



Family-based intervention for adolescents with substance use disorders in Vietnam

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ABSTRACT

Background: Adolescent substance use is a leading risk factor of medical and social problems in adults. However, evidence-based interventions for substance use disorders (SUD) among youth in resource-limited countries are lacking. Treatnet Family (TF), developed by United Nations Office on Drugs and Crime (UNODC), aims to make youth SUD care more affordable and accessible in low- and middle-income countries. This study explores the suitability of TF in Vietnam.

Method: Twenty interviews were conducted with eight adolescents and their family members who participated in TF, and four practitioners who delivered TF. Questions centred on their experiences with the intervention and suggestions for improvement. Thematic analysis was used to evaluate the data.

Results: All adolescents were male with an average age of 19.3. Seven of them had left school. Most caregivers were female. Both family members and adolescents expressed a great demand for support, and both groups appreciated the immediate improvement in parent–child communication. However, the impact of TF could be compromised due challenges in recruiting families, possibly arising from the novelty of a family-based intervention in Vietnam and drug-related stigma. The perception of drug use as an acute condition instead of a chronic disorder, and the lack of a continuing care system, also made it difficult to retain participants.

Conclusion: Vietnamese adolescents with SUD and their family members were in great need of support and access to evidence-based interventions. Building a comprehensive, health-centred substance use disorder treatment and care system would enhance treatment impact.

1. Introduction

Substance use disorder (SUD) continues to be a significant global public health burden, affecting over 35 million people world-wide (UNODC, 2020). In the United States, more than 10% of adolescents aged 12–17 are affected by SUD, with significant increases compared to the previous year in marijuana use (SAMHSA, 2019). Substance use is a leading risk factor for multiple health and social issues. A survey among school children in five Asian countries showed that amphetamine use was associated with suicidal ideation, school truancy, being a victim of physical assault, bullying victimization, and anxiety (Peltzer & Pengpid, 2017). SUD often co-occurs with mental disorders (Jones & McCance-Katz, 2019), including suicidal ideation (Sellers et al., 2019), HIV risk behaviours (Michel et al., 2020; Ngoc Do et al., 2020) and nonfatal injuries among youth (Peltzer & Pengpid, 2017). Substance use might increase as a coping mechanism due to the financial and mental stress induced by the COVID-19 epidemic (Czeisler et al., 2020). In Vietnam, information on the prevalence and severity of SUD is lacking. However,

a handful of studies that involved adolescents with SUD (16–24 years old) in the country showed that this population had high HIV and HCV prevalence (6.3% and 9.4%, respectively) (SCDI, 2017). Among those who injected drugs, more than 52% reported having shared their needles and syringes, and among those who had sexual intercourse, 80% reported having exhibited at least one unsafe sexual behaviour (SCDI, 2017). Moreover, 36–43% were severely depressed and received no treatment (SCDI, 2017).

Family environments play a critical role at the onset of adolescent substance use and in the development of substance use problems (Rowe, 2012). While family conflicts and family psychopathology predict adolescent drug use, good family functioning is a protective factor against drug use outcomes (Muchiri & dos Santos, 2018). The United Nations Office on Drugs and Crime (UNODC) and World Health Organization (WHO) emphasize the importance of involving family members in the treatment of adolescent substance use and co-occurring disorders (UNODC & WHO, 2017). The age range of adolescence is flexible. While the WHO defines adolescence to be between the ages of 10 and 19 years

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old, other studies might consider late adolescence to extend to 22 years of age (Canadian Paediatric Society, 2003; D'Amico et al., 2021).

Despite the strong evidence supporting family-based therapy for adolescent substance use, the lack of qualified professionals, uninsured treatment cost, and lack of coordination between different systems hinder the expansion of family-based therapy in low- and middle-income countries (Austin et al., 2005; Hogue et al., 2017; Rowe, 2012). Acknowledging this gap, the UNODC developed Treatnet Family (TF) training package, which contains the core elements of family-based interventions and evidence-based family therapy programmes that could partially substitute for manualized treatment, and be helpful to frontline health workers and clinicians who are inexperienced with formal family therapy in low-resource settings (Busse, Kashino, Suhartono, Narotama, Pelupessy, Irwanto, et al., 2021; Hogue et al., 2017). The treatment has on average six sessions, attended by the adolescent with SUD and his or her family members, covering five phases: engagement, family assessment, creating a motivational context for change, primary intervention and termination. TF focuses on family interactions and seeks to improve communication within the family (Busse, Kashino, Suhartono, Narotama, Pelupessy, Irwanto, et al., 2021). To explore the feasibility and acceptability of TF among adolescents with SUD and their families in real-world settings, a pilot study was conducted in Vietnam.

