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Transtheoretical Model (Stages of Change) and Its Potential Applications to Psychiatric and Mental Health Nursing Practice

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Abstract

Over the years, mental health challenges have always been a significant concern for the healthcare system. More recently, global events including the COVID-19 pandemic and its impacts on society have increased the burden and stress on the healthcare system and its management of mental health issues. This article offers a fresh perspective on the possibility of integrating the Transtheoretical Model (Stages of Change) in Psychiatric and Mental Health Nursing Practice alongside the already existing nursing concepts, approaches and interventions. This model has already been widely used in behavioral studies and in the management of chronic diseases. In the field of mental health nursing, this is yet a concept that needs further exploration. The use of the Transtheoretical Model highlights the shared responsibility and commitment to change by the client and the mental health practitioner such as the nurse. According to the elements of the Transtheoretical model, when a client's self-efficacy, commitment, and readiness to change are taken into consideration, this is more likely to lead to treatment and recovery success that is long-term and more permanent, thereby preventing relapses. Of all the elements of the Transtheoretical model, this article highlights the six stages of change, ways to identify an individual's stage of change and the appropriate nursing approaches as well as the pros, cons, and opportunities for further research.

Keywords: Transtheoretical Model of Change, Stages of Change, Mental Health, Psychiatry, Nursing

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Introduction

The World Health Organization (WHO) reported that mental disorders continue to be a burden globally with various effects on economy, human rights, and overall health and wellbeing (World Health Organization [WHO], 2019). With the rapid changes in society these days, including the ongoing COVID-19 pandemic, the transitions to online jobs and education, disruptions in travel, and more, have caused a surge in mental health issues such as anxiety and depression. The WHO organization also expressed that the current health systems have yet to adequately and efficiently respond to mental health concerns. There is also a wide gap between treatment and provision of mental health services worldwide (Wainberg, et al., 2017). Not to mention, currently healthcare workers, particularly nurses, may also have their own mental health needs. As a response to these, the WHO has emphasized the delivery of integrated mental health services focused on promotion and prevention (World Health Organization [WHO], 2019).

Generally, nurses' roles in psychiatric and mental health nursing include the provision of health promotion and maintenance, health education on self-care activities to patients, families and communities, conducting crisis intervention, as well as administering and monitoring psychobiological interventions. While advanced nursing practitioners provide psychotherapies and integrative therapies, develop programs, conduct referrals, and perform procedures (Scheydt & Hegedus, 2021). Nurses as frontline health care practitioners, also play a key role in mental health screening, mental health evaluation and mental health triaging (American Psychiatric Association, 2022).

Over the years, nurses have faced various challenges when faced with psychiatric patients seeking help. Most of the time people are reluctant to seek help in the early stages of the illness and receive attention and treatment only in its late or emergency stages. Cases like this can

eventually bring a toll to nurses' overall health and limit their capacity to provide care (World Health Organization [WHO], 2019). The current healthcare system highlights the burden placed on nurses' and other healthcare practitioners' shoulders with regard to psychiatric patients' mental health treatment and recovery particularly in emergency settings. The focus of successful recovery in patients lies on the nurses' knowledge, skills, attitude, and expertise—thus causing distress and frustration on nurses—and less on patients' commitment, and readiness to change and receive help (Gabrielsson, Sävenstedt, & Olsson, 2016). Leaning on the essence of 'therapeutic nurse-patient relationships', it is this article's aim to present an alternative way of approaching psychiatric and mental health patients through highlighting the shared responsibility, accountability, and efforts between nurses and patients using the Transtheoretical Model of Change with the intention of alleviating the burden on nurses while at the same time increasing patient compliance and commitment to change.

