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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

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ABSTRACT

Introduction: By adhering to government preventative messages to stay-at-home and social distancing during the COVID-19 pandemic, training practitioners in person in implementing a family-based intervention (i.e., Treatnet Family) is not possible. The present study examined the feasibility and acceptability of using digital technology to remotely deliver Treatnet Family training to practitioners in community counselling services in Indonesia.

Method: Fifteen practitioners, from the association of addiction counsellors in Indonesia, participated in the Treatnet Family workshop remotely. The training was delivered by four national Treatnet Family trainers remotely via a digital platform for five days with additional take-home assignments.

Results: All practitioners reported that Treatnet Family training have enhanced their skills in working with adolescents and their family. Most practitioners reported having confidence in conducting Treatnet Family and in applying core skills of family-based intervention. Participating in the workshop enabled practitioners to learn the core skills of the Treatnet Family at their own pace. However, some practitioners also stated few disadvantages in remote training, including having limited time for the discussion and feeling overwhelmed with the assignments. Some find it hard to attend such training from their home due to distractions.

Conclusion: Digital technology is acceptable and feasible method for training community practitioners to deliver Treatnet Family to adolescents with SUDs and their families in Indonesia. These findings can inform the way to use digital technology to deliver core family-based skills to community practitioners in other low-resource settings.

1. Introduction

Family-based interventions have emerged as the treatment of choice for adolescent substance use disorders (SUDs). These interventions emphasise the importance of the family system in both the development and maintenance of adolescent SUDs (Sexton & Turner, 2011; Ozechowski & Liddle, 2002). In family-based interventions, the key targets for change are familial factors such as communication skills, contingency management, and conflict resolution (Alexander, Waldron, Robbins, & Neeb, 2013; Ozechowski & Liddle, 2002). The key aim of the family-based interventions is to help adolescents and their families change the patterns of family interaction which contribute to adolescent SUDs and to help family members develop specific skills (Sexton & Turner, 2011) such as communication, conflict resolution, problem solving, and effective parenting skills.

Studies that used family-based therapies have demonstrated significant effects in reducing adolescent drug use and delinquent behaviour (Rigter et al., 2013), and recidivism and substance use among high-risk youths (Thornberry et al., 2018). Furthermore, family therapy has been identified as an effective treatment for cannabis and stimulant use disorders (World Health Organisation, 2015). Family therapy has also
been reported to successfully engage and retain difficult adolescents and their family members (Essau & Delfabbro, 2020).

Given its effectiveness in treating adolescent SUDs, family therapy has been recommended in the United Nations Office on Drugs and Crime (UNODC)-World Health Organisation (WHO) International Standards for the Treatment of Drug Use Disorders (2020) and in WHO MhGap evidence centre as the treatment for adolescent SUDs. However, in low-and middle-income countries (LMICs), adolescents with SUDs and their families do not have or have very little access to effective treatment such as family-based therapy. Hence, UNODC (2019) developed a science informed, skills-based and practical treatment training package with evidence-based elements of family therapy for adolescents with SUDs including those who are in contact with the criminal justice system. Through an iterative process and with several rounds of feedback from a wide range of international stakeholders, the Treatnet Family training materials were developed, which were further tailored to multiple cultural contexts, pilot-tested in three Asian regions in 2018. The Treatnet Family training package includes PowerPoint slides with extensive trainer instructions, lectures, discussions, videos, roleplay demonstrations, case examples, skill practice and other participatory learning activities. The Treatnet Family intervention contains 6–8 sessions, with each session lasting between 90 and 120 min.

In November 2019 and January 2020, practitioners in Indonesia and Vietnam, respectively, have been trained face-to-face in delivering Treatnet Family. Practitioners from numerous other LMICs have been scheduled to receive training in Treatnet Family in 2021. However, because of the preventative measures to contain the spread of COVID-19, face-to-face training for practitioners to implement Treatnet Family is not possible during the pandemic.

