

## **Project Title**

Evaluation of Therapists' Perceptions on Transdisciplinary Therapy in an Acute Inpatient Setting.

## **Project Lead and Members**

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## **Organisation(s) Involved**

Tan Tock Seng Hospital

## **Healthcare Family Group Involved in this Project**

Allied Health

## **Specialty or Discipline (if applicable)**

Physiotherapy, Occupational Therapy

## **Project Period**

Start date: November 2020

Completed date: August 2021

## **Aims**

Evaluate the perceptions of the therapists who had undergone Acute Inpatient Rehabilitation Essentials (AIRES) programme on transdisciplinary model of care.

## **Background**

See poster appended / below

## **Methods**

See poster appended / below

## Results

See poster appended / below

## Lessons Learnt

Transdisciplinary model of care is a new adoption for all the therapists under this programme. By highlighting to the participants during the focus group that their responses will aid improvement of the programme and implementation of transdisciplinary model of care, participants were forthcoming with their thoughts and experience. The use of the ICCAs outcome helped the team to identify areas in which the training program could be further enhanced to better prepare therapists to practice transdisciplinary model of care effectively in the wards. These findings then aided the further development of the programme as well as streamlining processes of the adoption of transdisciplinary model of care in the acute setting.

## Conclusion

See poster appended / below

## Additional Information

This project attained the Merit award (Category: Health Professions Education Research Investigator Award) at the Singapore Health & Biomedical Congress (SHBC) 2021

## Project Category

Workforce Transformation, Job Redesign, Trans-Disciplinary, Professional Development, Training & Education, Learning Approach, Inter-Professional Education

## Keywords

Transdisciplinary Therapy, Acute Inpatient Rehabilitation Essentials, Collaborative Practice

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# Evaluation of therapists perceptions on transdisciplinary therapy in an acute inpatient setting

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## Background

Transdisciplinary model of care has been increasingly popular as a strategy to address workforce shortages, improve cost-effectiveness and enhance patient care. In transdisciplinary care, the professional boundaries are less distinct and the roles and responsibilities of patient-centred care are shared by the professions. Acute Inpatient Rehabilitation Essentials (AIRES) is a transdisciplinary programme which trains physiotherapists (PT) and occupational therapists (OT) in identified core-skills through classroom and workplace learning sessions; and collaborative management of rehabilitation needs of patients in inpatient acute wards. The aim of this study is to evaluate the perceptions of the therapists who had undergone AIRES on transdisciplinary care.

## Methodology

A mixed quantitative and qualitative methodology was used. The Inter-professional Collaborative Competency Attainment Scale (ICCAS) is a self-rated questionnaire that participants rate their perceived competencies on 5 constructs, namely: communication, collaboration, roles and responsibilities, patient-centred care, and conflict management. 2 focus groups were conducted and responses were transcribed and coded. The coded data were then analysed for themes.

### Participants

Therapists that completed transdisciplinary training programme.

### Quantitative Measure

ICCAS is performed at end of classroom training (for pre-training and post-training competency) and 5<sup>th</sup> month follow up

### Quantitative Analysis

Scores in the 5 constructs of ICCAS were compared using Friedman test for the 3 time points, with confidence level of 95%.

### Qualitative Measure:

Focus group discussion with semi-structured questions conducted at 5<sup>th</sup> month follow-up

### Qualitative Analysis:

Transcripts were manually coded and analysed for recurring themes.

## Results

A total of 11 participants were recruited in this study. The ICCAS scores consistently increased from pre-training, post training to 5<sup>th</sup> month follow-up for all 5 constructs and were found to be statistically significant. Post-hoc analysis showed that the change in scores were statistically significant from pre-training to post training for all 5 constructs; and patient-centred care was significant for pre-training to 5<sup>th</sup> month follow-up. Details are shown in Figure 1 and Table 1.

Thematic analysis from qualitative data identified 3 main themes:

- 1.Improved communication and working relationship between therapists  
*"In the transdisciplinary ward, both PT and OT knows that if there is anything to bring up, they can go to each other. Whereas compared to a normal ward, it is more challenging"* - An OT
- 2.Transdisciplinary skills allowed therapist to provide sessions that were more holistic and value-adding to patients  
*"... if we can do both kind of interventions, we can involve [the patient] a bit more during the session, making it more meaningful and beneficial for them"* - A PT
- 3.Reduced duplication of services and workload  
*"it is good that one therapist can do the care-giver training from bed mobility to walking and home safety...it reduces the time for patient's family also"* - An OT

Figure 1. Median Scores of ICCAS

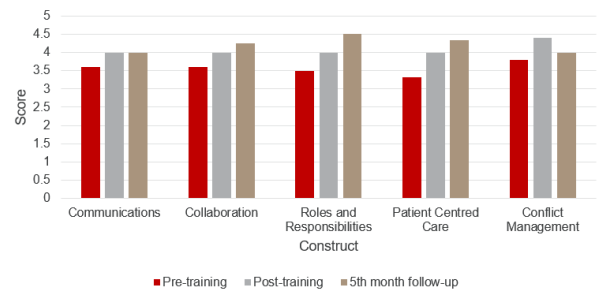


Table 1. Statistical Analysis of ICCAS Scores between pre-training, post-training and 5<sup>th</sup> month follow-up

Construct	Friedman Test n=11 p value	Post-Hoc Analysis <sup>a</sup>		
		Pre-training and Post-training	Pre-training and 5th Month follow-up	Post-training and 5th month follow-up
Communications	0.004*	0.005*	0.033	0.362
Collaboration	0.014*	0.011*	0.029	0.837
Roles and Responsibilities	0.005*	0.005*	0.026	0.569
Patient Centred Care	0.010*	0.011*	0.013*	0.18
Conflict Management	0.025*	0.011*	0.041	0.719

<sup>a</sup>p values adjusted by Bonferroni correction

\*Statistically significant p values

## Discussion

The ICCAS score improved at all 3 time points, and the greatest improvement was seen from pre-training to post-training. This is likely due to the attainment of new skills and peer-learning during the training. An increased awareness of inter-professional interactions and collaboration that is key for team functioning (Archibald et al.,2014) could also account for the increase in score post-training. The ICCAS score was sustained at 5<sup>th</sup> month follow-up. This is likely contributed by the practice of the skills learnt during training at the workplace and continued collaboration between therapists. However, the improvement was not statistically significant which could be due to a ceiling effect.

Thematic analysis from qualitative data showed positive experiences in transdisciplinary model of care. Professional culture is often a barrier for transdisciplinary care (Watterson et al.,2019), and perception of improved collaboration and communication in the transdisciplinary ward may signify acceptance of change in model of care in trained therapists. Collaboration, effective communication, and patient-centred care are reported outcomes of transdisciplinary care (Cartmill et al.,2011) and has been demonstrated in this study from the constructs of ICCAS and themes identified.

## Conclusion

A training programme for therapists that targets transdisciplinary care can improve inter-professional collaboration and communication which may enhance patient care. Perspectives of the therapists revealed that training and implementation of transdisciplinary model of care is feasible in an acute inpatient setting.

## References

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