To our knowledge, there is currently minimal literature exploring the potential application of the Transtheoretical Model (TTM) also known as the Stages of Change Model in psychiatric and mental health nursing. The Transtheoretical Model was known by the works of Prochaska and DiClemente in 1983 (DiClemente & Prochaska, 1983) and by Prochaska and Velicer in 1997 (Prochaska & Velicer, 1997). According to TTM, in order to support a change in behavior, it is the role of health professionals to align the individual with the appropriate stage of change and provide a tailored intervention approach (Prochaska & Velicer, 1997). This model highlights the core concepts as follows: six stages of change, ten processes of change, self-efficacy (Bandura, 1977), and decisional balance. Of these constructs, this article will be focusing on the six stages of change (pre-contemplation, contemplation, preparation, action, maintenance, and termination) and its

application as a potential guide for psychiatric and mental health nursing interventions.

An examination of the existing research databases such as SCOPUS, PubMed, CINAHL, Google scholar and Web of science searching for Transtheoretical model (TTM) and health, TTM and nursing, and TTM and psychiatric nursing in the last ten years, revealed a considerable amount of findings for the use of TTM in the field of behavioral change, minimal literature in its applicability to nursing interventions, while scarce in its use in psychiatric and mental health nursing.

Behavioral studies have shown the varying application of using TTM in successfully changing and maintaining patient behaviors including dietary and quit smoking behaviors (Hashemzadeh, Rahimi, Zare-Farashbandi, & Alavi-Naeini, 2019), improve interprofessional collaborative practice (Keshmiri, et al., 2017), and increase the amount of physical activity among University students (Ting Liu, Kueh, Arifin, Kim, & Kuan, 2018). In a study conducted in Brazil, it was found that Transtheoretical Model of Change as an innovative technique can help change behavior particularly on adhering to non-pharmacological treatment of hypertension in the primary care settings (Nascimento, et al., 2021). Moreover, in a systematic review, the use of TTM showed

remarkable improvements in the self-care behaviors of patients with hypertension (Arafat, Hasriani, & Sjattar, 2021). In psychotherapy outcomes, a meta-analysis of specific disorders such as eating, mood, and substance and alcohol disorders showed better outcomes when clients have increased readiness to change (Krebs, Norcross, Nicholson, & Prochaska, 2018). In one of the nursing studies that incorporated TTM, the most used nursing intervention was “counseling” delivered using Information Communication Technology (Lee, Ae Park, & Ha Min, 2015).

It is important to note, however, that these studies involved interventions targeted toward the management of lifestyle problems such as smoking, physical inactivity, and dietary changes and minimal on psychiatric and mental health conditions and the role that nurses play in therapy outcomes. From these literature findings, it can be inferred that there is much room for exploration in the use of TTM in psychiatric and mental health nursing practice. Considering that TTM has been found efficient in changing behavior and in managing chronic physical conditions, it is highly likely that in addressing stage-matched mental health problems, TTM can also be used considering mental health problems’ chronic nature and need for behavioral changes for its prevention and management.

Transtheoretical Model’s Stages of Change and Potential Nursing Approach in Psychiatric and Mental Health Nursing

The next paragraphs consist of three sections 1. Identifying an individual’s stage of change, 2. Proposed stage-specific nursing approaches, and 3. Pros and cons of

integrating the Transtheoretical Model of Change in psychiatric and mental health nursing practice.

1. Identifying an individual’s stage of change

The following screening tools or measures of readiness for change can be used to assess which stage the person is at. Then, a nurse can effectively match the nursing approach with the stage of change the patient is in. The University of Rhode Island Change Assessment (URICA) by Prochaska and DiClemente can be used to assess the client’s problems and their desire for change in a general manner (DiClemente & Hughes,

1990). URICA is a self-report tool for adults with 32 items and 4 subscales (Precontemplation, Contemplation, Action, and Maintenance) to measure the stage of change. For more specific concerns such as alcohol and other drug use, the “Stages of Change Readiness and Treatment Eagerness Scale” (SOCRATES) can be used (Miller & Tonigan, 1996). This 19-item instrument

yields three scale scores: Ambivalence, Recognition, Taking steps.

Qualitatively, individuals who are ready for change will come forward, seek help, and express one’s readiness to interventions. In nursing, a similar concept is employed when assessing the “Insight” section of the Mental Status Examination

(MSE), which is a common tool to assess a person’s cognitive functioning and behavior (Voss & Das, 2021). ‘Insight’ refers to an individual’s capacity to understand that his or her behavior is a possible psychiatric illness, and may affect themselves and/or other people. ‘Insight’ also refers to whether or not a client views treatment as helpful.

