson & Modanloo, 2014). The study also reported that men were more likely to discontinue treatment without physician consent and that this variance may be due to socio-cultural differences (Rafii et al., 2014). Similarly, several studies on therapeutic non-compliance have been conducted in developed countries. The studies revealed that treatment in terms of compliance not only includes medication, but also diet, exercise, or lifestyle changes, therefore there is a need to explore actual factors of treatment compliance (Gebeyehu et al., 2019).

In addition, global studies have indicated that non-adherence rates among clients with severe mental illness ranged between 30% and 65% and this greatly increases the risk of illness exacerbation and hospitalisations (Gebeyehu et al., 2019). Non-adherence also has major economic cost for health services. The annual cost to the National Health Service (NHS) in the United Kingdom was estimated to be £342 million at 2009/2010 prices, with 60% of this accounted for by inpatient admissions (Young, Rigney & Shaw 2011). Medication non-adherence has serious consequences for individuals as well as the country and having psychiatric disorders often resulting in 3.7 times

higher rates of relapse and exacerbation of psychotic symptoms, increased aggression and worse prognosis, more violent than adherent patients, higher hospitalisation, and poorer community adjustment (Cutler & Everett, 2010; Higashi et al., 2013).

Furthermore, psychiatric disorders are associated with several negative consequences, such as reduced individual well-being, increased family burden, and barriers to employment and financial stability (Higashi et al., 2013). Numerous psychopharmacological, psychosocial interventions, case management, problem-solving, and motivational interviewing treatments that improve patients' symptoms and overall functioning associated with severe psychiatric disorders have been identified (Higashi et al., 2013). However, uptake of and adherence to efficacious psychopharmacological approaches remain low, with only about 50% of patients with severe psychiatric disorders such as schizophrenia and bipolar disorder reporting adherence to prescribed medications and other treatments (Higashi et al., 2013).

In Africa, a study conducted in Ethiopia found that 55.2% of patients with severe mental disorders were non-adherent to their medication and therapeutic interventions (Gebeyehu et al, 2019). The study recommended continual awareness creation among professionals and engaging significant others for good social support system and continual treatment alliance is strongly commended for adherence (Gebeyehu et al., 2019). Findings from this study were in line with global non-adherence rates among patients with severe mental illness between 30 and 65% (Yang et al., 2012; Kassis et al., 2014). This finding was also consistent with a study conducted in Nigeria 54.2% and 55.7% (Ibrahim et al., 2015).

In Zimbabwe, the Global Burden of Disease Study (2017) estimates a population prevalence of 0.5% for persons diagnosed with bipolar disorder, 0.1% for schizophrenia, 0.3% for epilepsy, 1.5% for major depressive disorder (MDD), 0.7% for drug use disorders, 1.3% for alcohol use disorders and suicide accounts for 1.8% of all deaths. Compared to the southern sub-Saharan Africa region, Zimbabwe has a similar prevalence of each disorder except MDD, which is estimated to be slightly more prevalent (2.4%) across the region (Global Burden of Disease Study, 2017). This high prevalence in persons diagnosed with mental disorders in Zimbabwe is further worsened by the severe shortage of mental health practitioners, with an estimated 18 psychiatrists (17 of them in

Harare) or approximately 0.1 per 100,000, 917 psychiatric nurses (6.5 per 100,000) and 6 psychologists (0.04 per 100,000) (Global Burden of Disease Study, 2017).

In this regard, there is a need for effective treatment in order to minimise straining the few health care resources available and hence it is critical to minimise the rate of non-adherence as this would in turn reduce the rate of recurrence of illnesses, pre-hospitalisation and readmissions. However, in Zimbabwe, there is scantiness of studies exploring treatment non-adherence and its associated factors among patients with mood disorders. Therefore, this study is aimed at covering this gap through assessing determinant factors affecting treatment compliance. Furthermore, it provides information for mental health care providers to utilise and make an informed decision to address the best interests of patients with mood disorders leading to effective treatment initiatives.

