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The Effects of the Resilience Intervention on Adolescents and Young Adults Undergoing Treatments for Cancer

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Purpose: Resilience has been recognized as an essential factor for adolescents and young adults (AYA) with cancer to effectively manage illness distress and toward positive adjustment based on previous findings. However, the effects of the nursing care on promoting resilience in AYA with cancer are not verified. Therefore, the purpose of this study was to evaluate the effects of the nurse-led intervention on perceived stress (risk factor), perceived family support (protective factor) and resilience (outcome) in AYA with cancer, based on the theoretical perspective of Haase's Resilience in Illness Model.

Methods: This study used a quasi-experimental design to recruit participants who were 12 to 25 years old in the period of ongoing cancer treatment at two medical centers in northern Taiwan. Participants in the low-dose control group practiced the respiratory training (1st-4th days) through our biofeedback equipment. On the other hand, participants who were in the intervention group not only received biofeedback for respiratory training (from 1st to 4th days), but also processed and recorded action plans that consisted of a short-term plan (from 1st to 4th days) and a long-term plan (from 5th to 30th days). Each participant completed pretests at T1 (baseline, in the first day and before intervention) and time 2 (T2, 4 days post T1) and time 3 (T3, 30 days post T1). Data were collected by a structured questionnaire that included the perceived stress scale, perceived family support scale, and resilience in illness scale. Additionally, the implementation records of the resilience intervention in AYA were collected by diaries completed by participants and their family members in the intervention group.

Results: The study involved 59 participants, but only 54 AYA completed all measurements. Twenty-seven participants were in each group. No group differences in all demographic data were detected. The findings that included: (1) correlates of resilience were identified by Generalized Estimating Equation (GEE) analysis as age ($B=-0.397$, $p=0.026$), gender ($B=2.780$, $p=0.042$), time 3 ($B=2.613$, $p=0.042$), level of stress ($B=-0.260$, $p=0.008$), and family support ($B=0.502$, $p=0.000$), except type of group ($B=0.819$, $p=0.560$); (2) lower level of stress, more family support, and higher resilience were shown for participants in intervention group between before and after intervention. However, this phenomenon was not seen in the low-dose control group; (3) all participants in the intervention group witnessed their effort and celebrated their success on the fourth day because of reaching the goals that were set by them. Their goals included regularly doing exercise, eating healthy diet, stress relieving by listening music and deep breathing. However, in the continuous plan, 3 participants encountered personal events that occurred unintentionally, therefore only 24 participants (88.89%) victoriously reaching their goals at T3.

Conclusion: Although no group differences in level of stress, family support, and resilience were detected after intervention, these results were verified the feasibility and effectiveness of resilience intervention by implementing individual plans that were designed by AYA with cancer and followed by them and a family member. We suggest that healthcare professionals could foster resilience, strengthen family support, and appropriately manage stress of AYA with cancer by practicing this nurse-led intervention. Additionally, further nursing intervention needed to consider age and gender difference.

Title:

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References:

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Abstract Summary:

The participants will know how to apply middle range theory to guide an intervention study. Additionally, they will learn the procedures of resilience intervention for adolescents and young adults (AYA) with cancer. Finally, they will understand the risk factors and protective factors of resilience in AYA with cancer.

Content Outline:

I. Introduction

A. The resilience intervention was based on the theoretical perspective of Haase's Resilience in Illness Model.

B. The purpose of this study was to evaluate the effects of the nurse-led intervention on decreasing risk factor and increasing protective factor of resilience in adolescents and young adults with cancer.

II. Body

Main point #1: Lower level of stress, more family support, and higher resilience were shown for participants in intervention group between before and after intervention. However, this phenomenon was not seen in the low-dose control group, although no group difference was seen.

Supporting point: These result was verified the effectiveness of the resilience intervention.

Main point #2: The risk factors of resilience were detected as young age, level of stress. The protective factors were male and family support.

Supporting point: The findings were consistent with Haase's Resilience in Illness Model.

Main point #3: Participants in the intervention group witnessed their effort and celebrated their success on the fourth day and the last day of resilience intervention because of reaching the goals that were set by them.

Supporting point: These result was validated the feasibility of the resilience intervention.

III. Conclusion

According to the results of this study, we suggested that healthcare professionals could foster resilience, strengthen family support, and appropriately manage stress of AYA with cancer by practicing this nurse-led intervention.

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