Measuring the impact of fatigue on health-related quality of life in prostate cancer patients in the USA and Germany

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Fatigue has a measurable and consistent negative impact on patients with prostate cancer and their HRQoL

Patients with symptoms other than fatigue, with ongoing hormone therapy, and metastatic disease were more likely to have fatigue

CLINICAL RELEVANCE

- To our knowledge, this is the first and largest cross-sectional study of patients with prostate cancer demonstrating that fatigue has a measurable and consistent negative impact on HRQoL across three validated questionnaires
- Given the high burden and prevalence of fatigue among patients with prostate cancer, physicians should select treatment strategies associated with a lower burden of fatigue and educate patients on the importance of exercise to minimize the impact on patients' overall HRQoL

BACKGROUND

- Fatigue occurs frequently in patients with prostate cancer[1,2]
- Fatigue can negatively affect HRQoL by impacting physical functioning, emotional well-being, mental clarity, independence, daily activities, work, and social life[2]
- Understanding fatigue is therefore important to enable the effective management of this symptom[2]
- In this study, we measure the impact of fatigue on the HRQoL of patients with prostate cancer

OBJECTIVE

- To assess the impact of fatigue on HRQoL among patients with prostate cancer in the USA and Germany

METHODS

Survey was administered online to **10,424** patients (46% acceptance rate)

Survey questions assessed fatigue and HRQoL using 3 validated questionnaires

- EQ-5D-5L[3]: Mobility, self-care, usual activities, pain/discomfort, anxiety/depression
- FACIT-F[4]: Fatigue, daily activities/function
- FACT-P[5]: Physical, social, emotional aspects

Completed survey **(N=4301)** (41% response rate)

Survey analysis

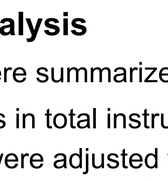
- Results were summarized using descriptive statistics
- Differences in total instrument score were assessed between patients with and without fatigue
  - Models were adjusted for age, cancer stage, symptoms other than fatigue, whether the patient was taking hormone therapy or exercised regularly, and country
- Multivariate regression models estimated fatigue impact on the EQ-5D index score

PATIENT BASELINE CHARACTERISTICS

- Patients' mean age was 70 years, with a diagnosis over 4 years ago, and >60% of patients exercised regularly
- Most patients were in the earlier stages of prostate cancer, with 79% having local disease
- Approximately half of the patients had received hormone therapy, and almost 40% of patients were receiving ongoing hormone therapy

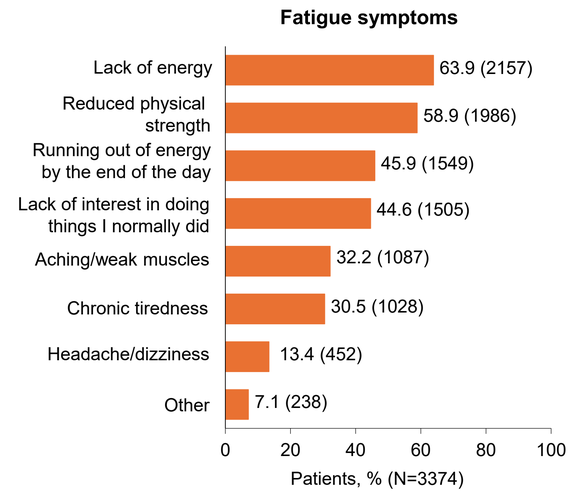
Demographics and disease characteristics	Overall population (N=4301)
Age, mean, years	70.5
Country, n (%)	
USA	1893 (44.0)
Germany	2408 (56.0)
Time since prostate cancer diagnosis, mean, months	52.7
Cancer stage, n (%)	
Local	2416 (56.2)
Locally advanced	974 (22.6)
Metastatic	697 (16.2)
Exercise regularly, n (%)	2738 (63.7)
Hormone therapy received, n (%)	2144 (49.8)
Hormone therapy ongoing, n (%)	1630 (37.9)
Fatigue experienced, n (%)	3374 (78.4)