Yet, during the COVID-19 outbreak is the most crucial time to provide the intervention to adolescents with SUDs and their families. By adhering to government preventative messages to stay-at-home and social distancing, the pandemic has caused significant disruption of everyday routines and caused stress to the lives of adolescents and families which also may create conflicts within the family. It is therefore not surprising that the rates of mental health problems, including SUDs have increased significantly among young people since the beginning of the pandemic. According to a report by YoungMinds (2020), up to 80% of young people with histories of mental health problems have been reported to show a worsening of symptoms. Furthermore, relapses to abuse from alcohol were common during the pandemic, being 19% (Sun, Li, Bao et al., 2020).

COVID-19 outbreak has also seen changes in the supply and consumption patterns of illicit drugs. While social distancing has reduced drug trafficking on the streets, drugs could be obtained via the internet through specialized websites, which could have explained for an increase in cannabis product online sales during the first three months of 2020 (Goroškova, Stoian, Cunningham, Griffiths, Singleton, & Sedefov, 2020). Furthermore, the difficulty of getting access to drugs has prompted those with SUDs to misuse psychoactive prescription medications (Rinaldi, Bersani, Martellini, & Zaami, 2020). Others may have changed drug use patterns from using substances which can be consumed alone, and which can have a relaxing effect (Orsolini, Corkery, Chiappini, et al., 2020). There is a risk associated with using drugs alone and that an unwitnessed overdose (such as opioid use) can be deadly. As a recent US registry study showed, there is an increased mortality and morbidity of people who use drugs during COVID-19 (Wang, Kaelber, Xu et al., 2021).

The above findings underline the importance of increasing mental health care, including those with SUDs, during the COVID-19 pandemic (Xiang et al. 2020). Thus, increasing number of practitioners in high-income countries have transitioned to delivering their services remotely via digital platforms. In LMICs, a major obstacle for disseminating evidence-based interventions such as the Treatnet Family is the limited number of specialist providers to deliver these treatments. Thus, building the capacity of non-specialist practitioners to deliver evidence-based interventions for SUDs among adolescents is urgently needed. However, due to social distancing measures during the COVID-19 outbreak, innovative approaches (e.g., digital technologies) are needed to train practitioners to deliver Treatnet Family so that adolescents with SUDs and their families could receive the support they need during the pandemic. However, studies that examined the feasibility and acceptability of using digital technologies to train practitioners in LMICs in family-based intervention are lacking. This is surprising given the number of studies that have provided beneficial evidence of using digital technology in training health care delivery among community health workers in LMICs (Long et al., 2019; Mishra et al., 2019; Rahman et al., 2019).

Therefore, the aim of the present study was to determine the feasibility and acceptability of using digital technology to remotely deliver Treatnet Family training to practitioners in community counselling services in Indonesia. Another aim was to determine practitioner’s experience in participating in Treatnet Family training. This evaluation therefore determined the extent to which Treatnet Family workshop produced change in the practitioner’s knowledge in the core skills and techniques of a family-based intervention and their perceived confidentiality in applying Treatnet Family into their daily practice.

2. Method

2.1. Participants

Fifteen practitioners (60% males) participated in the Treatnet Family workshop remotely, with a mean age of 35.6 years (Table 1). The practitioners were recruited from the Indonesian Association of Addiction Counsellors across Indonesia. Most of them have a bachelor’s degree (66.7%), and all have received training in addiction. Nine (60%) of the practitioners have drug-using history. Having former drug-users as practitioners could serve as models of hope for adolescents with SUDs and their families. It also helps to reduce stigmatisation against people with SUDs. Furthermore, it is important for the Treatnet Family implementation and study to work with existing human resources in the community, to learn if and how Treatnet Family can be implemented in such a setting. In many parts of the world, the available workforce delivering drug use disorder treatment services are people in recovery with a history of drug use themselves.

2.2. Treatnet Family training

The purpose of the Treatnet Family workshop was to train practitioners in the skills and techniques of the core elements of family therapy in the treatment of adolescents with SUDs. The workshop was designed to ensure that the practitioners:

- Have knowledge of the theoretical background of Treatnet Family, including Family Systems Theory, Ecological Systems Theory, Social Construction Theory, Social Learning/Behavioral Theories.

