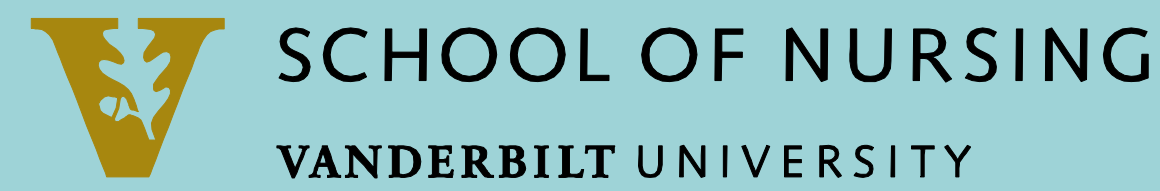


Improving Quality of Life in Adult Dialysis Patients Through a NP-led Virtual Support Group

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Introduction

Topic
 Evaluate how a virtual support group can affect quality of life (QOL) in adult patients with end-stage renal disease (ESRD) on hemodialysis

Problem

- Increasing number of patients with end-stage renal disease (ESRD) on dialysis due to higher incidence of hypertension & diabetes
- Dialysis leads to significant decrease in QOL for many patients, leading to missed treatments, increased hospitalizations, and death (Thome, 2017).
- Mortality risk increased with Kidney Disease Quality of Life (KDQOL) survey PCS (Physical Component Survey) score < 43 and a MCS (Mental Component Survey) score < 51; an increase of 1-point in PCS score reduced relative risk of mortality/hospitalization by 2%, and a 1-point increase in MCS score reduced relative risk of mortality by 2% and hospitalization by 1% (Lowrie et al., 2004).

Population
 Adult dialysis patients on dialysis > 6 months at the Rutland, VT dialysis unit who have completed a KDQOL survey within the last year.

Team
 Nephrology Nurse Practitioner, Dialysis unit care coordinator, Dialysis unit social worker

Aim
 Increase KDQOL PCS and/or MCS scores from the pre-implementation score to 1 point above the pre-implementation score in 25% of adult patients on hemodialysis

Objectives

- Improve QOL in adult dialysis patients
- Provide a supportive environment through a virtual support group
- Improve patient treatment adherence

Participant demographics	n (%)
Age	
<50	2 (22.2)
50-70	4 (44.5)
>70	3 (33.3)
Gender	
Female	3 (33.3)
Male	6 (66.7)
# of Virtual Support Group Sessions Attended by Participants	n (%)
0 sessions	5 (55.6)
1 session	2 (22.2)
2 sessions	2 (22.2)
3 sessions	0 (0)

Note. N=9

Table 1
 Virtual Support Group Participant Demographic/Session Participation

Methods

Measures

- KDQOL pre-/post-implementation PCS/MCS scores will be used to measure changes
- Measurement of change determined by the number of participating patients with an increase/decrease in PCS or MCS scores ≥ 1 point on KDQOL divided by the total number of patients that completed the KDQOL

PDSA

Plan

- Retrospective review: Review pre-implementation KDQOL scores
- Test how a support group will improve the patient's QOL in HD patients

Do

- Introduce/present support group topic (50-min session x 3)
- Demographic data collection of participating patients
- Review post-implementation KDQOL PCS/MCS scores

Study

- Analyze changes in pre-/post-PCS/MCS scores using descriptive statistics
- Create table of demographic data and session attendance

Act

- Adapt the intervention- due to minimal group participation & no/minimal improvement in the patient's KDQOL PCS/MCS scores

Results

Changes to PCS and MCS scores

- MCS score increased by 5.9 points (33.3%) in one of the three participants
- No increase in PCS scores in three patients that completed the post-intervention KDQOL survey
- Lack of change in PCS score could reflect length of time between the pre- and post-KDQOL; may reflect the physical health changes that occurred in the patients between the pre- and post-surveys