## **Background and setting**

Noncompliance to psychotherapeutic and psychopharmacological treatment has been found to predict worse outcomes for mental health patients in Zimbabwe including relapse, rehospitalisation and delays in achieving remission, violence such as reported aggression and arrests, suicide, and premature death. In this regard, it is critical that mental health practitioners become aware of these factors and try to proactively support patients in order to minimise noncompliance. Patients' failure to take medication or treatment as prescribed represents a significant barrier to effective psychopharmacological and psychotherapeutic treatment (Thompson & McCabe, 2012).

Besides undesirable impact on clinical outcomes, non-compliance also causes an increased financial burden for society through excess urgent care visits, hospitalisations and higher treatment costs (Sabaté, 2003). Additionally, therapeutic non-compliance has indirect cost implications due to the loss of productivity. Hence, in order to formulate effective strategies to contain the problem of non-compliance, there is a need to systematically review the factors that contribute to non-compliance. An understanding of the predictive value of these factors on non-compliance would also contribute positively to the overall mental health sector.

No study known to the researcher has been conducted regarding adherence to treatment in Zimbabwe except for areas such as HIV & AIDS and there is limited research regarding adherence

among mental health patients. In addition, literature has clearly stated that the study of factors affecting adherence forms the foundation required to come up with effective initiatives that can assist in improving adherence among mental health patients (Thompson & McCabe, 2012). Thus, this study focused on identifying these critical factors.

## **Objectives of the study**

The following objectives guided the study:

- i) To identify factors affecting compliance to treatment among mental health patients.
- ii) To suggest recommendations on initiatives that can be adopted to maximise compliance.

## **Research questions**

The following questions guided the study:

- 1) What factors are affecting compliance to treatment among mental health patients?
- 2) What initiatives or interventions can be adopted to maximise compliance/ adherence to treatment?

## **Methodology**

### **Approach**

The qualitative research approach was chosen to investigate and present detailed information concerning treatment adherence among mental health patients. Qualitative approach draws from interpretivist and constructivist paradigms that seek to have a deep understanding of people's lived experiences. (Denzin & Lincoln, 2011). Thus, it was most appropriate for this study to gain an understanding of underlying factors that cause non-adherence to treatment among mental health care patients.

### **Design**

The research used the case study as a design to establish the factors that led to non-treatment adherence among mental health patients. A case study is a research strategy and an empirical inquiry of a phenomenon within real-life context (Yin, 2017). Case studies are based on an in-depth investigation of a single individual, group or event to explore the causes of underlying principles thus, making it appropriate for this study.

## Population and sampling

### Inclusion criteria

The study included clients aged 18 years and above who presented with mood disorders as diagnosed by the diagnostic statistical manual (DSM-5) and who were receiving treatment (medication or therapy) during the past 12 months. In addition, the study included participants of both genders irrespective of their marital status, educational level, socioeconomic status, and place of residence.

### Sample

A sample of 20 participants was selected through convenience sampling. Convenience sampling is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand (Creswell, 2014). In this case, clients who were accessible at the clinic and available to participate in the interview and focus groups were included in the sample. In addition, this type of phenomenological research requires a minimum of between 5 to 20 participants as a sample (Sauro, 2015). Thus, the chosen sample of 20 participants was more than enough to adequately explore the phenomena in this research.