Table 1

| Practitioner’s sociodemographic information. | N (%) |
|--------------------------------------------|-------|
| Gender                                     |       |
| Male                                       | 9 (60) |
| Female                                     | 6 (40) |
| Age (range: 22-49 years)                   | Mean = 35.60 years (SD = 7.13) |
| Experience in working with adolescents     | Mean = 6.53 years (SD = 5.45) |
| (range: 0 – 17 years)                      |       |
| Education                                  |       |
| Masters degree                             | 1 (6.7) |
| Bachelors degree                           | 10 (66.7) |
| Associate degree                           | 1 (6.7) |
| High school                                | 3 (20.0) |
| Training in addiction                      | 15 (100.0) |
| Training in child development              | 6 (40.0) |
| Drug-using history                         | 9 (60.0) |
• Have a thorough knowledge on the core assumptions of Family Therapy.
• Master the core skills needed to deliver Treatnet Family (e.g., Positive Reframing, Positive Relational Reframing, Perspective Taking, etc.).
• Master the implementation of Treatnet Family skills in each Treatnet Family session.

Training was delivered by four national Treatnet Family trainers online (Table 2) remotely via a digital platform once a week from December 7th to 28th, 2020 (total of five days), with additional take-home assignments. The practitioners received the Treatnet Family training through various teaching strategies such as the use of breakout room and video recording assignments for the socialization and integration of the participants, theoretical class of the central concepts in Power-Point, practical activities such genograms, videos, case studies, role plays, reflections, group and individual reflexive activities. The practitioners were encouraged to make an action plan in implementing the newly acquired skills and techniques to adolescents with SUDs and their families after the training.

All the practitioners were provided with a Treatnet Family practitioner manual which gives a clear guidance on exactly what to do when, and how to do it. Furthermore, there was a messenger group for each supervisor and supervisees/practitioners, as well as within the practitioners for reminders on assignments during the training period.

2.3. Instruments

After the Treatnet Family training, all the practitioners completed three self-report questionnaires. Another questionnaire (Knowledge on Family-based Intervention Scale) was administered to the practitioners before and after the training. The practitioners were also asked, through a semi-structured interview, about their experience in participating with the Treatnet Family training and their perception on the barriers and facilitators in implementing this intervention in their organisation.

2.3.1. Self-report questionnaires

Knowledge on Family-based Intervention Scale (UNODC, 2019) was used to measure knowledge surrounding the theoretical background and core components of family-based intervention. The first eight items have four multiple choice questions (where correct answers received a score of one, and incorrect answers – a score of zero). An example of the question include: “What is not a perspective taking question? The four possible answers are (a) “How do you think Mom feels when you miss school?” (b) “Do you think your mother worries about you?” (c) “Do you want to drop out of school?”, and (d) “Why do you think your mom gets angry with you?” The last two questions were to be answered with a “true” or “false”. An example of an item is “The genogram can be used as an engagement tool. “

Training Feedback Scale was used to measure the extent to which the practitioners learnt the core Treatnet Family skills during the 5-day workshop.

| DAY 1 | DAY 2 | DAY 3 | DAY 4 | DAY 5 |
|-------|-------|-------|-------|-------|
| Introduction | Core strategies | Treatment phases | Additional issues | Microteaching and feedback |
| • Theoretical foundations of Treatnet Family | • Positive reframing | • Treatment phases: engagement, family assessment, creating a motivational context for change, primary intervention | | |
| • Basic information on drug use and treatment | • Positive relational reframing | | • Problem solving | |
| • Core assumptions of Treatnet Family | • Perspective taking | | • Evaluation | |
| • Cultural issues | • Relational questions | | | |
| | • Going with resistance | | | |

Table 2

Outline of Treatnet Family workshop.

