

# The Complexity of Caring for People with Mental Disorders: Family Challenges in Contributing to Horticultural Therapy

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## ABSTRACT

The fluctuation of psychological conditions among people with mental disorders are suspected to burden the family caregiver. Horticultural therapy has been known as an effective complementary therapy to enhance people mental health. Family assistance in the implementation of horticultural therapy is a form of family caring which contributes greatly in determining the achievement of horticultural therapy goals. However, not many previous studies have explored family experiences when accompanying family members who suffer from mental disorders in undergoing horticultural therapy. This study aims to explore family experiences when accompanying family members who suffer from mental disorders when undertaking horticultural therapy. Qualitative research using a hermeneutic phenomenology approach was conducted in 5 homes of people with mental disorders who had experienced horticultural therapy. Five family participants were selected by purposive sampling and considered data saturation. Family data were analyzed by using data analysis content. Interview notes are read repeatedly to identify data saturation and formulate the unit of analysis. Furthermore, the data is structured through the coding phase, followed by formulating categories and abstracting them to obtain a brief overview. To guarantee the validity of the data, this study pays attention to its credibility, confirmability, dependability, transferability and authenticity. The results of the study indicate that the family is aware that while assisting the patients during horticultural therapy, the family must have strong motivation, patience, sincerity and confidence. It is proven that the patient's self-confidence, ability to interact and communicate shows positive development after undertaking horticultural therapy. As one form of complementary therapy, the sustainability of horticultural therapy should be done continuously by the health care provider accompanied by family support.

**Keywords:** Caring; family; horticultural therapy; mental disorder.

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## INTRODUCTION

Mental health is as important as physical health and other illnesses or disabilities that arise in the body, consequently mental health conditions now can no longer be underestimated. Many cases of mental disorders is experienced by people who live in low and middle income countries (Weinmann & Koesters, 2016). In Indonesia, mental health is still one of the issues that has been ruled out. In fact, in terms of number, sufferers of mental disorders continue to enhance. There is an escalation in prevalence of severe mental disorders for Indonesian population, from 1.7 per mile in 2013, increased in 2018 to 7 per mile (Ministry of Health The Republic of Indonesia, 2018).

Schizophrenia is the most dominant mental disorder compared to other mental disorders. The family caregivers feel heavy burden when their family member is diagnosed with schizophrenia, due to stigma, financial, and social problems (Nasrallah et al., 2015).

Horticultural therapy has been known as an effective and therapeutic complementary therapy to improve mental conditions (Kamioka et al., 2014; Vujcic et al., 2017). Horticultural therapy has a positive impact on mental patients in thinking capabilities. It can encourage people with mental disorders to do more activity and improve their mental health condition (Im, Park, & Son, 2018; Stowell, Owens, & Burnett, 2018). The patients work together and feel it as a pleasurable and beneficial activity (Vujcic et al., 2017; Cipriani et al., 2017). Furthermore the interaction

between patients will grow and it will help them gain their pride and confidence (Seixas, Williamson, Barker, & Vickerstaff, 2017). In general, it has been proven that a planting program which is conducted in an open air showed progressively positive outcome than the indoor program (Davies et al. 2014; Seixas et al., 2017).

Family caregiver assistance in horticulture therapy as a form of family caring, contributes greatly in determining the achievement of horticultural therapy goals. Family caregivers should be able of giving affection, showing psychological support, providing facilities and actively engaging the patient in various activities. A mutual relationship between family members is expected to contribute to the recovery process achievement (Goldberg et al., 2019; Waller et al., 2019). However, horticultural therapy as the complementary therapy for the mental health patients has not been applied consistently even though it is known that the therapy could improve the patients' psychosocial condition (Sommer et al., 2015).

## MATERIALS AND METHOD

**Research design:** This qualitative research with hermeneutic phenomenology approach aims to explore the family caregivers' experience when accompanying people with mental disorders who have followed horticultural therapy. The study was carried out in the work area of public health center with the highest prevalence of mental disorders in South Sumatra province which provided mental

health services as its specialty and an integrated mental health service post (posyandu) was formed.

**Population and sample research:** Twenty-three family caregivers who accompanied the implementation of horticultural therapy became the study population. In this qualitative study, a sample of family caregiver participants amounted to 5 people, based on the results of data saturation. Samples of family caregiver participants were determined based on the purposive sampling method, with criteria living with patients, accompanying them when attending integrated service post programs, having accompanied patients for 2 months in horticultural therapy and were willing to participate in research.