2. Proposed stage-specific nursing approaches

Once the particular stage is identified, the following proposed nursing approaches indicated in Table 1 can be employed. In each stage, common psychiatric and mental health nursing concepts including self-

awareness, therapeutic communications and relationships, and therapeutic milieu (Hartley, Raphael, Lovell, & Berry, 2020) , can be threaded through and carefully tailored for each stage (see Table 1).

Table 1: Proposed Nursing Approaches for Patients with Mental Health Challenges According to the Transtheoretical Model

Stage	Description (Raihan & Cogburn, 2021)	Proposed nursing approaches for patients in this stage based on interventions for effective nurse-patient relationships (Hartley, Raphael, Lovell, & Berry, 2020)
Stage 1 Precontemplation	There is a considerable lack of awareness as to one’s personal behavior and how it can create negative consequences to self and others. There is no readiness for change. Thus, change in this stage is perceived as highly disadvantageous.	Conduct self-awareness activities, nursing health education, and provide mental health screening tools, provide resources to the client such as hotline numbers and help-centers that are accessible anytime the person is ready to seek help.
Stage 2 Contemplation	People begin to consider changing in the future, possibly in the next 6 months. There is a considerable awareness that one’s behavior may be causing negative consequences to self and/or others. Although ambivalent, the person now weighs the pros and cons of behavior change.	Conduct one-on-one conversations directed to clarifying beliefs and aligning values. It would be helpful also to expose the patient to people who have successfully created changes in their lives by making decisions to change one’s behavior. It is important at this stage to provide psychological space to the patient, so the decision comes from them. Pushing them to change may cause them to back down and resort back to the earlier stage.
Stage 3 Preparation (Determination)	People are now ready to act and create change in their lives, possibly within the next 30 days. They begin to take steps toward changing behavior as they begin to believe that this can lead to a healthier life.	Offer options, support, and resources to patients in relation to the change that they are ready to make. Medical interventions such as pharmacotherapy and psychotherapy may now be appropriate. Allow them to visualize how their lives would be different as a result of the behavioral changes.
Stage 4 Action	People have been creating changes in their behaviors within the last 6 months and continue to take action toward behavior and lifestyle changes.	Provide follow-ups and positive reinforcements to actions taken to change behavior. Continue the provision of options, support, resources, as well as nursing and medical interventions.

Stage	Description (Raihan & Cogburn, 2021)	Proposed nursing approaches for patients in this stage based on interventions for effective nurse-patient relationships (Hartley, Raphael, Lovell, & Berry, 2020)
Stage 5 Maintenance	People have sustained the changes in behavior for some time already and put effort into keeping this change and preventing any relapse from occurring.	Continue to provide follow-ups and positive reinforcements to actions taken to change behavior. Continue the provision of options, support, resources, as well as nursing and medical interventions. It would be helpful to assign a treatment and/or accountability partner who could be a healthcare practitioner or a former patient turned healthcare volunteer to help sustain the behavioral changes.
Stage 6 Termination	People have created a new sense of self, have adapted new behaviors totally different from the earlier stages.	Positive reinforcement can be used in this stage. These fully recovered (former) patients can now be used as resource speakers during nursing health education sessions and as accountability partners to recovering patients, when warranted.

3 The Pros and Cons of Integrating the Transtheoretical Model of Change in Psychiatric and Mental Health Nursing Practice

Since the use of the Transtheoretical Model of Change is a relatively new concept to be integrated in psychiatric and mental health nursing practice, it is important to note its potential pros and cons. The initial use of this model can be time and energy consuming. Therefore, nurses will have to spend more time with patients in every stage of change, as well as in customizing a specific intervention to match an individual's needs. This also requires additional training and specialization for nurses working in the mental health field. Since nurses will be working closely with, and possibly on a one-on-one basis with individuals, there is an increased risk of transference and countertransference. Also, this process may have limited applicability for psychiatric emergency cases whereby the person poses a potential risk to oneself and/or to others. In cases like this where patients have limitations in making choices for oneself considering their lack of insight, the healthcare practitioner has increased responsibility, instead, to make executive life-saving decisions on behalf of the client. Moreover, additional efforts and patience is required in this approach considering the possible non-linear progression of clients and that the time

spent for each stage is unpredictable (Steele, 2023) . Furthermore, more efforts need to be directed to standardize the measures to be used in general and particularly in psychiatric and mental health nursing practice for identifying the specific stage the client is currently in as well as the corresponding practice guidelines (Raihan & Cogburn, 2021).