### Demographic data and population characteristics

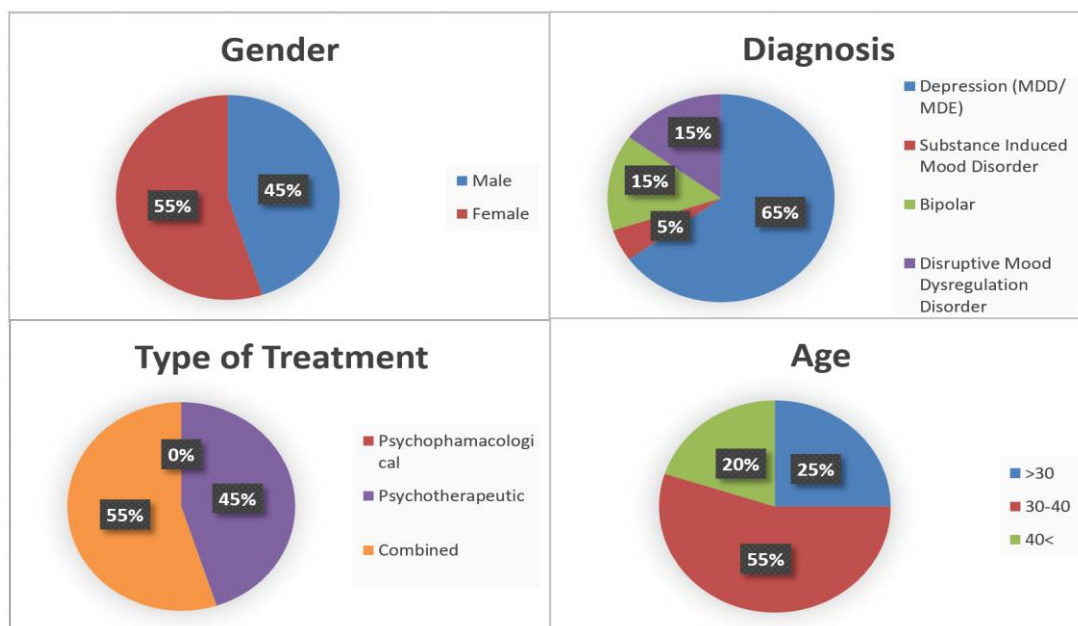


Figure 1: Demographic Data

## **Data collection instruments**

This study used interviews and focus group discussions to understand the factors that led to non-treatment adherence among mental health patients. Creswell (2014) suggests that when conducting a case study, it is more effective to use a variety of data collection procedures or multiple information sources for reconstructing and analysing the case which include, but not limited to documents and interviews. In this regard, this study conducted both focus group discussions and interviews to investigate the experiences of diverse participants, collect multiple types of evidence, and triangulate the data. The study utilised semi-structured interview questions used as a guide during both the focus group discussions and interviews. When using semi-structured questionnaires during focus group discussions, the interviewer had a set of questions but there was room for developing ideas and questions during discussions (Creswell, 2014). In addition, key informant interviews (KII) with two critical staff members at the Mental Health Wellness Clinic were conducted to validate the findings on the objective to establish medical reasons for noncompliance.

## **Research procedure**

Clients who had been noncompliant to treatment were identified through their case file history and the researcher engaged each participant to introduce the research and acquire their consent to participate in the research. The researcher also engaged the participants to identify the most convenient time for scheduling the focus group discussion and invite the participants to attend. The focus groups were divided into two groups of five people in each group. Information from the focus group discussions was to be consolidated for analysis.

In addition to the above, each participant took part in a 30minute interview conducted. Interviews allowed for in-depth follow ups to focus group discussions and they also allowed the researcher to capture individual factors affecting the diverse participants. Lastly, interviews were also conducted with two staff members at the clinic in order to validate the data gathered from both focus group discussions and Interviews.

## **Data analysis and interpretation**

Qualitative research generated a wealth of data which required further processing and refinement. The data generated in this study was analysed through thematic content analysis by reading through the responses from in depth interviews and focus groups and identifying patterns across the data to derive themes. The above method of analysis was appropriate for the research design.

## **Results**

### **Patient- related factors affecting compliance**

Findings from the research highlighted that the patient related factors affecting compliance to treatment among the patients include client insight, denial and client's attitude.

#### *Client insight*

Participants indicated that ignorance, inadequate understanding, poor knowledge and perceptions of the illness and medication contributed to their inability to accurately comply with treatment. One of them stated that:

“When I went to the clinic, the doctor explained to me that the treatment will take about eight sessions (two months) and he prescribed antidepressants. However, after taking the antidepressants for 3 days, some of the symptoms disappeared and I thought I was back to normal; so, I stopped taking the medication. A few days later I relapsed, symptoms were worse than before, and I had to go back to the doctor and start the treatment all over again.”