Evidence-Based Practice Attitude Scale (EBPAS; Aarons, 2004) was used to measure practitioner’s attitudes toward adoption of evidence-based practices. It contains 15 items which covers four attitude domains: (1) The Appeal sub-scale measures the extent to which the practitioner would adopt a new practice if it is intuitively appealing, makes sense, could be used correctly, or is being used by colleagues who are happy with it. (2) The Requirements sub-scale measures the likelihood of adopting evidence-based practices so if it is required by an agency, supervisor, or state. (3) The Openness sub-scale measures the extent to which the provider is generally open to trying new interventions and would be willing to try or use new types of therapy. (4) The Divergence sub-scale measures practitioner’s perceived divergence of one’s usual practice with research-based/academically developed interventions.

Self-Efficacy Scale was used to measure the trainer’s confidence level in delivering Treatnet Family in their settings. This scale is based on the construct of self-efficacy which is a person’s belief in his/her capability to master a specific task (Bandura, 1986). The practitioners were asked to rate on a 5-point Likert scale ranging from “not at all confident” (0) to “extremely confident” (4) their level of confident in their skills, knowledge, experience, ability to overcome existing obstacles such as limited time, space.

2.3.2. Semi-structured interview

Semi-structured interview was conducted with the practitioners to explore their experiences of the training and perceived barriers and facilitators of implementing Treatnet Family within their organisation.

To determine the extent to which practitioners have learnt the core skills of family-based interventions during the Treatnet Family workshop, the study also used videos, case studies, role plays, and reflexive activities. In all these activities, the practitioners received individual feedback from their supervisors. Furthermore, by observing the implementation of the Treatnet Family sessions, the supervisors could assess the practical skills that the practitioners have actually achieved.

3. Results

3.1. Quantitative findings

The practitioners showed a 40% increase in knowledge about family-based intervention from pre- to post-training. All practitioners reported that Treatnet Family training have enhanced their skills in working with adolescents and their family. Eight (53.3%) and 7 (46.1%) practitioners indicated having learnt “a lot” and “some”, respectively, from the Treatnet Family training.

After the training, all practitioners also reported that they have confidence (1 reported “Extremely confident”, 8 reported “very confident”, and 6 reported “moderately confident”) in conducting Treatnet Family and applying core skills. Table 3 shows the specific family therapy core skills that they have learned during the workshop. Almost all the practitioners learnt some/a lot about each of the family therapy core skills.
Table 3
Specific family therapy core skills that the practitioners have learned during the Treatnet Family workshop.

| Skill                          | A Lot (%) | Some (%) | A Little (%) | Nothing at All |
|-------------------------------|-----------|----------|--------------|----------------|
| Reframes                      | 10 (66.7) | 5 (33.3) | 0            | 0              |
| Relational reframes           | 9 (60.0)  | 6 (40.0) | 0            | 0              |
| Perspective taking            | 9 (60.0)  | 6 (40.0) | 0            | 0              |
| Relational questions          | 8 (53.3)  | 7 (46.7) | 0            | 0              |
| Going with resistance         | 7 (46.7)  | 8 (53.3) | 0            | 0              |

Table 4 shows the means, standard deviations, and internal consistency reliabilities for each of the sub-scales of the Evidence-Based Practice Attitude Scale (EBPAS). Findings on the EBPAS showed that the practitioners were generally open and willing to try Treatnet Family, and that they indicated this type of intervention to be appealing. Practitioner’s attitudes toward adoption of evidence-based practices did not differ significantly by practitioner’s gender ($F(1, 14) = 0.02, ns$), age group ($F(1, 14) = 0.04, ns$), and working experience ($F(1, 14) = 0.09, ns$).

The Cronbach’s alpha for the total score was 0.79, with values ranging from 0.11 (Openness to new practices) to 0.95 (likelihood of adopting evidence-based practices given requirements to do so), suggesting a good level of internal consistency except for the Openness to new practices subscale.

3.2. Qualitative findings

3.2.1. Acceptability of digital training

Participating in the Treatnet Family workshop via teleconferencing appeared to be a positive experience for the practitioners. Some practitioners described their experience as:

“It was fun! I gained so much knowledge....”