**Materials and research tools:** The researcher acts as the research instrument in this qualitative research. During in-depth interviews, researcher ask questions in the form of open questions and it is recorded by using a voice recorder. During the interview, the researcher observed the patient's condition and home environment. The questions were developed to obtain information about the experience of family caregivers while accompanying people with mental disorders following a horticultural therapy program. The main questions asked to family caregivers include:

1. How is the experience of the family caregiver when accompanying family members while undergoing horticultural therapy?
2. How is the development of the patient's response when undergoing horticultural therapy?
3. What does the family do to be able to accompany the patient optimally?

**Collection/ research stages:** Data collection began with providing an informed consent of the study and then signed by the participants after willingly contribute to join the research. The number of study samples were 5 families which were determined based on saturation data obtained during in-depth interviews. Each participant was given a different code, namely P1, P2, P3, P4 and P5. In-depth interviews are conducted at the participant's house so that participants' comfort and openness can still be fulfilled. In-depth interviews are carried out repeatedly in order to obtain data saturation. To guarantee the validity of research data, researcher pay attention to the research credibility, confirmability, dependability, transferability, and authenticity. Fulfillment of credibility aspects is done by doing member checking to all participants to ensure researchers' and participants' understanding of the interview results are equal. A detailed explanation of the research findings is disclosed so that the issue of transferability is met. Researcher carefully interpret the stages in order to get the right interpretation. The study of coding and themes were discussed between the researcher and psychiatrist to ensure the theme formulation. The researcher should be aware of participant's facial expressions during the interview to obtain the data authenticity. In this study data triangulation was carried out by comparing information submitted by families with information obtained from mental health cadres in public health centers.

**Data analysis:** Information or data that has been recorded on the voice recorder is written in the form of a transcript and all data were analyzed using content analysis.

All transcripts are arranged systematically in the form of a matrix and then the meaning of each information is coded. Some coding was further structured into themes.

## RESULTS AND DISCUSSION

Based on in-depth interviews with 5 family participants, it is known that all participants are housewives, who sometimes work as washing laborers, are classified as poor families. The relationship between the patients and their family caregiver is that the patient is a child of the family caregiver. The caregivers are between 45-60 years old, while the patients are between 16-35 years old. The distance between the house and the public health center can be reached by participants for about 10 minutes by walking. After the interview, the following themes were obtained, based on the information submitted by the family caregiver.

Themes that can be drawn after structuring coding and content analysis on family experiences during mentoring are: **Requires patience:** The following expressions of participants who support the formation of the theme, namely:

... in my opinion if you want your child to be healthy, the key is patience, you bear if you are impatient, moreover he is happier at home than to go to follow the program. Not to mention if he suddenly doesn't want to go... (P2).

Sometimes he ... doesn't want to take therapy, but I have to be patient, invite him over and over again. If I were impatient, then I do not know how will he become, including his recovery, his right. It is a pity ... his future is still long ahead... as a mother, this is all i can do... (P3).

I have to try many times until he wants, especially if he is lazy ... God ... he should be persuaded until he is eager to water the plants ... but sometimes he has a high enthusiasm to participate in therapy (P4).

Patience is a study related to gratitude and forgiveness (Rubinshteyn, 2016; Souza et al., 2017) as parents generally shown in the form of accepting the suffer with patience and calmness (Janardhana et al., 2015). Patience keeps the caregiver calm by controlling the feeling of behavior when trying to persuade and accompanying family members undergoing horticultural therapy. The patience of the caregiver to accompany the patient could strengthen the desire of the caregiver for the improvement of psychological conditions. The existence of the family caregiver desire will also lead them to accompany the patient to follow the therapy, considering the future of their child. This is consistent with the issue that patience is also shown in the form of perseverance. Perseverance is shown by tirelessly persuading patients to attend horticultural therapy. Although family caregivers are often scolded by the patients, but they are consistently persuading them to actively follow the therapy program. In the case of mental disorders, the family has an important function in influencing the mental health development of their children or as a moderating variable (Souza et al., 2017; Wiegand-Grefe et al., 2019).

**Sincerity:** The following expressions of participants who support the formation of the theme, namely:

As a parent, don't think about the bad things, you have to be positive even at times you do not feel really good, but you have to be sincere. Yeah..... maybe God has predestined me like this, so I have to sincerely accept this reality (P1).

Should be willing to go through all of this, so that his future is better than mine ... although sometimes I also think why my fate is like this ... oh well ... the important thing is that i am really trying to be sincere in asking my child to follow the treatment, that's all ... (P5).

Although sometimes he gets angry and it feels difficult when i ask him to follow the therapy, I have to always try, it is a consequence as a parent. Indeed as parents i have to be really sincere (P4).