Findings indicated that a lack of insight and perceptions about the illness can cause the clients to prematurely cease treatment or fail to get the prescribed medication. In addition, other participants indicated that they had to conduct several research studies on their own in order to get more insight regarding their diagnosis, and that is how they were convinced to adhere to treatment.

#### *Denial*

Secondly, the issue of denial was also highlighted by a few participants as a factor that affected their adherence to treatment. One participant stated that:

“When the doctor said that I had bipolar, I couldn't believe it because I had seen several people with bipolar on TV and I did not behave the same way as they did.”



In this regard, the participant did not purchase the prescribed medication until she had an intense episode that almost got her fired from work. Another stated that they did not consistently adhere to treatment appointments for psychotherapy as they had not fully accepted the diagnosis. Therefore, they only went to the clinic when necessary and; in addition to this, they did not want to consider themselves as “crazy” so they never took the diagnosis seriously. However, they sometimes went for appointment out of fear that what the doctor said could be true.

### ***Client’s attitude***

Most participants agreed that their personal attitude and willingness to get better had been a major contributor towards adhering to treatment. One participant said:

“I lacked motivation to get better as the thought of having depression and the symptoms rendered me hopeless and reduced my willingness to adhere to prescribed interventions.”

Another agreed with this and indicated that:

“I lacked commitment and did not follow the treatment regime based on how I felt at any given moment and; with depression, it’s really difficult to ever feel like doing anything productive.”

Thus, participants agreed that lack of internal motivation and willingness to get better was a deterrent to the treatment process and affected the anticipated therapeutic outcome and wellbeing of a client. Other participants indicated that their attitude was so bad that they sometimes forgot to take their medicine and could not make an effort to set a reminder. One participant also stated that:

“The depression also made me paranoid; and I did not initially trust the process and that the therapist had good intentions to help me get better. So, I was sceptical and resisted getting help at first.”

Thus, one's medical condition also played a part in their psychological attitude towards life and treatment.

### ***Environmental factors affecting compliance***

Findings also indicated several environmental factors affecting compliance to treatment such as finance, stigma, lack of social support and religious and cultural beliefs.

### *Economic circumstances*

Participants indicated that not being financially stable and one's socioeconomic status had an impact on adherence to treatment. Feedback from focus group discussions revealed that participants paid \$60 for an hourly session with the mental health service provider and those with medical aid had shortfalls of up to \$30 per session. On top of this, those going through combined treatment procedures, which included both medication and therapy also needed money to purchase the relevant drugs for their treatment. One participant indicated that this made his family "less cooperative in their supporting role during the treatment plan as they felt it was too expensive and this affected his ability to attend all prescribed therapy sessions." Another participant indicated that:

"I am completely dependent on family for everything so sometimes I could not turn-up for sessions because there was no money for paying for the session or even for bus-fare to find transport to attend the session."

Findings indicated that this was one of the top issues raised by most participants as a hindrance to their ability to adhere to treatment due to their socioeconomic status, lack of resources and being unable to afford the cost of medicine.

### *Stigma*

Most participants raised the issue of stigma as one of the environmental factors affecting adherence. Participants highlighted that there was a lot of stigma associated with mental health issues which made it difficult to even tell people that one is in therapy for a mental health condition. One participant stated that:

"People think that visiting the psychologist automatically means that you are now mentally incapable of making your own decisions and this is embarrassing."

Another participant added that:

"Society does not accept that black men should seek therapy; and this made it difficult to openly disclose resulting in some appointment being missed as I ran out of excuses to give to explain my absence from work."

Thus, several clients missed appointments because of the fear of being socially ostracised. Some participants also discussed that hiding their diagnosis helped them in their effort to maintain their

dignity. Such participants indicated that they even hid their diagnosis from their partners for fear of how it would impact on their relationship and their perception of them. This affected their adherence as they could not take the medication when the partner was around. In this regard, their fear of what the community would say and the fear of being rejected affected their ability to consistently adhere to medication.