The practitioners talked about the fact that being trained in Treatnet Family using digital technology give them freedom to learn different aspects of the intervention at their own pace.

“I like how the trainers provided us with simulation videos during online training. I can replay all the videos after sessions at my own pace. I think this is one of the advantages of online training.”

“...we are provided with many opportunities to practice the session through simulation video and role-play.”

“I love how the material was delivered through video to replay those videos after sessions to help me gain more insight.”

Table 4
EBPAS Subscales and Item Means, Standard Deviations, and Cronbach’s Alpha.

| subscale                        | Mean (SD)  | Cronbach Alpha |
|--------------------------------|------------|----------------|
| Requirements sub-scale         | 2.38 (1.2) | 0.95           |
| Agency required                | 2.33 (1.18) |               |
| Supervisor required            | 2.40 (1.24) |               |
| State required                 | 2.40 (1.45) |               |
| Appeal sub-scale               | 3.22 (0.76) | 0.75           |
| Makes sense                    | 3.67 (1.05) |               |
| Intuitively appealing          | 3.87 (0.35) |               |
| Get enough training to use     | 2.67 (1.29) |               |
| Colleagues happy with intervention | 2.67 (1.05) |               |
| Openness sub-scale             | 3.32 (0.42) | 0.11           |
| Will follow a treatment manual | 3.67 (0.49) |               |
| Like new therapy types         | 3.33 (0.72) |               |
| Therapy developed by researchers| 3.27 (0.79) |               |
| Therapy different than usual   | 3.00 (1.07) |               |
| Divergence sub-scale           | 3.10 (0.95) | 0.88           |
| Research-based treatments not useful | 2.47 (1.19) |               |
| Will not use manualized therapy| 3.60 (0.91) |               |
| Clinical experience more important | 2.87 (1.36) |               |
| Know better than researchers   | 3.47 (0.92) |               |
| EBPAS total                    | 3.05 (0.53) | 0.79           |

However, some practitioners also stated few disadvantages in remote training:

“I feel that during online training, the discussion time is very limited. The assignment was also quite overwhelming. I think it is better to have group assignments to discuss even when we do the task and comprehend more of the theory and practice with other participants. It will also make the assignment feel lighter.”

“It is hard to catch up on training sessions remotely because there are so many distractions that we tend to multitask during sessions. For example, sometimes I need to drive somewhere during the session. I prefer offline or face-to-face training to online training.”

“For such skill-based training, I don’t think it accommodates well in an online platform. I wonder if our facilitators knew if we, practitioners, really grasp the training material’s ideas. I’ve discussed this with some practitioners, and they agreed that it’d be much better if the training were delivered in an offline, face-to-face setting. Although I quite understand most of the theoretical aspects from modules and videos, I am still unsure if I captured the essence like how to pick a conversational cue, etc.”

3.2.2. Professional development

Practitioners reported that the training has enhanced their knowledge and skills that they need to support adolescents with SUDs and their families:

“...I learned new things from this training. I never had proper guidance on how to handle a whole family before. It was always counseling, counseling, and counseling with no specialized training. Through this training, I learned that ‘Oh, so you need to plan a therapy program that was meant for the whole family members.’ I felt enlightened.”

“For as long as my career in rehabilitation programs, we mostly put our focus on the (adolescent) client and only give their family members seminars, preventive education, and concise guidance on how to welcome their children from rehabilitation centers. It turns out we need to re-evaluate their entire family system.”

3.2.3. Applicability of Treatnet family

Practitioners considered Treatnet Family as compact and applicable.

“It is undoubtedly practical and easy to deliver. Everything was structured”.  
“It is reasonably practical, considering the number of sessions needed in Treatnet Family is not quite long. The number of sessions in a program is essential, especially if the program involves families. Sometimes families feel tired or demotivated to continue sessions if the number of sessions is too long.”

“...each phase or session step-by-step were written very clearly. The role-play during training also makes it even more practical to implement.”