Sincerity is very closely related to social support, including families to solve problems experienced (Singh, 2014; Grover et al., 2017). Family caregiver shows patience and sincerity when accompanying the patients following the horticultural therapy. Many aspects can shape one's sincerity. All of the patients and family caregivers are the mother and her children suffering from mental disorders generally aged 13-25 years. The children is still needed to be taken care by their family. In Indonesian culture, generally the children is closer to their mother than their father.

**Must have a strong motivation:** The following expressions of participants who support the formation of the theme, namely:

It takes a lot of motivation from the family members when I want to accompany the patient ... the illness started from long time ago and since then his friend never come to our home anymore.

I tried to strengthen and encourage myself so that my child would also be enthusiastic about following the treatment including farming. But actually it's sometimes tiring, but still ... I have to hold back, strengthen myself, so that my child will recover quickly, I sympathize him (P1).

Actually, sometimes I am lazy to accompany, but for the sake of his recovery, I am willing to accompany him to the public health center (P2).

Our motivation is important, because we want to heal the mentally ill person, because they are very dependent on those who care for them, yes, it is their parents, if other family members can only give advice or just entertain (P3).

There is a need for family motivation in caring for patients to strengthen and continue taking care of their family members (Janardhana et al., 2015; Grover et al., 2017). High motivation from family caregiver influences his behavior specifically when the family caregivers accompanying them undergoing the treatment. Patience in dealing with stigma or unpleasant behavior from the environment should be existed to face the challenge by focusing on the goal of healing the patient. This desire strengthens the family caregiver motivations in caring for patients.

**The importance of self confidence:** The following expressions of participants who support the formation of the theme, namely:

If you want to treat the sick, the person who cared for them should trust the treatment first, because if you are not sure

then maybe you will not fully participate in this planting program (P5).

Looks like it takes trust from the caregiver, you have to trust the healer, if he says health cadres can heal, yes, if I believe treatment by planting is beneficial for patients, the proof is already there (P2).

What I do is ... I have to be sure and trust in the health workers, they do understand, don't they? I also believe that by learning to plant, the patients can heal quickly, because they spend the time by being busy, not daydreaming (P1).

There is hope that it can be a motivating factor that can improve the condition of schizophrenia patients (Souza et al., 2017; Lethin, Hallberg, Karlsson, & Janlöv, 2016). Families play a complex role when caring for patients with heavy burdens, but nevertheless are required to behave well when caring for patients (Janardhana et al., 2015; Grover et al., 2017). Participants believe that their family members suffering from mental disorders can improve their condition. Strong self-confidence raises hope that the patients can live better. The age of the patients who are still very young puts its own burden on the family, especially mothers. As a mother, children are the foundation of hope, so according to family participants, it is necessary to have good faith in the benefits of horticultural therapy that their children follow. There is a hope of being able to raise positive family thinking so that the perceived burden becomes lighter. Previous study suggested that self-confidence was able to reduce the burden on the family when caring for people with mental disorders (Gharavi et al., 2018).

The following are themes that were formed based on the results of in-depth interviews that have undergone content analysis. As for the themes formed related to changes in behavior or response experienced by patients after undergoing horticultural therapy that have been revealed by the family caregiver.

**Patients feel more confident:** The following expressions of participants who support the formation of the theme, namely:

I see the ... enthusiasm when going to the therapy, he is curious to see the plant (P2).

X often asks about how big the plant has grown ... and he said that he was happy to be able to grow kale. He said thing like 'it turns out I can do it' (P4).

When I was at the place of farming, my child said ... wow ... I grew a big plant, I want to plant another. So yesterday we planted chillies, and tomorrow we will plant vegetables ... (P1).

The results shows an increase in patient confidence as expressed by the patient's family caregiver after undergoing horticultural therapy. This is consistent with the results of previous studies that horticultural therapy contributes to increasing self-confidence (Davies et al., 2014; Kam & Siu, 2010). Enhanced confidence comes when the patient has seen plant growth. Patients can see the results of his efforts in planting, which grows little by little. Changes in plant size in horticultural therapy lead to satisfaction, giving rise to pride and self-confidence.

**Patients get new acquaintances:** The following expressions of participants who support the formation of the theme, namely:

I saw when he was watering plants, he asked his friend, did the plants grow? ... while smiling ... It was nice to see that he wanted to start talking to other people (P5).

Earlier my son told me that he had a new acquaintance, his name was Y, he planted oranges and chilli ... happy to see he had a new friend (P2).

I didn't pay much attention when he watered the plants, but he told me that ... there was a kind person but forgot what his name was (P4).