Vietnam, a lower-middle-income country in Southeast Asia, has depenalised drug use since 2009 and since 2013, officially acknowledging that individuals with SUD are entitled to treatment (Government of Vietnam, 2013). Vietnamese culture is strongly family-oriented and family serves as a major resource to individuals using drugs (Li et al., 2013; Trang et al., 2020). The country has no system of care specifically designed for adolescents with SUD yet. The only evidence-based treatment is methadone maintenance for individuals older than 16 with opioid use disorder (Vuong et al., 2012). Other interventions including education, community-based monitoring and extended stays in drug rehabilitation centres have been proved to be ineffective (Vuong et al., 2012).

2. Method

2.1. Study design

This article presents the qualitative findings of the TF non-randomized pilot trial in Vietnam. This kind of feasibility study is in stage 1 of the 6-stage model of intervention development that goes from basic science (stage 0) to dissemination of empirically supported interventions in community settings (National Institutes of Health, n.d.). This study and its twin study in Indonesia were part of a program by the United Nations Office on Drugs and Crime (UNODC) to explore the feasibility, acceptability and preliminary impact of TF on adolescent substance use and family interactions in low- and middle-income countries (Busse, Kashino, Suhartono, Narotama, Pelupessy, Irwanto, et al., 2021). We used a before-after and follow-up study design to address the research questions. Quantitative data was triangulated with qualitative data from interviews with adolescents and their families. The study took place between April and November 2020. Hanoi Medical University Ethics Committee approved this study.

2.2. Study implementation

The study was conducted in Hanoi – a major socioeconomic centre of Vietnam with a potentially high burden of adolescent drug use. As TF would be ideally delivered in outpatient settings, we first posted information about our service on social media and informed various services that come into contact with people who use drugs, including family medicine and mental health clinics, a private high school that received students being expelled from other schools, community-based organizations for people who use drugs, and methadone clinics. Eligible

participants were adolescents between 14 and 21 years old with substance use problems that caused impairments in their social, educational or psychological life, and their family members. No exclusion criteria were applied.

The outbreak of the COVID-19 pandemic in Hanoi led to the lockdown of city hospitals and schools between mid-April and mid-May 2020. As enrolment was low, we decided to recruit participants in drug rehabilitation centres. In total, we enrolled 15 families, including 11 from drug rehabilitation centres. Full intervention was suspended during the lockdown but practitioners remained in contact with participants throughout by phone.

2.3. Study settings

We provided TF in two locations: the drug rehabilitation centre N⁰⁵ of Hanoi and the outpatient clinic Song Hanh Phuc (SHP) (Living Happily in English) at Hanoi Medical University Hospital. Centre N⁰⁵, located on the outskirts of Hanoi, provided compulsory and voluntary drug interventions including outpatient methadone maintenance treatment for people with opioid use disorder, inpatient residential care including detoxification, and abstinence-based counselling for people who use other drugs. A stay in residential care lasted between three to twelve months ([Drug Rehabilitation Centre #5], 2021). Our participants were recruited from the voluntary inpatient rehabilitation service. Families came to visit adolescents at weekends. The SHP clinic provided sexual health check-ups and treatment, addiction and mental health interventions, outreach, and case management (SHP clinic, 2021).

2.4. Participants: Adolescents, family members and practitioners

11/15 families stayed until the end of the therapy. We conducted 16 qualitative interviews with eight adolescents and their respective family members. Two families refused to take part in the interviews and one moved away from Hanoi. We conducted four additional interviews with the practitioners working with these families in TF.

Table 1 presents participants' characteristics. All adolescents were male with the average age of 19.3 years. Most had dropped out of school. 50% lived with one parent only or with other family members. Adolescents received no treatments other than TF or residential care in the drug rehabilitation centre. One adolescent received TF in the outpatient SHP clinic. Seven of the eight family members were female. Most were small business owners or held an office job. Half of caregivers completed middle school only. Four practitioners, including one medical doctor, one psychiatrist, one psychotherapist and one social worker, delivered TF in this study. Three of them had between five and sixteen years of experience in drug addiction treatment. The medical doctor had less than one year of experience.

2.5. Training and supervision for practitioners

Prior to the implementation, all practitioners received one week of skill-building training in TF by two national supervisors who had relevant experience in drug and mental health interventions, and who themselves were trained by TF international trainers. The training outlined the theoretical foundation of family therapy, core strategies, and treatment phases (Busse, Kashino, Suhartono, Narotama, Pelupessy, Avicenna Fikri, et al., 2021). Supervisors assisted practitioners in their first sessions with families. Case discussions were conducted every two weeks.