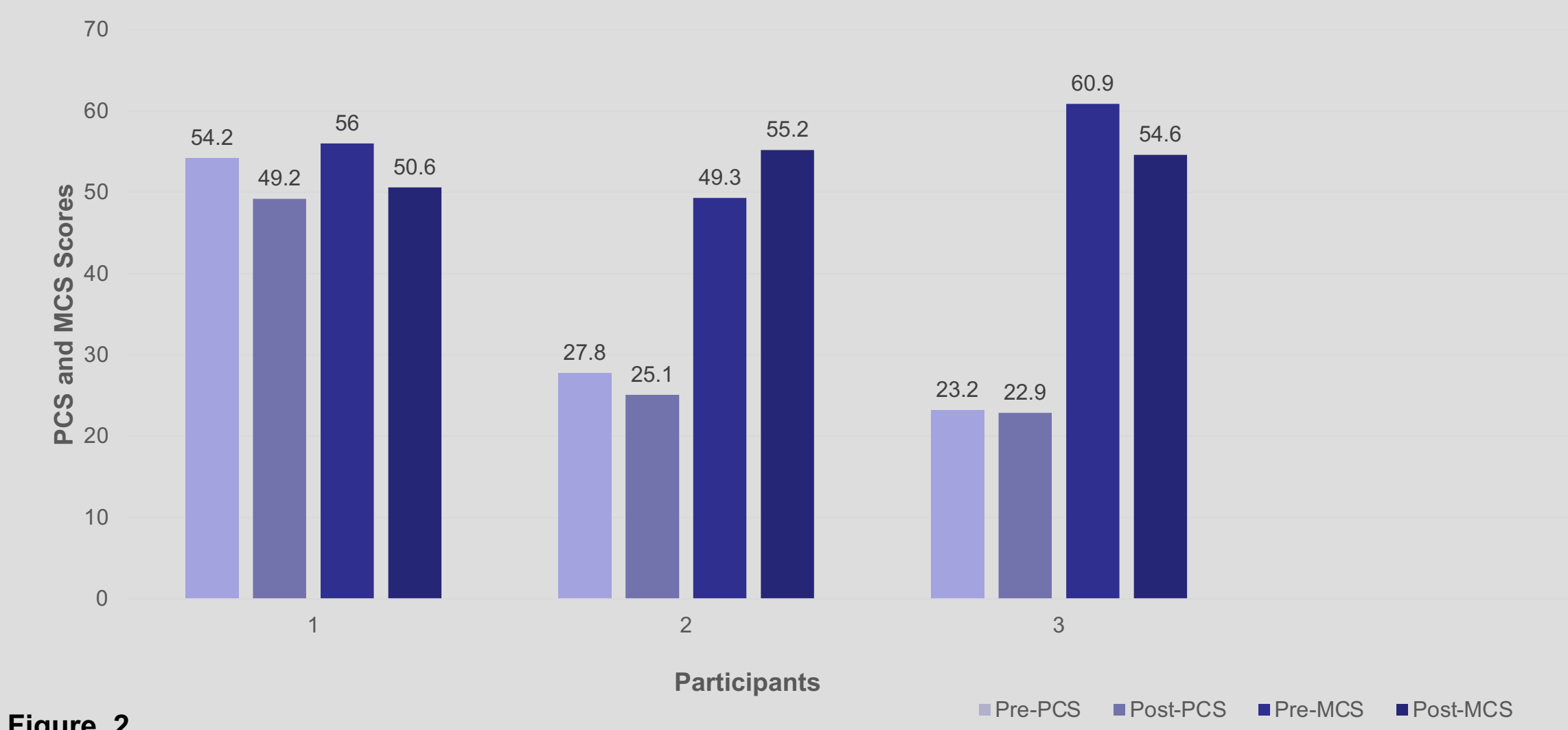


Figure 2
 Pre/Post PCS and MCS scores

Implications for Practice

Results show low attendance rate for the support group and no improvement in KDQOL PCS scores. The small number of participants may not accurately reflect a change in patient QOL.

Strengths

- Improved one-on-one communication with patients that attended virtual support group
- A virtual support group is beneficial during the ongoing COVID-19 pandemic

Weaknesses

- Small sample size, low attendance rate
- Limited time for intervention due to school time limits
- Connectivity issues due to lack of knowledge in using online meeting platform and poor internet service in a rural area

Using a different meeting platform and day of the week could improve group participation. Anyone wanting to start a support group, I would recommend polling the group participants prior to implementation about their preferred meeting day, time, and platform

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