



# The Effect of Wound Care Challenges and Solutions by Telehealth during the COVID-19 Pandemic

Piraluk Laplai, M.N.S. (Adult Nursing), Marasri Pinsuwan B.N.S.  
Surgical Nursing Division, Pra Nakhon Sri Ayutthaya Hospital

## ABSTRACT

**BACKGROUND :** The transmission of the COVID-19 virus has profoundly affected the way nurses conduct nursing care and medical services resulting in a decrease in the necessary medical care, especially the specialty of wound healing. To increase the opportunities of equality of the chronic wound care system and respond to the policy of the Ministry of Public Health to include early and effective management of non-communicable disease (NCD) patients in hospital (excellent prevention and control of COVID-19 transmission), relevant technologies were developed, including telehealth. This would help to advance wound care and drive Innovative Healthcare Management. As a result, there would be effectiveness and sustainability for advance chronic wound care in the Transformations of the New Normal Medical and Nursing Care System.

## OBJECTIVE AND METHODS

**OBJECTIVES:** To examine the effects of the wound care challenges and solutions by telehealth during the COVID-19 pandemic in chronic wound patients on the progression of wound healing.

**METHODS :** Based on the logic model conceptual framework and nursing processes for development in the format of the New Normal, 40 chronic wound patients were recruited by purposive sampling, and divided into 20 participants each in the control group and experimental group. The effect of the wound care by telehealth was evaluated when the patients completed the research tool; Bates-Jensen Wound Assessment Tool (BWAT), before and during the nursing care by telehealth, including Weeks 1, 2, 3, and 4 by the researcher and research assistant. The data were analyzed for reliability with inter-rater reliability (IRR), as well as descriptive statistics, and a two-factor repeated measures design with a repeated measure on one factor.

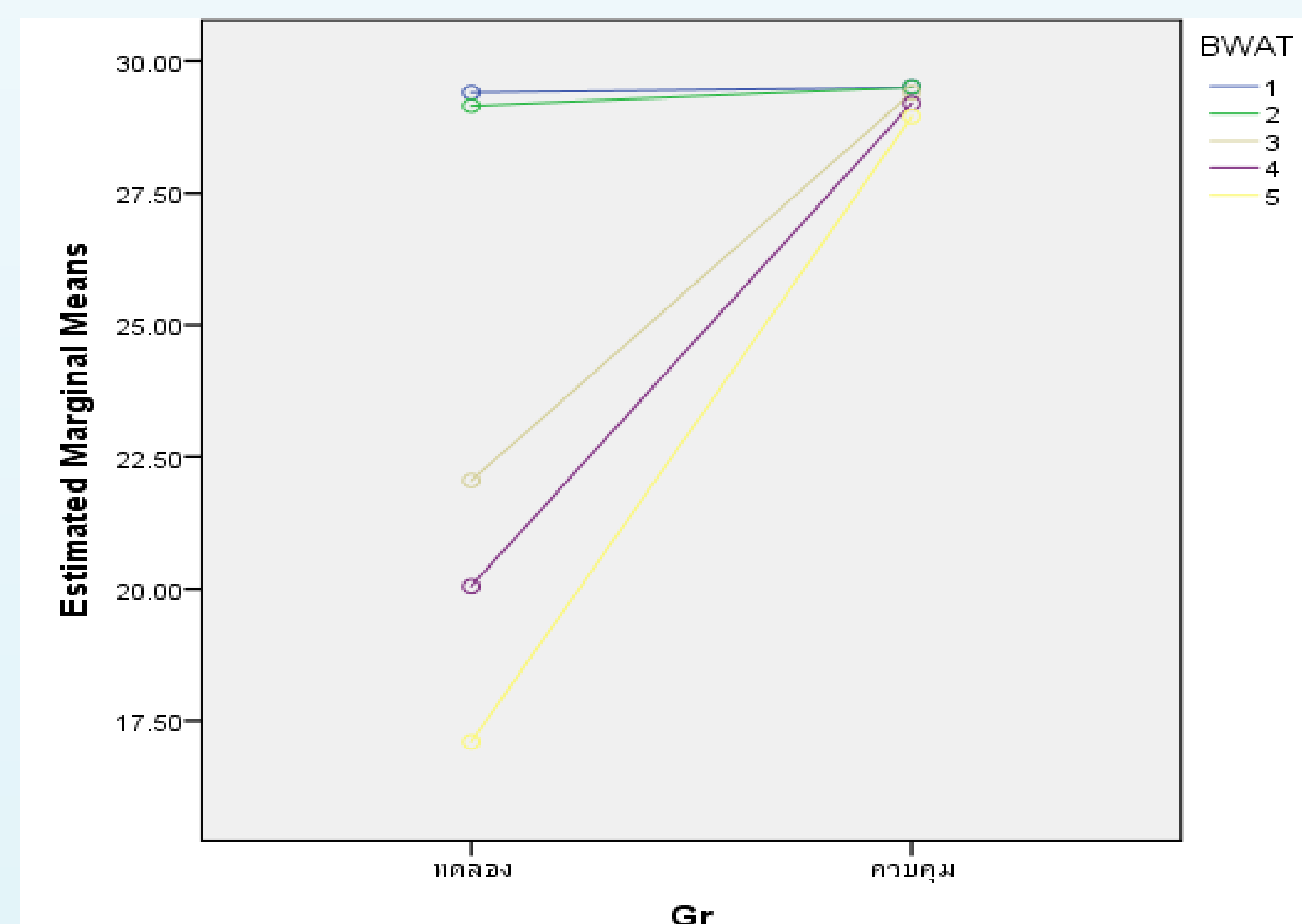
## RESULTS

The results revealed that patients in the experimental group, who received wound care by telehealth and advanced/modern wound dressing, had a significantly different score on the BWAT than those in the control group, who received regular nursing care. The development of integrated knowledge would require utilizing technology to communicate and modern innovations. Thus, the selection of materials of wound care by an enterostomal therapy (ET) nurse would be appropriate for the patients, including safety and effectiveness.

## CONCLUSIONS

Chronic wound care by telehealth and advanced/modern wound dressing was successful in the process of wound healing without any signs and symptoms of wound infection.

**KEYWORDS :** Telehealth, chronic wound, COVID-19 pandemic



**Table** Mean BWAT scores were compared between patients in the control group. and patients in the experimental group in the pre-experimental period and in the experimental period at weeks 1, 2, 3, and 4, using a two-factor, repetitive analysis of variance, controlling for the influence of group variables. (n = 40)

Sources	SS	Df	MS	F	p-value
Between group					
BWAT Scores	1658.88	1	1658.88	7.57	0.009
Error1	8326.94	38	219.13		
Within group					
BWAT Scores	1314.02	2.44	537.64	23.12	< 0.001
BWAT Scores *times	1124.12	2.44	459.94	19.78	< 0.001
Error2	2159.06	38	23.24		