2.6. Data collection

The first and second authors conducted individual, in-depth interviews with adolescents, their family members and practitioners right after the intervention was completed. The interviewers were two PhD candidates with experience in drug-related issues and qualitative

Table 1
Participant characteristics.

| Adolescents | N = 8 |
|--|---------------------|
| Age (mean, SD) | 19.3 (1.5) |
| Gender | n (%) |
| Male | 8 (100) |
| Living arrangement | |
| Both parents | 4 (50) |
| Only with mother | 1 (12.5) |
| Other | 3 (37.5) |
| In school | |
| No | 7 (87.5) |
| Types of drug used | |
| Alcohol | 8 (100) |
| Cigarette smoking | 7 (87.5) |
| Marijuana | 7 (87.5) |
| Amphetamine | 5 (62.5) |
| Other drugs (ketamine, heroin, ecstasy, nitrous oxide) | 6 (75) |
| Intervention site | |
| SHP clinic (outpatient) | 1 (12.5) |
| Rehabilitation centre N ^o 5 (inpatient) | 7 (87.5) |
| Number of TF sessions (median, SD) | 8 (0.5) |
| Family members | N = 8 |
| Age (mean, SD) | 44.0 (8.9) |
| Gender | n (%) |
| Male / Female | 1 (12.5) / 7 (87.5) |
| Relationship with adolescent | |
| Father | 1 (12.5) |
| Mother | 6 (75) |
| Aunt | 1 (12.5) |
| Employment status | |
| Unemployed | 1 (12.5) |
| Temporary job | 1 (12.5) |
| Small business owner & office jobs | 6 (75) |
| Educational attainment | |
| Middle school | 4 (50) |
| High school and college | 4 (50) |
| Practitioner | N = 4 |
| Age (mean, SD) | 34 (7.5) |
| Gender | n (%) |
| Male/Female | 3 (75)/1 (25) |
| Specialty | |
| Medical doctor | 1 |
| Psychiatrist | 1 |
| Psychotherapist | 1 |
| Social worker | 1 |
| Years of experience in addiction treatment (median, min–max) | 9.5 (0.5–16) |

interviews. We called the four families who dropped out to invite them to the interviews, but could not reach them. We probed participants on what they liked about TF, what they learned from TF, and what challenges they perceived in taking part in TF as clients or as practitioners. Interviewers summarized each interview upon its completion and highlighted the main themes. Interviews lasted on average 60 min. All were audio-recorded and transcribed verbatim.

2.7. Data analysis

On the qualitative data analysis software Atlas.ti 8 (ATLAS.ti, n.d.), the first author coded data into previously defined themes in relation to the research questions, and then added other codes as they emerged during the coding process. Examples of these codes included “uncertainty about future drug use”, “all depends on you”, and “having a job counteracts relapse”. A summary of each theme was discussed within the research team including the practitioners. Critical feedback strengthened the final report.

3. Results

The results showed that participants, including both family members and adolescents, appreciated the therapy for its immediate perceived positive impact on their psychological wellbeing and parent–child

communication.

3.1. Great demand for support

Participants expressed a relief for participating in the family-based intervention. For both adolescents and parents, having someone in which to confide about their struggles made them feel reassured.

Feel relieved and less lonely. (Mother of Ado 10)

Having someone to talk to makes me feel better. (Ado 13)

For adolescents in the residential rehabilitation centre, family-based intervention sessions were opportunities for them to see their family. This reason was cited by some adolescents, with one youth confiding that he wanted this program to reconcile his relationship with his mother.

When I was home, I fought with my mum a lot. We didn't get along with each other. I thought this program would help me and my mum reconcile with each other so I could stay away from drugs when I'm back home. (Ado 06)

Three adolescents and two family members said they came to treatment to learn and to receive advice on drug use control. They thought that with better knowledge, they would know how to prevent relapse. Given that the rehabilitation centre was far from the city centre, it was difficult for most parents to go there every week. Not only did they have to travel a great distance to the centre, but some also had to take time off work, resulting in a loss of income. Nevertheless, with a desire to help their children, parents made it.

My greatest wish when joining this program was to know more, to understand better since I worried most about relapse. (Ado 07)

I decided to attend to learn more. To be honest, at my age, I know nothing. I just work all day. [...] Both my husband and son are involved with drugs. The more I learn, the better it will be for me. I need to try my best since I'm quite busy too. (Mother of Ado 09)

As a recruitment bias, most participants perceived no challenge in attending TF. Some parents had to take time off from their work to attend the sessions. However, if they perceived the sessions to be effective, they did not hesitate to do so.

As adolescents appreciated TF sessions and wanted to continue, their family members followed suit, although they might not initially have believed in treatment. One aunt who did not attend the first session expressed her reluctance when her nephew asked her to come with him to the therapy:

I've never thought that I'd one day come to psychotherapy. But he wanted to come. [...] At that time, I thought that it wouldn't help. (Aunt of Ado 05)

3.2. Appreciation for the immediate impact of TF

In general, most parents perceived positive changes in their adolescents and in themselves. Adolescents and families appreciated that practitioners made them think about their behaviours. This reflection made them start changing the way they interacted with each other. Better communication was highlighted in both parents' and adolescents' narratives. Families seemed to find the communication skills they learned in TF applicable and helpful.

