

# Comparison of Fatigue and Quality of Life in Individuals With Pancreatogenic Diabetes After Total or Partial Pancreatectomy

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**OBJECTIVES:** To compare fatigue and quality of life (QOL) between individuals with pancreatogenic diabetes after total pancreatectomy (TP) and pancreaticoduodenectomy (PD).

**SAMPLE & SETTING:** 50 individuals (14 after TP and 36 after PD) were recruited from a pancreatic surgical outpatient department. A final sample of 39 matched individuals (13 after TP and 26 after PD) were included in the final analysis.

**METHODS & VARIABLES:** A comparative cross-sectional approach was used. Variables were fatigue and QOL. The Fatigue Symptom Inventory and European Organisation for the Research and Treatment of Cancer Quality-of-Life Questionnaire—Core 30 were used. Data went through propensity score one-to-two matching. Generalized estimating equation was used to compare fatigue and QOL.

**RESULTS:** The groups showed no statistically significant difference in fatigue intensity and overall QOL. The TP group had significantly longer fatigue duration, perceived higher interference of functioning, lower physical function, and a higher level of insomnia.

**IMPLICATIONS FOR NURSING:** Future studies with a larger sample and longitudinal design will help identify the trajectory of fatigue and QOL in individuals with pancreatogenic diabetes post-TP and PD.

**KEYWORDS** fatigue; pancreaticoduodenectomy; quality of life; total pancreatectomy

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Pancreatic resection plays a crucial role in treating individuals with diseases of the pancreas, including chronic pancreatitis, pancreatic tumors (e.g., intraductal papillary mucinous neoplasm, pancreatic neuroendocrine tumor), and pancreatic malignancies (Heidt, Burant, & Simeone, 2007; Tillou et al., 2017). Pancreatic cancer is one of the most fatal malignant tumors worldwide (Ilic & Ilic, 2016). The onset of pancreatic cancer occurs in older adults aged an average of 65 years, and its five-year survival rate is much lower when compared to benign conditions, such as chronic pancreatitis (Raimondi, Lowenfels, Morselli-Labate, Maisonneuve, & Pezzilli, 2010). Pancreatic surgery is one of the only curative treatments for pancreatic malignancies (Zhang et al., 2016). Pancreaticoduodenectomy (PD), also known as the Whipple procedure, is the most common and traditional surgical method used in treating pancreatic cancer (Cid-Arregui & Juarez, 2015); however, pancreatic anastomosis-related complications and pancreatic cancer recurrence after PD decrease individuals' quality of life and survival (Zhang et al., 2016). With the improvement in surgical techniques, individuals with diseases of the pancreas are provided with the option of a total pancreatectomy (TP) to assist in the complete resection of the malignancy or the region with a higher risk of malignancy to improve survival (Andrén-Sandberg, Ansorge, & Yadav, 2016).

Despite the promising advantages of TP, postoperative exocrine and endocrine insufficiency remains a downside of the procedure (Casadei et al., 2010). However, with the progress of medical and surgical care, individuals after TP receive better care for endocrine and exocrine insufficiency (Andrén-Sandberg et al., 2016; Jamil et al., 2012; Keim, Klar, Poll, &