Family caregivers revealed that patients often seemed to have a conversation with a fellow friend who was also farming. Health cadres revealed that patients who were initially lazy to talk, after following this therapy had started to want to talk in a therapy group. As the results of previous studies, that horticultural therapy is useful to improve the patient's ability to interact. Patients who were not initially interested in interacting after being in a therapeutic environment became interested in interacting because there were activities that were carried out together (Davies et al., 2014; Haigh et al., 2014).

**Patients are able to tell stories:** The following expressions of participants who support the formation of the theme, namely:

My child now, he grow plant in the treatment place, he told me that the plant is now growing, yesterday the leaves were still small but now it is getting bigger (P3).

I notice now that he has new friends and often talks to the others ... while watering plants they talk to each other ... whereas he looks happier while talking than before ... (P1).

At first he did not want to talk as usual right, but after repeatedly following the treatment of planting, he began to talk often, at first he only spoke a little but over time he began to talk a lot ... I am happy to see that he wanted to talk more (P2).

The ability of patients to express their feelings towards the activities carried out has multiplied after the patients following horticultural therapy for some times. At first, some patients did seem less enthusiastic about the activities carried out. However, after several sessions of the activity, the patient's interest is increasing and this makes the patient initiate to start a conversation with other patients involved in the therapy. It is as the previous research conducted before where the patient is able to tell stories (Davies et al., 2014; Haigh et al., 2014; Oh, Park, & Ahn, 2018; Davies et al., 2014; Scholarworks, Schneider, & Schneider, 2014; Haigh et al., 2014). Horticultural therapy has a positive impact on the ability of patients to express his opinion. Togetherness in the group, doing the same activities, and dependence with other therapy participants makes the patient want to talk and express their opinions.

## CONCLUSION

Based on the results of explorations of family caregiver experiences, it was concluded that horticultural therapy had a positive impact for psychological and social aspects of the patients. It improves the self-confidence and ability to interact with patients. However, patience and sincerity are needed when accompanying patients who have unexpected psychological fluctuations. Furthermore, strong motivation, trust, and hopes of the family caregiver over the

benefits of horticultural therapy also determine the patient's resilience to undergo continuous therapy. The inherent limitations of monitoring and quantitative evaluation is needed to be considered for further researchers.

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## REFERENCE

1. Cipriani, J., Benz, A., Holmgren, A., Kinter, D., Rufino, G., Cipriani, J., Kinter, D. (2017). A Systematic Review of the Effects of Horticultural Therapy on Persons with Mental Health Conditions. *Occupational Therapy in Mental Health, 0*(0), 1–23. <https://doi.org/10.1080/0164212X.2016.1231602>
2. Davies, G., Devereaux, M., Lennartsson, M., Schmutz, U., & Williams, S. (2014). The benefits of gardening and food growing for health and wellbeing By Garden Organic and Sustain, (April).
3. Gharavi, Y., Stringer, B., Hoogendoorn, A., Boogaarts, J., Van Raaij, B., & Van Meijel, B. (2018). Evaluation of an interaction-skills training for reducing the burden of family caregivers of patients with severe mental illness: A pre-posttest design. *BMC Psychiatry, 18*(1), 1–8. <https://doi.org/10.1186/s12888-018-1669-z>
4. Goldberg, Z. E., Chin, N. P., Alio, A., Williams, G., & Morse, D. S. (2019). A Qualitative Analysis of Family Dynamics and Motivation in Sessions With 15 Women in Drug Treatment Court. *Substance Abuse: Research and Treatment, 13*, 117822181881884. <https://doi.org/10.1177/1178221818818846>
5. Grover, S., Avasthi, A., Singh, A., Dan, A., Neogi, R., Kaur, D., Behere, P. (2017). Stigma experienced by caregivers of patients with severe mental disorders: A nationwide multicentric study. *International Journal of Social Psychiatry, 63*(5), 407–417. <https://doi.org/10.1177/0020764017709484>
6. Haigh, R., Best, D., Lubman, D. I., Savic, M., Wilson, A., Dingle, G., Haigh, R. (2014). The quintessence of a therapeutic environment The quintessence of a therapeutic environment. <https://doi.org/10.1108/09641861311330464>
7. Im, E., Park, S., & Son, K. (2018). Complementary Therapies in Medicine Developing evaluation scales for horticultural therapy. *Complementary Therapies in Medicine, 37*(April 2014), 29–36. <https://doi.org/10.1016/j.ctim.2018.01.008>
8. Janardhana, N., Raghunandan, S., Naidu, D., Saraswathi, L., & Seshan, V. (2015). Care giving of people with severe mental illness: An Indian experience. *Indian Journal of Psychological Medicine, 37*(2), 184. <https://doi.org/10.4103/0253-7176.155619>
9. Kamioka, H., Tsutani, K., Yamada, M., Park, H., Okuzumi, H., Honda, T., Mutoh, Y. (2014). Effectiveness of horticultural therapy: A systematic review of randomized controlled trials. *Complementary Therapies in Medicine, 22*(5), 930–943. <https://doi.org/10.1016/j.ctim.2014.08.009>
10. Lethin, C., Hallberg, I. R., Karlsson, S., & Janlöv, A. C. (2016). Family caregivers experiences of formal care when caring for persons with dementia through the process of the disease. *Scandinavian Journal of Caring Sciences, 30*(3), 526–534. <https://doi.org/10.1111/scs.12275>
11. Ministry of Health The Republic of Indonesia. (2018). *Potret Sehat Indonesia dari Riskesdas 2018*.
12. Nasrallah, H. A., Harvey, P. D., Casey, D., Csoboth, C. T., Hudson, J. I., Julian, L., Gorman, C. O. (2015). The Management of Schizophrenia in Clinical Practice ( MOSAIC ) Registry: A focus on patients , caregivers , illness severity , functional status , disease burden and healthcare utilization. *Schizophrenia Research, 166*(1-3), 69–79. <https://doi.org/10.1016/j.schres.2015.04.031>