Before, he had never cared about what I ate. But these days he goes out to buy me some dessert. [...] I saw changes in him as each week passed. He talked more and more. (Mother of Ado 09)

We used to get angry at each other every time we talked. It was hard to sit together. Now I've learned from the counsellor and talk to him more calmly. There is more affection this way. (Mother of Ado 12)

For many families, the therapy offered them the opportunity to really talk and listen to each other. Such perception was echoed in what adolescents reported:

[The therapy] pulls us closer. When I was at home, I was not close to my dad, but now I see that my parents care a lot about me. (Ado 12)

Most participants thought of TF as teaching opportunities and advice. This concurred with their motivation to enter the treatment “to learn”. Some adolescents appreciated the relapse prevention techniques. One adolescent who used heroin appreciated the information about methadone treatment. He said that he would try it if he could not keep abstinent after getting out of the centre. Parents seemed to appreciate the drug-related information they learned from TF sessions more than their adolescents, who had insider knowledge about it.

I understand more about drugs. Where they come from, how my son uses them when he's sad or happy, the role of his friends... Thus, I can pay closer attention to him. (Mother of Ado 09)

3.3. Challenges to the implementation of TF

Participants also indicated the obstacles that might hinder the implementation and long-term impact of TF, including challenges in recruiting families and challenges in retaining participants.

3.3.1. Challenges to recruitment

Lack of trust in the new service and parents' uncertainty about the benefits of family involvement in treatment constituted challenges in attracting participants to the therapy:

The parents don't know who you are. [They'd say] “How come you say that my child is addicted?” “How do I know if coming here would do anything good for us?” (Ado 09)

It was common that the parents in our sample came to treatment only when they were referred by someone they trusted. One parent described how she was approached by the intervention team and how she decided to come to the therapy:

That day, someone called me and said that he was a therapist at Hanoi Medical University and that they wanted to help adolescents about 18 years old. To be honest, I didn't believe him, I rejected his offer. The next day, the guy in my son's rehab centre called me to explain more about it. It's only then that I agreed to come here. (Mother of Ado 02)

Another challenge for recruitment might be parents' discouragement and lack of hope in their children:

Parents may perceive that it's difficult to quit drugs, and that there is no medication to treat it. They may not be confident in changing [their children's behaviours]. Or they may be fed up, [or] discouraged... (Mother of Ado 02)

Persuading someone who is ambivalent about the benefits of treatment to participate might not be easy. One adolescent said he was willing to refer other adolescents who used drugs to TF, but only if they were motivated to come:

If I meet someone who is addicted to drugs and who wants to stop, I will refer them here. But if they are using and tell me to use drugs with them, how can I tell them about treatment? (Ado 02)

This reluctance with respect to treatment was shown in an adolescent's testimonial:

To be honest... if my mum had told me that this was a treatment centre, I'd not have come. Because I'm not like someone who sees physicians every time they're sick. [...] I was only aware that this was a study when I met [practitioner's name]. (Ado 04)

3.3.2. Barriers to the long-term impact of TF

A major concern of practitioners regarding the impact of TF was related to the lack of an ongoing support system for adolescents and their families. Without such a system, practitioners worried about how to maintain the initially positive effect of TF over time. The larger socioeconomic context also made practitioners feel like treatment was not helpful:

I had one patient who was a heavy ice [crystal methamphetamine] user. He was working as a driver for sex workers so he used it to be able to work at night. He didn't live with his parents. And in his village, ice use was common. That's why he is at great risk of relapse. Since he's gone home, we can't reach him or his parents on the phone. (Practitioner 1)

Families often came to treatment with the purpose of helping adolescents stop drug use. When this initial goal seemed to be attained, they shifted their attention to finding adolescents a job. In their opinion, an appropriate job with regular schedule might be protective.

want to get him a factory job. Thus, he'd not have time to hang out with bad friends. (Mother of Ado 06)

I'd get him a job with his brother-in-law. He must work with a family member. I'd not let him wander out there. I cannot leave him at home alone, either. (Father of Ado 07)

As parents gave priority to finding work for adolescents and to social reintegration, they were less interested in continuing family therapy sessions when adolescents had achieved some level of abstinence. Moreover, the fact that most adolescents in our sample had already dropped out of school previously and sought work in another city, might also make conducting follow-up sessions with participants more challenging.

3.3.3. Uncertainty about future drug use

Although participants appreciated the positive changes in parent-adolescent communication and the new knowledge they acquired from the TF sessions, the most important outcome on which parents and adolescents agreed was abstinence from drugs. Since most adolescents included in the study were in the rehabilitation centre, parents were worried about potential relapse when their children left the centre.