Advantages include creating empowered individuals who are committed and dedicated to create changes in their behaviors and lives. It is possible that long-term and more permanent positive changes can occur whereby clients can become future models of change, with reduced chances of relapse. Ultimately, if clients achieve more sustained change, this can eventually lessen the overall burden to the healthcare system, including the burden placed on the shoulders of the healthcare workers and family caregivers. Recovered clients can even help in facilitating change in other individuals who are ready to seek help and receive interventions. There can also be a more efficient utilization of human, information technology, and other resources as we match an individual's stage of change with a more

tailored intervention to match specific needs.

Summary and Recommendations for Further Research

This article presents a novel approach to psychiatric and mental health nursing care through the possible integration of the Transtheoretical Model (Stages of Change) alongside already existing, main mental health concepts such as self-awareness, therapeutic nurse-client relationships, and therapeutic milieu among others. In this integrated approach, the commitment, self-efficacy, and readiness to change of the individual is taken into consideration by identifying the stage of change that the client is in to match the intervention/approach with their specific needs and readiness. In this way, there is a shared responsibility between the individual and the nurse/healthcare practitioner.

Opportunities for further research include conducting a pilot study integrating

TTM in the nursing care of clients with mental health conditions. Second, researchers can formulate a nursing-centered stages of change screening tool that can be efficiently integrated in nursing practice. Third, researchers may conduct studies to identify if there are any gender differences in the use of TTM in mental health nursing. Fourth, researchers should explore the potential application of TTM to clients below 18 years of age and to those with limitations in speech and comprehension. Fifth, nurses may consider TTM's applicability to psychiatric emergency cases, if any, after stabilizing physiologic needs and ensuring the safety of patients and others around. Sixth, is to explore the implications of the other elements of TTM to nursing practice not highlighted in this article as follows: process of change, decisional balance, and self-efficacy.