The fact that Treatnet Family can be delivered online seemed appealing to practitioners:

“I can operate this intervention just fine since it’s online-based. I can easily have my sessions delivered from the office/rehabilitation center or home.”

The Treatnet Family is expected to benefit the adolescents and their families in a number of ways.

“Both will develop better communication with each other. Most families in our society and culture have a hierarchical relationship between parents and children. This made the children feel reluctant to express their feelings or emotions to their parents. They tend to be more submissive in front of their parents. Through Treatnet Family, parents and children can practice open communication towards each other, and I am sure it will be impactful to their relationship.”

“It will help adolescent’s families to build a healthy, strong support system within them. Therefore, a room that can help adolescents grow to their full
interest and potential can be created... and help them going through social pressures to get a better future in their life."

3.2.4. Barriers and facilitators of implementing treatnet family

Some of the factors that might hinder the implementation of Treatnet Family according to some practitioners included time and commitment of the families, and the location (if delivered in person):

“It might be hard to set a session schedule with clients and their families, especially parents who work. It needs high commitment from families to prioritize Treatnet Family. It takes more effort to gather clients and their families at the same time to follow the sessions.”

“If the sessions are conducted offline, sometimes the distance between clients’ homes and rehabilitation centers is far away. It takes more effort for practitioners to come to their homes or encourage clients and their families to visit the center.”

If Treatnet Family is to be delivered remotely, the availability of the internet could be a problem:

“We have a limited internet network. If the sessions are conducted offline, the internet network would be the main challenge to run the sessions since my organization operates in relatively remote areas.”

In terms of the factors that could facilitate the implementation of the Treatnet Family, practitioners reported that this intervention will add to the services that they have in supporting the adolescents with SUDs and their families.

“Most of the clients in my organization are accompanied by their families. So, involving families in the counseling sessions might be more accessible.”

“Treatnet Family modules fit well with the organization’s needs to help clients from an end-to-end journey of rehabilitation. … Treatnet Family could play an essential role in a follow-up program for clients and their families after being discharged from our inpatient programs.”

“The organization is quite flexible to adopt new programs. In my organization, we don’t have a family intervention program yet. So, it is possible to add Treatnet Family as one of our services or programs.”

4. Discussion

To our knowledge this study is the first to have explored the acceptability and feasibility of delivering a family-based intervention training (Treatnet Family) remotely via a digital platform. Our findings could be summarised as follows: First, it is acceptable and feasible to deliver Treatnet Family to practitioners via a digital platform, and replicated our previous study when Treatnet Family was delivered in person (Busse et al., in this issue). The practitioners reported a significant increase in knowledge about family-based intervention and felt confidence in implementing Treatnet Family to adolescents with SUDs and their families. This finding supports previous studies that reported the benefit of using digital technology in training community health workers in low- and middle-income countries (Long et al., 2019; Mishra et al., 2019; Rahman et al., 2019). For example, a recent study conducted in India by Balhara and Singh (2019) showed that teachers and counsellors who were trained online in delivering brief interventions to school students with problematic internet could be a problem: levels of distractions at home. Another potential disadvantage might be related to poor internet connectivity, a technical challenge which has been observed in other studies (Medhanyie et al., 2015). One way to address this challenge would be to use an offline tablet-based application which does not require internet access (Rahman et al., 2019).

Third, the fact that Treatnet Family can be delivered online seemed appealing to practitioners as it would save them or their client’s travelling time. More importantly, it will encourage adolescents with SUDs and their families to seek treatment. One of the key hinderances to seeking treatment is being fearful of being seen because of stigmatization attached to people with SUDs (Yang, Wong, Grivel, & Hasin, 2017). If the intervention is to be delivered in person, time and commitment of the families, and the location of the community centers are some of factors which might hinder families to seek treatment. At the same time, practitioners need to ensure that no other persons except for a client and family members concerned are available to maintain confidentiality and safety when delivering online psychosocial interventions.