I always feel anxious. Now he is doing very well, but whether or not he can keep abstinent when he goes home, this is what matters! (Mother of Ado 06)

Adolescents who were in the rehabilitation centre shared the same concern with their families. They were uncertain whether the relapse prevention strategies they learned could work in real life:

Here, we can only plan for it. Only when we get into society, into reality, into the real experience do we know whether it would work. (Ado 07)

This explained the disappointment of a mother when her son relapsed after getting out of the rehabilitation centre. She was discouraged and did not want to return to the therapy:

When the therapists talked to him, he seemed to understand. I thought that he'd try not to relapse when he was home. But then... he does it again. I'm no longer confident and at first I didn't want to come here. But luckily, it has been a few days that he hasn't smoked or called his friends. That's why I'm ok to return here. (Mother of Ado 02)

3.4. Suggestions to improve the implementation of TF

3.4.1. A comprehensive system of care

Both families and practitioners suggested that TF should be part of a comprehensive system of care where adolescents could be linked to other services, like vocational training or job placement, after they get out of rehab centres or medication-assisted treatment. A practitioner

reflected on an adolescent he had worked with:

I can see that he is dependent on heroin and he needs medication treatment. Moreover, when we talked about his future job, there seemed to be no way for him to get an appropriate job. (Practitioner 2)

One parent who worked in schools advised that scientific knowledge about drugs and addiction should be taught to middle and high school students. This might help students, teachers, and parents to be more aware of drug issues and the available help they can get.

3.4.2. Intervention structure

Practitioners suggested that the prescription of treatment should be flexible to meet the needs of adolescents and their families. For adolescents who had not disclosed their drug use to their families, individual sessions could help them until they were ready for family sessions. Moreover, the addition of individual sessions to family sessions would be helpful to address individuals' issues.

In family therapy, everyone should be ready to sit together. But some clients are not at that stage yet. They want to work individually first. (Practitioner 4)

3.4.3. Organisation of intervention

3.4.3.1. Frequency and duration. All adolescents, families and practitioners agreed that eight sessions and one meeting per week were an acceptable length and frequency. Parents might not be able to pursue treatment for too long as they may not be able to take time off work. One meeting a week might also be good for therapeutic purposes, as a practitioner explained:

If we meet them too frequently, changes might not be clear and it takes a lot of time. Adolescents also need time to do the homework we give them. (Practitioner 4)

However, practitioners also perceived that some families needed more time to work on their relationship issues. Given the time constraints on this pilot study, they suggested that the duration of future interventions should be adapted to each family.

3.4.3.2. Location. Adolescents commonly suggested that intervention should take place outside the rehabilitation centre for them to test their knowledge in real-world situations.

Out there is the reality. Only when we experience things do we see what doesn't work. In here we can only plan for it. (Ado 10)

Given the particular condition of the pilot study, parents of adolescents in residential care appreciated that treatment was provided in the rehabilitation centre as they could see their children more often. This suggested that family therapy could be integrated into residential treatment for better outcomes.

4. Discussion

Affordable, evidence-based interventions such as TF for adolescents with SUD are needed, especially in low- and middle-income countries, in order to prevent advancement to more severe SUD in adulthood. This pilot study explored the feasibility and acceptability of one such intervention in the context of Vietnam. Its findings indicated a great demand for support of both adolescents and their families. However, they also shed light on the challenges facing a more effective implementation of family therapy and other evidence-based interventions for adolescents with SUD in different contexts.

Attending therapeutic sessions together brought a sense of relief to caregivers and adolescents. Both appreciated the opportunity to see and talk to each other in the meetings with a therapist. This pointed to

families' needs for psychological aid during crises and for effective adolescent substance use interventions. As mental health issues are common among family members of people who use drugs (Li et al., 2013), these caregivers might benefit from individual sessions in addition to family sessions in order to improve their general health functioning. The finding also suggested that adolescents in centre-based drug rehabilitation and their parents would appreciate family sessions being integrated into their residential care. Continuing treatment in the community after adolescents have left rehabilitation centres would be beneficial to families.

The improvement in family functioning was shown in the testimonials of family members and adolescents. Both adolescents and their caregivers appreciated the opportunity to communicate with each other in TF sessions. Being able to listen to each other made them realize that the other person cared about them. Parents also better understood what adolescents were confronting and had more sympathy for their children. The small positive changes in parent-child interaction based on this mutual understanding made families feel happy and hopeful. This finding echoes that of the Indonesian TF study, in which both adolescents and their family members reported that communication and listening were the most useful skills to develop closer family relationships (Busse, Kashino, Suhartono, Narotama, Pelupessy, Irwanto, et al., 2021). This finding is also consistent with previous reviews that assert the importance of parent-child connectedness and its key element, open, constructive family conversations, in preventing adolescent substance use (Carver et al., 2017; Ryan et al., 2010; Townsend & McWhirter, 2005).

The retention rate of participants in this pilot was 73.3%, comparable to other addiction treatment programs (Liddle et al., 2008; Marinelli-Casey et al., 2008). This retention rate might stem from the fact that most participants were in residential care during TF. Nonetheless, outpatient family therapy has been showed to retain participants better than community treatment as usual (Robbins et al., 2011). Further studies are needed to explore the capacity of TF to retain participants in outpatient settings in Vietnam.

The challenges in recruiting adolescents and their families into TF constituted a major barrier to the pilot study. As psychotherapy, and especially family therapy, are unfamiliar to the vast majority of the population, it is understandable that parents and adolescents were sceptical about this new service. Moreover, as adolescents in general have recently initiated drug use, it is possible that they have not yet experienced serious drug-related consequences. Thus, adolescents may consider SUD treatment to be unnecessary. Finally, families might try to conceal their adolescents' drug use problems by not seeking help for fear of drug-related stigma (Trang et al., 2021).