References

- American Psychiatric Association. (2022, January). About Psychiatric-Mental Health Nursing. Retrieved January, 2022 from <https://www.apna.org/about-psychiatric-nursing/>
- Arafat, R., Hasriani, & Sjattar, E. (2021, May 18). Transtheoretical model on the self-care behavior of hypertension patients: a systematic review. *Journal of Health Research*. doi:<https://doi.org/10.1108/JHR-01-2021-0053>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. doi:<https://doi.org/10.1037/0033-295X.84.2.191>
- DiClemente, C., & Hughes, S. (1990). Stages of change profiles in alcoholism treatment. *Journal of Substance Abuse*, 2, 217-235. Retrieved January, 2022 from https://pubs.niaaa.nih.gov/publications/AssessingAlcohol/InstrumentPDFs/75_URICA.pdf
- DiClemente, C., & Prochaska, J. (1983). Stages and processes of self-change of smoking, toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 390-395. doi:10.1037/0022-006X.51.3.390
- Gabrielsson, S., Sävenstedt, S., & Olsson, M. (2016, October). Taking personal responsibility: Nurses' and assistant nurses' experiences of good nursing practice in psychiatric inpatient care. *International Journal of Mental Health Nursing*, 25(5), 434-43. doi:doi: 10.1111/inm.12230. Epub 2016 Jul 4
- Hartley, S., Raphael, J., Lovell, K., & Berry, K. (2020, February). Effective nurse-patient relationships in mental health care: A systematic review of interventions to improve the therapeutic alliance. *International Journal of Nursing Studies*, 102(103490). doi:10.1016/j.ijnurstu.2019.103490
- Hashemzadeh, M., Rahimi, A., Zare-Farashbandi, F., & Alavi-Naeini, A. (2019, March-April). Transtheoretical Model of Health Behavioral Change: A Systematic Review. *Iranian Journal of Nursing and Midwifery Research*, 24(2), 83-90. Retrieved December 3, 2021 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6390443/>
- Keshmiri, F., Rezai, M., Mosaddegh, R., Moradi, K., Hafezimoghadam, P., Zare, M., . . . Shirazi, M. (2017). Effectiveness of an interprofessional education model based on the transtheoretical model of behaviour change to improve interprofessional collaboration. *Journal of Interprofessional Care*, 31(3), 307-316. doi:<https://doi.org/10.1080/13561820.2016.1276051>
- Krebs, P., Norcross, J., Nicholson, J., & Prochaska, J. (2018, November). Stages of change and psychotherapy outcomes: A review and meta-analysis. *Journal of Clinical Psychology*, 74(11), 1964-1979. doi:10.1002/jclp.22683.
- Lee, J., Ae Park, H., & Ha Min, Y. (2015). Transtheoretical Model-based Nursing Intervention on Lifestyle Change: A Review Focused on Intervention Delivery Methods. *Asian Nursing Research*, 9(2), 158-167. doi:<https://doi.org/10.1016/j.anr.2015.05.001>
- Miller, W., & Tonigan, J. (1996). Assessing drinkers' motivation for change: The Stages of Change Readiness. *Psychology of Addictive Behaviors*, 10, 81-89. Retrieved January, 2022 from <https://casaa.unm.edu/inst/SOCRATESv8.pdf>
- Nascimento, M., Oliveira Belo, R., de Santana Araújo, T., da Silva, K., Noya Barros, M., Figueirêdo, T., & da Silva Bezerra, S. (2021). Factors associated to the adherence to the non-pharmacological treatment of hypertension in primary health care. *Revista Brasileira de Enfermagem*, 74(suppl 6). doi:<https://doi.org/10.1590/0034-7167-2020-0173>
- Prochaska, J., & Velicer, W. (1997, Sept-Oct). The transtheoretical model of health behavior change. *American Journal of Health Promotion*, 12(1), 38-48. doi:doi: 10.4278/0890-1171-12.1.38. PMID: 10170434.
- Raihan, N., & Cogburn, M. (2021). *Stages of Change Theory*. Florida: StatPearls Publishing. Retrieved May, 2022 from <https://www.ncbi.nlm.nih.gov/books/NBK556005/>
- Scheydt, S., & Hegedus, A. (2021, June). Tasks and activities of Advanced Practice Nurses in the psychiatric and mental health care context: A systematic review and thematic analysis. *International journal of nursing studies*, 118(103759). doi:<https://doi.org/10.1016/j.ijnurstu.2020.103759>
- Steele, D. (2023). *Keltner's Psychiatric Nursing* (ninth ed.). St. Louis Missouri: Elsevier. Retrieved May, 2022

- Ting Liu, K., Kueh, Y., Arifin, W., Kim, Y., & Kuan, G. (2018). Application of Transtheoretical Model on Behavioral Changes, and Amount of Physical Activity Among University's Students. *Frontiers in Psychology*, 9, 1-8. doi:<https://doi.org/10.3389/fpsyg.2018.02402>
- Voss, R. M., & Das, J. M. (2021). *Mental Status Examination*. Florida: StatPearls Publishing. Retrieved May, 2022 from <https://www.ncbi.nlm.nih.gov/books/NBK546682/>
- Wainberg, M., Scorza, P., Shultz, J., Helpman, L., Moots, J., Johnson, K., . . . Arbuckle, M. (2017, May 19). Challenges and Opportunities in Global Mental Health: a Research-to-Practice Perspective. *Current Psychiatry Reports*, 5(28). doi:10.1007/s11920-017-0780-z
- World Health Organization [WHO]. (2019, November 28). *Mental Disorders: Key Facts*. Retrieved January 2, 2022 from WHO | World Health Organization: <https://www.who.int/news-room/fact-sheets/detail/mental-disorders>