Fourth, although the Cronbach’s alpha for most of the sub-scales of the Evidence-Based Practice Attitude Scale (EBPAS) were acceptable, the Cronbach’s alpha for the “Openness to new practices” sub-scale was poor. The reason for this was not clear; there was no association found between the “Openness to new practices” sub-scale, practitioner’s gender, age group, and working experience. However, previous studies have shown openness sub-scale to be associated with more positive organizational culture (Aarons & Sawitzky, 2006) and with more positive leadership (Aarons, 2006). As the present study did not examine the characteristics of organizational environment and culture, we have no information about the organizational attitudes toward adoption of new practices.

Our study is not without methodological limitation. The small sample size was a major limitation of the present study which need to be taken into consideration when interpreting our findings. Thus, the findings may not be generalizable to the larger groups of practitioners across Indonesia. In spite of this limitation, the present study provides evidence on the acceptability and feasibility of using digital platform to train community practitioners in the Treatnet Family in Indonesia. The use of a digital platform saves travel time and costs, and enables practitioners to learn at their own pace. More importantly it enables us to continue providing a much-needed training to practitioners in LMICs when it is not possible to do so during the pandemic.

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CRediT authorship contribution statement

Anja Busse: Conceptualization, Validation, Writing - original draft, Writing - review & editing, Supervision, Funding acquisition. Wataru Kashino: Conceptualization, Writing - review & editing, Supervision, Funding acquisition. Sanita Suhartono: Conceptualization, Writing - review & editing. Narendra Narotama: Writing - review & editing. Dicky Pelupessy: Data curation, Formal analysis, Writing - review & editing.
Annafi Avicenna Fikri: Data curation, Formal analysis, Writing - review & editing. Cecilia A. Essau: Conceptualization, Methodology, Data curation, Formal analysis, Writing - original draft, Writing - review & editing.

Declaration of Competing Interest

The authors declare that they have no conflict of interest. Anja Busse, Wataru Kashiho, Sanita Suhartono and Narendra Naratoma are staff members of the United Nations. The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the United Nations.