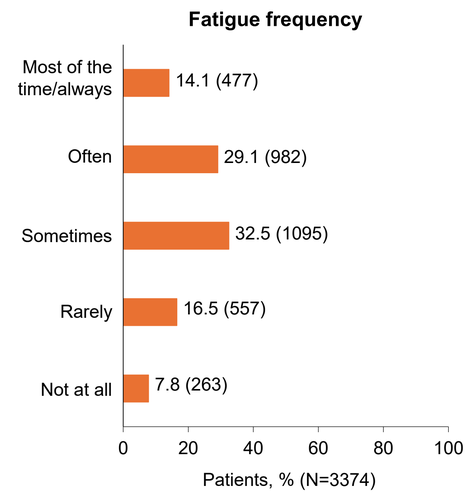
Patients reporting fatigue



FATIGUE SYMPTOMS

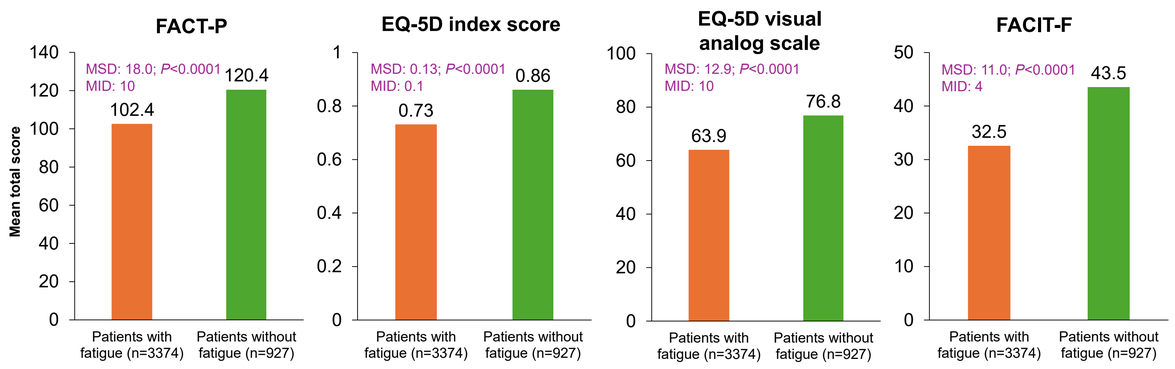
- The most common characterizations of fatigue were lack of energy (64%), reduced physical strength (59%), and running out of energy by the end of the day (46%)
- Among patients who experienced fatigue in the past 30 days, 43% reported that fatigue occurred most of the time/always or often, and 33% sometimes





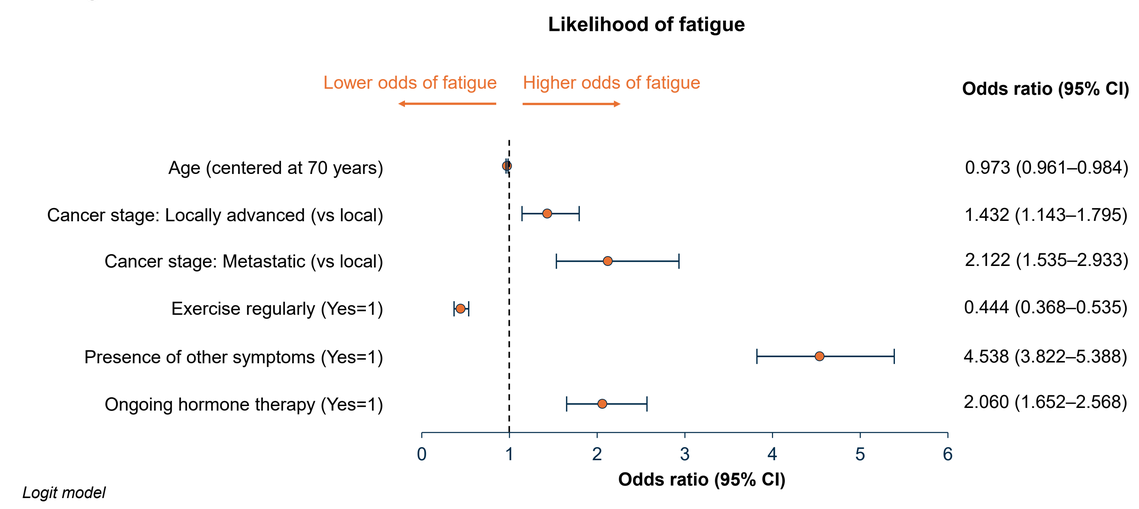
IMPACT OF FATIGUE ON HRQOL

- Fatigue impacted HRQoL. Patients with fatigue had significantly lower mean total scores across all three questionnaires than those without fatigue (P<0.001)
- The mean score differences exceeded minimally important difference thresholds, indicating clinically meaningful impairments by fatigue on HRQoL*



Adjusted model

- Patients with fatigue experienced markedly worse HRQoL (approximately 0.17-point lower mean EQ-5D index score) versus those without fatigue (P<0.001)
- Regular exercise was associated with a lower likelihood of fatigue, whereas symptoms other than fatigue, ongoing hormone therapy, and metastatic disease were associated with a higher likelihood



Logit model

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Footnotes: *After adjusting for age, cancer stage, hormone therapy, regular exercise, and other concurrent symptoms.

Abbreviations: **CI**, confidence interval; **EQ-5D-5L**, EuroQol 5-dimension 5-level; **FACIT-F**, Functional Assessment of Chronic Illness Therapy – Fatigue; **FACT-P**, Functional Assessment of Cancer Therapy – Prostate; **HRQoL**, health-related quality of life; **MID**, minimally important difference; **MSD**, mean score difference.

References: **1.** Berger AM, et al. *J Natl Compr Canc Netw* 2015;13:1012–1039; **2.** Cornford P, et al. *Eur Urol Open Sci* 2024;63:119–125; **3.** EuroQol. EQ-5D-5L. Available at https://euroqol.org/information-and-support/euroqol-instruments/eq-5d-5l/l (Accessed October 9, 2026); **4.** FACIT.org. FACIT-F. Available at https://www.facit.org/measures/facit-f (Accessed October 9, 2026); **5.** FACIT.org. FACIT-P. https://www.facit.org/measures/fact-p (Accessed October 9, 2026).

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