13. Oh, Y., Park, S., & Ahn, B. (2018). Complementary Therapies in Medicine Assessment of the psychopathological effects of a horticultural therapy program in patients with schizophrenia. *Complementary Therapies in Medicine*, 36(October 2017), 54–58. <https://doi.org/10.1016/j.ctim.2017.11.019>
14. Rubinshteyn, J. (2016). Primary and family stigma of mental illness: Comparing perceptions of African Americans and European Americans. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 76(9-B(E)), No – Specified. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc13&NEWS=N&AN=2016-26520-092>
15. Scholarworks, S., Schneider, A. B., & Schneider, A. (2014). Finding personal meaning: vocational horticulture therapy for individuals with severe and persistent mental illness.
16. Seixas, M. De, Williamson, D., Barker, G., & Vickerstaff, R. (2017). Horticultural therapy in a psychiatric in-patient setting, *BJPsychiatry International*. Nov. 14(4), 87–89.
17. Singh, I. (2014). Authenticity, values, and context in mental disorder: The case of children with ADHD. *Philosophy, Psychiatry and Psychology*, 21(3), 237–240. <https://doi.org/10.1353/ppp.2014.0038>
18. Sommer, I. E., Murray, R. M., Meyer-lindenberg, A., Cannon, T. D., Correll, C. U., Kane, J. M., ... Insel, T. R. (2015). Schizophrenia, PRIMER, (November). <https://doi.org/10.1038/nrdp.2015.67>
19. Souza, A. L. R., Guimarães, R. A., de Araújo Vilela, D., de Assis, R. M., de Almeida Cavalcante Oliveira, L. M., Souza, M. R., ... Barbosa, M. A. (2017). Factors associated with the burden of family caregivers of patients with mental disorders: A cross-sectional study. *BMC Psychiatry*, 17(1), 1–10. <https://doi.org/10.1186/s12888-017-1501-1>
20. Stowell, D. R., Owens, G. P., & Burnett, A. (2018). Complementary Therapies in Clinical Practice A pilot horticultural therapy program serving veterans with mental health issues: Feasibility and outcomes. *Complementary Therapies in Clinical Practice*, 32(April), 74–78. <https://doi.org/10.1016/j.ctcp.2018.05.007>
21. Vujcic, M., Tomicevic-dubljevic, J., Grbic, M., & Lecic-tosevski, D. (2017). Nature based solution for improving mental health and well-being in urban areas. *Environmental Research*, 158(September 2016), 385–392. <https://doi.org/10.1016/j.envres.2017.06.030>
22. Waller, S., Reupert, A., Ward, B., McCormick, F., & Kidd, S. (2019). Family-focused recovery: Perspectives from individuals with a mental illness. *International Journal of Mental Health Nursing*, 28(1), 247–255. <https://doi.org/10.1111/inm.12528>
23. Weinmann, S., & Koesters, M. (2016). Mental health service provision in low and middle-income countries: Recent developments. *Current Opinion in Psychiatry*, 29(4), 270–275. <https://doi.org/10.1097/YCO.0000000000000256>
24. Wiegand-Grefe, S., Sell, M., Filter, B., & Plass-Christl, A. (2019). Family functioning and psychological health of children with mentally ill parents. *International Journal of Environmental Research and Public Health*, 16(7). <https://doi.org/10.3390/ijerph16071278>