Another barrier to the retention of patients in SUD treatment could be the widespread belief among Vietnamese people that addiction is an acute condition and not a chronic disease (Higgs et al., 2009). If immediate abstinence is considered to be the key outcome by families and adolescents, the effectiveness of therapy might be judged lower and participants might be less likely to remain in treatment. This explains the uncertainty of parents and adolescents about future relapse as they leave therapy, and the decision of some parents to give up on therapy as their adolescents relapsed.

4.1. Limitations

The findings of this study should be judged in light of several limitations. Firstly, most of our participant families received TF in inpatient settings and met only once a week during these sessions. The impact of TF on family interactions might not be the same as it would be if adolescents and their family members lived together and shared daily activities. We were also unable to assess the challenges in retaining participants in outpatient settings. Secondly, we could not interview the four families who dropped out of TF and thus explore the challenges they faced in attending treatment. These participants might have had specific

reasons for drop-out (i.e. serious issues in family relationship, mental health problems of family members or inability to arrange time for therapy) and were less likely to be satisfied with treatment. Therefore, their feedback might have indicated other areas for improvement within the program.

4.2. Recommendations

The review of Rowe (2012) indicates that multidimensional family therapy (MDFT) and multisystemic therapy (MST) are the two most effective family interventions. Both of these therapies seek to work with not only the family and adolescent, but also with the school and legal systems to produce a convergent impact. Moreover, integrating addiction therapy into existing systems of care, such as residential treatment or drug court, would enhance treatment adherence (Marinelli-Casey et al., 2008).

While building such a comprehensive system of care would promote the impact of family interventions, it would take time for low- and middle-income countries like Vietnam to develop it. In the meantime, practitioners could build a referral system upon their existing collaboration with other treatment centres and non-governmental organizations working with youth. The new law on drug prevention of Vietnam, which specifies that youth who use drugs should receive treatment, may serve as a basis to further develop drug treatment services for adolescents (Vietnam National Assembly, 2021).

The pilot study provided important insights on the delivery and organization of treatment for adolescents with substance use problems. In order to be effective, treatment with adolescents using drugs should be flexible to adapt to individuals' issues. Family sessions could be combined with individual sessions when needed. The reluctance of families in getting family therapy might be reduced when TF is established as an official service of the hospital. Word of mouth and referrals from other services, in combination with formal advertisement, would help with the recruitment and retention of clients.

Evidence-based interventions for SUD, like contingency management and combined psychosocial interventions such as in Matrix, are being tested with methadone patients in Vietnam, largely in adult populations (Diep et al., 2021; Giang et al., 2020). The pilot findings of these studies suggest that it is feasible to implement these interventions at a larger scale (Diep et al., 2021; Giang et al., 2020). While contingency management has been proved to enhance retention rate (Brown & DeFulio, 2020), combining it with TF would better retain participants and thus, improve treatment outcomes.

5. Conclusion

This feasibility study of TF as an alternative family therapy for low- and middle-income countries showed that adolescents with SUD and their families in Vietnam are in great need of therapeutic support. All participants appreciated the positive impact of TF on their own psychological wellbeing, and especially the possibility of communicating with each other in a safe place, and in the presence of the therapist. The challenges in recruiting participants are related to the unfamiliarity of this intervention, as well as other psychotherapeutic interventions for drug use disorders in Vietnam, and associated barriers to access for treatment of adolescents. A comprehensive care system would be able to meet people where they are and would enhance treatment impact.

6. Disclaimer

Anja Busse, Wataru Kashino and Sanita Suhartono are staff members of the United Nations. The views expressed in this article are those of the authors and do not necessarily reflect the views of the United Nations.