### ***Lack of social support***

Lack of social support was the main factor that affected the majority of participants in one way or another from adhering to medication. Participants accentuated that the availability of support in the form of family, friends, or caregivers to assist and remind them about their medication increased their ability to comply with treatment. However, when this support is not available, it has an opposite effect towards their adherence. One participant indicated that:

“Outside therapy there was no one to share my struggles and this made me resign.”

This indicated that failure to receive extra support made the client eventually quit the treatment process. Another participant added that:

“I now stick to my medication because my dad used to remind me to take my medication; and now, I remember on my own.”

Thus, this client managed to change their adherence with the help of family support.

However, findings also showed that if the home environment is not supportive, this could lead to non-adherence as one participant stated that:

“My toxic home environment perpetuated my depression and made adherence difficult even just simply turning up for my sessions was hard.”

Thus, continuous exposure to social or home environments that triggered the condition under treatment made it difficult for participants to remain committed to their treatment regimen. Another participant also added that:

“It was difficult to adhere to treatment when I was staying in Chitungwiza because I always found myself hanging out with the people I used to abuse drugs with; so, I would do the same and miss my medication and felt embarrassed to turn up for the sessions. Eventually, I moved location so as to be on track with my treatment.”

Thus, positive or negative influence from the client's family or social structure have an impact on adherence. Participants also indicated that some families in the case of severe mental illnesses such as severe bipolar or depressive episodes may intentionally or unintentionally give incorrect dosages of medication. One participant realised this whilst doing a pill count after a series of severe episodes. In addition to the above, criticism from friends, work pressures, family pressures have a bearing on the ability for one to receive support that fosters treatment adherence as some workplaces may not allow you to attend sessions during working hours. Thus, having a negative bearing on the client's ability to adhere to treatment.

### ***Religious and cultural beliefs***

Participants also indicated religious and cultural beliefs as one of the factors affecting adherence. During focus group discussions, participants indicated that some families encouraged prayer and exorcism as a solution to their challenges and refused to believe the doctors' diagnosis. One participant indicated that, after getting the diagnosis, the family concluded that, instead of wasting money on expensive therapy sessions and medication, they would take the client to a prestigious church for exorcism. However, the symptoms did not disappear; and they eventually followed the treatment regimen even though some of the family members were still opposed to it. In addition to the above, participants indicated that some of their family members associated mental health issues with witchcraft hence sometimes they were forced to hide their condition from them.

### ***Medical- related factors affect compliance***

Findings from the study indicated four medical related factors that affect compliance to treatment; and these included doctor to patient relationship, medication side effects, treatment regimen and accessibility to mental health services

### ***Practitioner - client compatibility***

Participants indicated that effects of non-adherence to treatment could be caused by practitioner and client compatibility. They indicated that it is important for mental health practitioners to avoid making a client feel like a pay check to the medical practitioner as genuine interest in the client's life is not expressed or felt, either causing the client to stop treatment all together or prolonged illness. In addition to this, participants also highlighted that the practitioner's lack of patience, poor

interest and follow up may cause the client to stop treatment. Thus, failure to achieving a personal relationship with health care providers could lead to non-adherence to treatment.

### ***Medication side effects***

Findings from the study indicate that it was of great concern to some participants and their families that medication had side effects that might affect their everyday life. Some participants highlighted that they became overweight, others felt drowsy and indolent the whole day, which led them and their families to perceive the medication as harmful for them. Thus, participants were worried more about the side effects of medication and disregarded the drugs' effectiveness. Other side effects experienced by participants included agitation, restlessness, tremors, feeling jittery, irritability, sedation, feeling sleepy, difficulty in thinking or concentration, dizziness, nausea, dry mouth and constipation. One participant stated that:

“I was sceptic about the medication after reading about the side effects of the medication and skipped some of the doses.”