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References

Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The Evidence-Based Practice Attitude Scale. Mental Health Services Research, 6(2), 61–74.
Aarons, G. A., & Sawitzky, A. C. (2006). Organizational culture and climate and mental health provider attitudes toward evidence-based practice. Psychological Services, 3, 61–72 [PubMed: 17183411].
Alexander, J. F., Waldron, H. B., Robbins, M. S., & Neeb, A. A. (2013). Functional family therapy for adolescent behavior problems. DC: American Association Washington.
Balhara, Y. P. S., & Singh, S. (2019). Online course on basics of management of behavioral addictions involving use of internet: Observations from the first batch of participants. Asian Journal of Psychiatry, 44, 1–3. https://doi.org/10.1016/j.ajp.2019.07.013.
Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.
Chaiyachati, K. H., Loveday, M., Lorenz, S., et al. (2013). A pilot study of an mHealth application for healthcare workers: Poor uptake despite high reported acceptability at a rural South African community-based MDR-TB treatment program. PLoSOne, 8(6), Article e64662.
Essau, C. A., & Delfabbro, P. (Eds.). (2020). Adolescent addiction: Epidemiology, assessment, and treatment (second edition). New York: Elsevier Inc.
Flores-Arangio, J. F., Iyengar, M. S., Dunn, K., & Zhang, J. (2011). Performance factors of mobile rich media job aids for community health workers. Journal of the American Medical Informatics Association, 18, 131–137.
Groshkova, T., Stoian, T., Cunningham, A., Griffiths, P., Singleton, N., & Sedevot, R. (2020). Will the Current COVID-19 Pandemic Impact on Long-term Cannabis Using Practices? Journal of Addiction Medicine, 14(4). https://doi.org/10.1097/ADM.0000000000000698.
Haberer, J. E., Kiwanuka, J., Nansera, D., Wilson, I. B., & Bangsberg, D. R. (2010). Challenges in using mobile phones for collection of anti-retroviral therapy adherence data in a resource-limited setting. AIDS and Behavior, 14, 1294–1301. https://doi.org/10.1007/s10461-010-9720-1.
Long, L. A., Pariyo, G., & Kallander, K. (2018). Digital Technologies for Health Workforce Development in Low- and Middle-Income Countries: A Scoping Review. Global Health, Science and Practice, 6(Suppl 1), S41–S46. https://doi.org/10.9745/GHSP-D-18-00167.
Medhanyie, A. A., Moser, A., Spigt, M., Yehyo, H., Little, A., Dinant, G., et al. (2015). Mobile health data collection at primary health care in Ethiopia: A feasible challenge. Journal of Clinical Epidemiology, 68, 80–86.
Mishra, S. R., Lygidakis, C., Neupane, D., et al. (2019). Combating non-communicable diseases: Potential and challenges for community health workers in a digital age, a narrative review of the literature. Health Policy Plan, 34, 55–66. https://doi.org/10.1093/heapol/czy099.
Oezchovkis, T. J., & Liddle, H. A. (2002). Family-based therapy. In C. A. Essau (Ed.), Substance abuse and dependence in adolescence: Epidemiology, risk factors, and treatment (pp. 205–226). East Sussex, UK: Brunner-Routledge.
Oroslin, L., Corkery, J. M., Chiapponi, S., et al. (2020). New/Designer Benzodiazepines: An analysis of the literature and psychonauts’ trip reports. Current Neuropharmacology, 18, 1–29. https://doi.org/10.2174/1570159x18666200110121333.
Rahman, A., Akhter, P., Hamdani, S. U., et al. (2019). Using technology to scale-up training and supervision of community health workers in the psychosocial management of perinatal depression: An on-inferiority, randomized controlled trial. Glob. Ment. Health, 6, 1–12. https://doi.org/10.1017/gmh.2019.7.
Rigter, H., Henderson, C. E., Pel, I., Tossmann, P., Phan, O., Hendriks, V., et al. (2013). Multidimensional family therapy lowers the rate of cannabis dependence in adolescents: A randomised controlled trial in Western European outpatient settings. Drug and Alcohol Dependence, 130, 85–93. https://doi.org/10.1016/j.drugalcdep.2012.10.013.
Rinaldi, R., Bersani, G., Marinelli, E., & Zaami, S. (2020). The rise of new psychoactive substances and psychiatric implications: A wide-ranging, multisubject challenge. Human Psychopharmacology, 35, Article e2727. https://doi.org/10.1002/hup.2727.
Sexton, T. L., & Turner, C. W. (2011). The effectiveness of functional family therapy for youth with behavioral problems in a community practice setting. Couple and Family Psychology: Research and Practice, 1(5), 3–15.
Sun, Y., Li, Y., Bao, Y., Meng, S., Sun, Y., Schumann, G., et al. (2020). Brief Report: Increased Addictive Internet and Substance Use Behavior During the COVID-19 Pandemic in China. The American Journal on Addictions, 29(4), 268–270. https://doi.org/10.1111/ajad.13066.
Thornberry, T. P., Kearley, B., Gottfredson, D. C., Slohower, M. P., Devlin, D. N., & Fader, J. J. (2018). Reducing Crime Among Youth at Risk for Gang Involvement. Criminology & Public Policy, 17, 953–989. https://doi.org/10.1177/1470997417703136.
United Nations Office on Drugs and Crime (UNODC) (2019). The Treatnet Family Training package. UNODC Vienna: Austria.
Wang, Q. Q., Kaelber, D. C., Xu, R., et al. (2021). COVID-19 risk and outcomes in patients with substance use disorders: Analyses from electronic health records in the United States. Moleular Psychiatry, 26, 30–39. https://doi.org/10.1038/s41380-020-10800-7.
Yang, L. H., Wong, L. Y., Grisel, M. M., & Hasin, D. S. (2017). Stigma and substance use disorders: An international phenomenon. Current opinion in psychiatry, 30(5), 378–388. https://doi.org/10.1097/YCO.0000000000000351.
YoungMinds (2020). Coronavirus: Impact on young people with mental health needs. Retrieved on February 21, 2021. youngminds.org.uk.