CRediT authorship contribution statement

Nguyen Thu Trang: Data curation, Formal analysis, Investigation, Project administration, Visualization, Writing – original draft, Writing – review & editing. **Dinh Thanh Thuy:** Investigation, Validation. **Anja Busse:** Conceptualization, Funding acquisition, Methodology, Resources. **Wataru Kashino:** Conceptualization, Funding acquisition, Methodology, Resources. **Sanita Suhartono:** Conceptualization, Funding acquisition, Methodology, Resources. **Le Minh Giang:** Funding acquisition, Resources, Supervision, Validation.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- ATLAS.ti: The Qualitative Data Analysis & Research Software. (n.d.). ATLAS.ti. Retrieved June 7, 2021, from <https://atlasti.com/>.
- Austin, A. M., Macgowan, M. J., & Wagner, E. F. (2005). Effective family-based interventions for adolescents with substance use problems: A systematic review. *Research on Social Work Practice, 15*(2), 67–83. <https://doi.org/10.1177/1049731504271606>
- Brown, H. D., & DeFulio, A. (2020). Contingency management for the treatment of methamphetamine use disorder: A systematic review. *Drug and Alcohol Dependence, 216*, 108307. <https://doi.org/10.1016/j.drugalcdep.2020.108307>
- Busse, A., Kashino, W., Suhartono, S., Narotama, N., Pelupessy, D., Avicenna Fikri, A., & Essau, C. A. (2021). Acceptability and feasibility of using digital technology to train community practitioners to deliver a family-based intervention for adolescents with drug use disorders during the COVID-19 pandemic. *Addictive Behaviors Reports, 14*, 100357. <https://doi.org/10.1016/j.abrep.2021.100357>
- Busse, A., Kashino, W., Suhartono, S., Narotama, N., Pelupessy, D., Irwanto, & Essau, C. A. (2021). An open trial investigation of Treatnet Family among adolescents with substance use problems. *Addictive Behaviors Reports, 14*, 100358. <https://doi.org/10.1016/j.abrep.2021.100358>
- Canadian Paediatric Society (2003). Age limits and adolescents. *Paediatrics & Child Health, 8*(9), 577.
- Carver, H., Elliott, L., Kennedy, C., & Hanley, J. (2017). Parent–child connectedness and communication in relation to alcohol, tobacco and drug use in adolescence: An integrative review of the literature. *Drugs: Education, Prevention and Policy, 24*(2), 119–133. <https://doi.org/10.1080/09687637.2016.1221060>
- Czeisler, M. É., Lane, R. I., Petrosky, E., Wiley, J. F., Christensen, A., Njai, R., Weaver, M. D., Robbins, R., Facer-Childs, E. R., Barger, L. K., Czeisler, C. A., Howard, M. E., & Rajaratnam, S. M. W. (2020). Mental health, substance use, and suicidal ideation during the COVID-19 pandemic—United States, June 24–30, 2020. *Morbidity and Mortality Weekly Report, 69*(32), 1049–1057. [10.15585/mmwr.mm6932a1](https://doi.org/10.15585/mmwr.mm6932a1).
- D'Amico, E. J., Davis, J. P., Tucker, J. S., Seelam, R., & Stein, B. D. (2021). Opioid misuse during late adolescence and its effects on risk behaviors, social functioning, health, and emerging adult roles. *Addictive Behaviors, 113*, 106696. <https://doi.org/10.1016/j.addbeh.2020.106696>
- Diep, N. B., Trang, N. T., Anh, V. M., Thuy, D. T. T., Hoe, H. D., Van, H. T. H., ... Giang, L. M. (2021). *Acceptability and feasibility of adaptive evidence-based interventions for methadone patients who use methamphetamine in a lower middle income country*. NIDA International Forum.
- [Drug Rehabilitation Centre #5]. (2021). <https://solao dong.hanoi.gov.vn/cai-ngh-ien-so-5>.
- Giang, L. M., Hoe, H. D., Anh, V. M., Anh, N. H., Trang, N. T., Larkins, S., & Shoptaw, S. (2020). Tailoring evidence-based interventions to reduce methamphetamine use among HIV-positive patients on methadone in Hanoi, Vietnam. *The College on Problems of Drug Dependence (CPDD)*.
- Government of Vietnam (2013). Approval of the Renovation plan for drug treatment in Vietnam until 2020—Decision 2596/QĐ-TTg.
- Higgs, P., Jordens, J., Maher, L., & Dunlop, A. (2009). Vietnamese-Australian heroin users' perspectives on the role of the family in treatment. *Drugs: Education, Prevention and Policy, 16*(5), 409–421. <https://doi.org/10.1080/09687630802063623>
- Hogue, A., Bobek, M., Dauber, S., Henderson, C. E., McLeod, B. D., & Southam-Gerow, M. A. (2017). Distilling the core elements of family therapy for adolescent substance use: Conceptual and empirical solutions. *Journal of Child & Adolescent Substance Abuse, 26*(6), 437–453. <https://doi.org/10.1080/1067828X.2017.1322020>
- Jones, C. M., & McCance-Katz, E. F. (2019). Co-occurring substance use and mental disorders among adults with opioid use disorder. *Drug and Alcohol Dependence, 197*, 78–82. <https://doi.org/10.1016/j.drugalcdep.2018.12.030>
- Li, L., Tuan, N. A., Liang, L.-J., Lin, C., Farmer, S. C., & Flore, M. (2013). Mental health and family relations among people who inject drugs and their family members in Vietnam. *The International Journal on Drug Policy, 24*(6), 545–549. <https://doi.org/10.1016/j.drugpo.2013.06.007>