In addition, some participants also indicated that they were scared of getting addicted or over becoming dependent on the medication; and were therefore not willing to regularly take tablets. In this regard, the negative side effects experienced by clients affected their willingness to regularly comply with the treatment. Some of them did not experience the symptoms, but researched on them from the internet and became sceptics.

### ***Accessibility to healthcare services***

Participants indicated that accessibility to healthcare service providers was also another factor contributing to adherence. They indicated that there were no mental healthcare facilities in local clinics or close to most residential areas and they had to travel to the central business district for appointment and to access medication. This could be a financial burden as well as an inconvenience. In addition, some of the prescribed medications were sometimes either not available or too costly for clients, which prolonged treatment plan or disrupted their ability to comply with the doctors' instructions. Other participants indicated that sometimes the prescribed medication was not available in pharmacies that accept the client's medical aid provider. This meant that they had to pay cash even when they had a valid medical aid. Furthermore, participants indicated that most practitioners were only available during working days and working hours and

this sometimes made it difficult to attend sessions if one was not excused from work during the specific time they were booked for their appointment. Hence, one participant indicated that they failed to adhere as:

“Appointment times just could not align with my work schedule.”

### **Treatment regimen**

Complexity and length of treatment regimen was another medical related factor that participant indicated as affecting adherence. Participants indicated that knowledge of how to take medicine, duration of treatment period could cause one to defer treatment. One of the participants stated that “the medication and session take a long time to complete and show results making it easy to sometimes skip sessions or taking medication”.

### ***Lack of social support***

Findings from both interviews and focus group sessions indicate that, lack of social support was the most influential factor that was highlighted by almost every participant during the one-on-one interviews. It was also highlighted in all focus group discussions and almost all participants had an experience with this factor. This was followed by the issue of medication side effects. All participants who were on psychopharmacological treatment mentioned the issue of side effects as a cause for their non-adherence and some of them did not take their medication regularly as a result. The third highest ranking factor was that of economic circumstances. Most participants indicated that the cost of the sessions and medication sometimes forced them to abscond from taking the medication until they were financial able to do so and sometimes without informing the doctor.

### **Discussion**

Findings from the research highlight that the patient related factors affecting compliance to treatment among the patients include client insight, denial and client’s attitude. These three factors may seem different; but, in a way, they are interrelated as adequate knowledge and understanding about the diagnosis not only increases client insights, but it also influences clients in denial and might even affect the client’s attitude towards the treatment process. These findings are aligned to findings from the literature which states that, patients who had no insight into their disorder and

treatment were significantly associated with medication non-adherence (Gebeyehu et al., 2019). This result is also similar to the study reported in India that suggested that patient insight in their illness leads to ease of acceptance of treatment initiatives (Maan, Hussain, Heramani & Lenin, 2015). Thus, the presence of insight towards the disease and their treatment plays an important role in medication adherence. Research also states that awareness of illness among mental health patients is widely related with two theories; and these are lack of awareness caused by psychological defence mechanisms as a form of refusal to face the perceived illness, or the presence of cognitive disorders that prevent them from understanding their illness better, especially in bipolar or depression (Amador et al., 1991). This aligns with results from the study as participants also indicated denial as a factor that affected their ability to comply with treatment.

In addition, several studies also found that an unhealthy or negative attitude towards treatment is one of the factors causing non-adherence to treatment of mental health issues and this could be resolved by psychoeducation (Sajatovic et al., 2021). Thus, knowledge and awareness can be effective motivators in the case of patients with bipolar or depression and can influence both client insight and attitude.

In addition to the above findings, the study also indicated several environmental factors, such as finance, stigma, lack of social support and religious and cultural beliefs, that affect compliance to treatment. These findings show that over and above the client related issues, there are also factors that can emanate from the client's micro and macro environment that could affect the client's ability to adhere to treatment procedures. This also aligns with results from past studies that revealed that economic circumstances, availability of health insurance, sustainable financing and affordable prices are also environment related factors that have been identified to affect adherence amongst mental health patients (Chukwujekwu & Adesokun, 2017). In this regard, the homeless, unemployed and poor patients with unstable economic circumstances live in an unfavourable environment that mitigate adherence to treatment.

