



## Abstract

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**PI Title:**

**Project Title:** ADULT FAILURE TO THRIVE IN LONG-TERM VENTILATOR PATIENTS

**Abstract:** Long-term ventilator (LTV) patients represent a growing population that consumes considerable health care resources. Although the majority of critically ill patients require short-term ventilator support, LTV patients may require mechanical ventilation and thus, intensive care hospitalization for weeks or months. Prolonged mechanical ventilation usually involves a lengthy weaning period (an interval in which mechanical ventilator support is gradually withdrawn). To date, much of the research on LTV patients has focused on respiratory parameters that predict weaning outcome and mortality. There are indications, however, that factors such as malnutrition, mood state, social isolation, and poor sleep patterns may be as significant as respiratory parameters in predicting outcomes of LTV patients. Little is known about these factors in LTV patients but they are associated with adult failure to thrive (FTT), a syndrome defined as a lower than expected level of functioning that frequently is associated with nutritional deficits, depressed mood state, and social isolation. In addition to the need to assess factors that affect respiratory functioning in LTV patients, there is increasing recognition that weaning is a process, not a single incident. The proposed research will use a prospective longitudinal design to describe weaning patterns and patterns of FTT-related variables (nutrition, mood state, social isolation, and sleep) in 300 LTV patients. Descriptive statistics will be used to characterize this patient population and graphic analysis will be used to characterize patterns of change in the variables over time and illustrate between-group variability. Multivariate analyses will investigate the relationship between FTT variables and four outcome variables: discharge disposition, length of stay, weaning outcome, and readmit status. Through identification of factors that can be modified by

*nurses (e.g., nutritional adequacy, sleep habits, support systems, or mood state), research about weaning and FTT variables in LTV patients will provide data for future intervention studies. It has the potential, therefore, to decrease the morbidity and mortality associated with adult FTT and long-term mechanical ventilation and it will help nurses, patients and families prepare for post-hospital care.*

**Thesaurus Terms:**

*artificial respiration, critical care, extended care, functional ability, human therapy evaluation, longitudinal human study, respiratory therapy depression, human morbidity, human mortality, malnutrition, outcomes research, psychological stressor, psychosocial separation, sleep deprivation, social support network adult human (19+), data collection methodology /evaluation, human subject, interview, patient oriented research, statistics /biometry*

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