- Liddle, H. A., Dakof, G. A., Turner, R. M., Henderson, C. E., & Greenbaum, P. E. (2008). Treating adolescent drug abuse: A randomized trial comparing multidimensional family therapy and cognitive behavior therapy. *Addiction (Abingdon, England)*, *103*(10), 1660–1670. <https://doi.org/10.1111/j.1360-0443.2008.02274.x>
- Marinelli-Casey, P., Gonzales, R., Hillhouse, M., Ang, A., Zweben, J., Cohen, J., ... Rawson, R. A. (2008). Drug court treatment for methamphetamine dependence: Treatment response and posttreatment outcomes. *Journal of Substance Abuse Treatment*, *34*(2), 242–248. <https://doi.org/10.1016/j.jsat.2007.04.005>
- Michel, L., Nguyen, L. T., Nguyen, A. K., Ekwari, J. P., Laureillard, D., Nagot, N., ... Khuat, O. T. H. (2020). Exposure to HIV risks among young people who use drugs (YPUD) in three cities in Vietnam: Time to develop targeted interventions. *Harm Reduction Journal*, *17*(1), 13. <https://doi.org/10.1186/s12954-020-00357-4>
- Muchiri, B. W., & dos Santos, M. M. L. (2018). Family management risk and protective factors for adolescent substance use in South Africa. *Substance Abuse Treatment, Prevention, and Policy*, *13*(1), 24. <https://doi.org/10.1186/s13011-018-0163-4>
- National Institutes of Health (n.d.). Stage Model for Behavioral Intervention Development. Retrieved September 16, 2021, from <https://www.nia.nih.gov/research/dbsr/nih-stage-model-behavioral-intervention-development>.
- Ngoc Do, H., Ngoc Nguyen, D., Quynh Thi Nguyen, H., Tuan Nguyen, A., Duy Nguyen, H., Phuong Bui, T., ... Ho, C. S. H. (2020). Patterns of risky sexual behaviors and associated factors among youths and adolescents in Vietnam. *International Journal of Environmental Research and Public Health*, *17*(6), 1903. <https://doi.org/10.3390/ijerph17061903>
- Peltzer, K., & Pengpid, S. (2017). Cannabis and amphetamine use among adolescents in five Asian countries. *Central Asian Journal of Global Health*, *6*(1). <https://doi.org/10.5195/cajgh.2017.288>
- Robbins, M. S., Feaster, D. J., Horigian, V. E., Rohrbaugh, M., Shoham, V., Bachrach, K., ... Szapocznik, J. (2011). Brief strategic family therapy versus treatment as usual: Results of a multisite randomized trial for substance using adolescents. *Journal of Consulting and Clinical Psychology*, *79*(6), 713–727. <https://doi.org/10.1037/a0025477>
- Rowe, C. L. (2012). Family therapy for drug abuse: Review and updates 2003–2010. *Journal of Marital and Family Therapy*, *38*(1), 59–81. <https://doi.org/10.1111/j.1752-0606.2011.00280.x>
- Ryan, S. M., Jorm, A. F., & Lubman, D. I. (2010). Parenting factors associated with reduced adolescent alcohol use: A systematic review of longitudinal studies. *Australian & New Zealand Journal of Psychiatry*, *44*(9), 774–783. <https://doi.org/10.1080/00048674.2010.501759>
- SAMHSA (2019). The national survey on drug use and health. 63.
- SCDI, C. for S. C. D. I. (2017). Young people who use drugs in Vietnam and HIV risks: Initial assessment findings.
- Sellers, C. M., McRoy, R. G., & O'Brien, K. H. M. (2019). Substance use and suicidal ideation among child welfare involved adolescents: A longitudinal examination. *Addictive Behaviors*, *93*, 39–45. <https://doi.org/10.1016/j.addbeh.2019.01.021>
- SHP clinic. (2021). Phòng khám Sống Hạnh Phúc. <http://songhanhphuc.info/>.
- Townsend, K. C., & McWhirter, B. T. (2005). Connectedness: A review of the literature with implications for counseling, assessment, and research. *Journal of Counseling & Development*, *83*(2), 191–201. <https://doi.org/10.1002/j.1556-6678.2005.tb00596.x>
- Trang, N. T., Jauffret-Roustide, M., Giang, L. M., & Visier, L. (2020). How to be self-reliant in a stigmatising context? Challenges facing people who inject drugs in Vietnam. *International Journal of Drug Policy*, *87*, 102913. <https://doi.org/10.1016/j.drugpo.2020.102913>
- Trang, N. T., Jauffret-Roustide, M., Giang, L. M., & Visier, L. (2021). "I'm not like others": Stigma navigation by people who inject drugs in Vietnam. *Drugs: Education, Prevention and Policy*. <https://www.tandfonline.com/doi/abs/10.1080/09687637.2021.1874875>.
- UNODC (2020). World Drug Report 2020. UNODC.
- UNODC, & WHO (2017). International standards for the treatment of drug use disorders. 99.
- Vietnam National Assembly (2021). [Law on Drug prevention #73/2021/QH14].
- Vuong, T., Ali, R., Baldwin, S., & Mills, S. (2012). Drug policy in Vietnam: A decade of change? *International Journal of Drug Policy*, *23*(4), 319–326. <https://doi.org/10.1016/j.drugpo.2011.11.005>