In addition to this, the issues of religion and culture that were highlighted in this study were also identified as obstacles to compliance. Participants indicated that this stems from different ideologies and environments as some religious sects in Zimbabwe do not allow their members to seek medical attention regardless of their health condition or mental disorder. Other religions believe in exorcism of mental disorder as they perceive the patients as victims of demonic

possession. In other cultures, they believe that mental disorders could be witchcraft. This is also in line with studies that established that there is a significant relationship between spiritual well-being and medication adherence in individuals diagnosed with mental disorders (Sajatovic et al., 2021).

Furthermore, findings also illustrate that for the effective provision of care for mental health disorders, it is necessary that the patient, the family and the community who support him or her also play an active role. Social support received by patients from other members of their community was consistently reported as an important factor affecting health outcomes and behaviours. Studies also show that there is substantial evidence that peer support among patients can improve adherence to therapy while reducing the amount of time devoted by the health professionals to the care of chronic conditions (Sabate, 2003). Furthermore, regarding social support, a study by Gebeyehu et al. (2019) highlighted that participants who had no social support were significantly associated with non-adherence. This finding was supported by Chukwujekwu and Adesokun (2017) who reported in their study that social support provides the cue for patients to take their medication on time as it minimises fear, burden and anxiety related to the illness, especially for the elderly patients who need constant reminders.

In addition, lack of social support was revealed as the main factor that inhibited the majority of participants from adhering to medication in this study. Findings from the focus group discussions and interviews indicated that this factor had a direct effect on most of the other factors such as economic factors, denial, clients' insight, religious and cultural beliefs. Social support is therefore one of the most critical factors that could either negatively or positively affect adherence. In this regard, even though the client might not have insight, family members may be able to find ways to assure that patients take their medication through various interventions, and this also applies to religious beliefs. In terms of economic circumstances, families and communities could come up with several ways to assist patients to access their medication, and some may assist with transportation to sessions. Some companies even pay medical insurance for their employees thus providing the much-needed social support to patients.

Findings from the study indicate four medical related factors that affect compliance to treatment, and these include doctor to patient relationship, medication side effects, treatment regimen and accessibility to mental health services. Correlational studies have also revealed positive



relationships between adherence of patients to their treatment and provider communication styles characterised by providing information, “positive talk” and asking patients specific questions about adherence by (Chukwujekwu & Adesokun, 2017). Thus, clarity of diagnostic and treatment advice has a positive effect on adherence to treatment initiatives. Other important factors that positively correlated with adherence were continuity of care (follow-up) after receiving a prescription, warmth and empathy of the health provider as well as the ability of the health providers to share information, build partnerships, and provide emotional support (Maan, Hussain, Heramani & Lenin, 2015). In addition, patients who are satisfied with their health provider and medical regimen and view themselves as partners in the treatment process and are actively engaged in the care process, have better adherence behaviour and health outcomes (Sabate, 2003). Findings such as these can guide providers to create a treatment relationship that reflects a partnership with their patients and supports the discussion of therapeutic options, the negotiation of the regimen and clear discussion of adherence (Maan, Hussain, Heramani & Lenin, 2015). Thus, more structured, thoughtful and sophisticated interactions between provider and patient are essential if improvements in adherence are to be realised. The issue of side effects was also a major issue raised in the study. This is because the perceived side effects have an impact on the activities of daily life of people with bipolar and depression. This issue was raised by participants going through both psychotherapy and psychopharmacological treatment because of the drugs they were required to take. Clients also react differently to the drugs hence the psychiatrist is only able to adjust or prescribe alternative drugs after clients have already experienced side effects and this becomes one of the determinants of treatment adherence.

## **Conclusion**

In summary, findings from the research highlight that patient related factors affecting adherence to treatment among the patients with mood disorders include client insight, denial and attitude. These were mainly attributed to by the patient themselves. In addition to the above findings, the study also established several environmental factors affecting compliance to treatment such as finance, stigma, lack of social support and religious and cultural beliefs. These could emanate from the patient’s micro and macro environment. Furthermore, findings from the study identified four medical related factors that affect compliance to These included doctor to patient relationship,

medication side effects, treatment regimen and accessibility to mental health services. These mainly emanate from health service provision part of the treatment process.

## **Recommendations**

First, there is a need for intense psycho-education with clients and ensuring acknowledgment of diagnosed condition by client; a personal connection and open relationship between health care provider and client and commitment from clients to prescribed treatment plan by health care provider and pharmacist would eliminate some of the patient related factors affecting adherence. The client's personal efforts to achieve normal living through advice of medical practitioners, as well as a safe, healthy, nurturing and supportive environment surrounding the client for their future wellbeing is also important. Educating clients about the pros and cons of the medication and adequate information on how to take drugs is also important during psychoeducation. In addition to this, it is critical to educate the patient on the nature of their diagnosis and what to expect in terms of symptoms.

Furthermore, social support is critical in ensuring that clients did not forget to take medication and it is important for health practitioners to involve family members when prescribing and explaining treatments so that they can effectively support clients. This ensures that the client receives assurance, emotional support and monitoring when necessary.

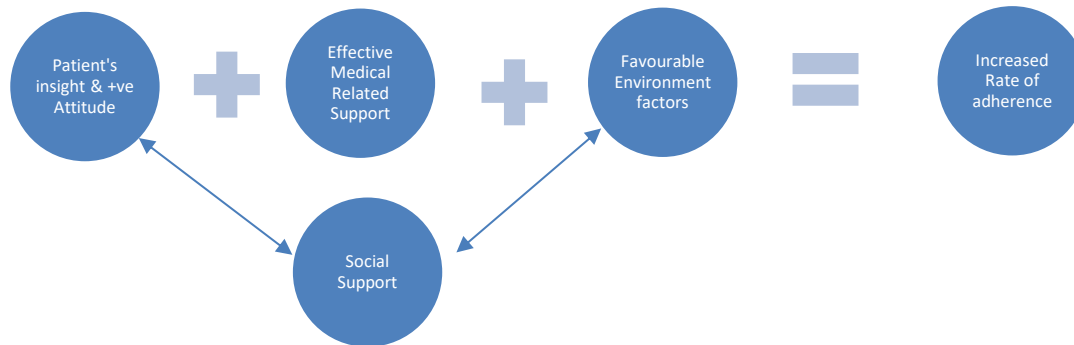
Furthermore, there is a need for increased awareness on the importance of mental health and available support structures. Continuous engagement of clients through digital platforms and tracking applications that update the doctor or client's family is also necessary. It is also necessary to empower and educate people in their local communities about mental health issues so as to stop the stigma and to assist them to support those community members with mental health challenges. This approach would assist to break the stigma such that mental health illnesses could be viewed as normal illnesses. Furthermore, mental health services and medication should be made available even to the poorest of people so as to increase access. There is also a need to ensure medical aid service providers cover all consultation fees without shortfalls.

In order to identify factors that strongly predict compliance and design a scientific model that could assist mental health care practitioners to proactively curb any possibilities of noncompliance,

future quantitative studies on the relationship between these factors and compliance among mental health patients are therefore recommended.

### Intervention model

*Patient's insight and attitude + Medical Related Support + Favourable environmental factors + Social Support = Increased Rate of Compliance*



**Figure 2: Intervention Model**

It is clear from the findings of the study that each factor above contributes in its own way toward increasing the rate of compliance from the clients that participated in the study. A combination of all 3 factors ensures that the client would receive adequate support. It is also critical to separate social support from the factors above as the study presented that it was a recurring and most influential factor. Findings also showed that most patient related, and environmental related factors can be positively influenced by an effective social support structure. However, there is a need to do a quantitative study of the factors presented in order to scientifically measure the extent to which they are correlated to compliance.

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