**An Ethno-science Approach to Develop a Cross-Cultural Understanding of Fatigue**

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**Fatigue and advancing cancer**
Fatigue attributable to cancer and its treatment is a cause of distress around the world, but comparisons of fatigue among people from various countries is limited. Understanding the influence of socio-cultural contexts on fatigue could help health care professionals communicate more clearly with patients and potentially aid in the development of any modifications required to fatigue interventions.

**Ethno-science**
The objectives of this study were to compare the descriptions of fatigue provided by individuals with advanced cancer living in Canada, Thailand, England, and Italy and use them to refine the conceptual definition of fatigue as outlined in the Edmonton Fatigue Framework.

A qualitative approach based on ethnoscientific was used to compare the way participants from each study population use language to describe fatigue. Data were collected using two semi-structured interviews, incorporating a card sort technique, and then used to construct taxonomies showing the dimensions of fatigue in each population. The segregates (categories) are presented as headings and their sub-segregates (qualities) are presented as bullet points below, according to country.

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**ENGLAND n=9**

- **Emotional experience of advancing disease**
  - Emotional effect of decline (variable mood, annoyance, frustration, worry, giving in to sleep/health)
  - Cognitive realization of decline (disease, pain, change in appetite, problem sleeping, ‘deep down I know I am not fine’, ‘day to day struggle’)
  - Mental tenacity (perseverance and planning, ‘pushing self’, wanting to do more)

- **Functional limitations**
  - Limitations on leisure (watching TV, reading, travel, socialising)
  - Limitation on functional roles (shopping, bearing weight, helping others)
  - Repatterning and adjustment (taking taxis, scheduling extra time, ‘battle with gravity’)

**Essence of meaning: functional decline**

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**CANADA n=27**

- **MIND**
  - Emotions (impatient, anxious, emotionally numb)
  - Thinking (forgetful, hard to concentrate, confused)

- **BODY**
  - Muscles (weak, heavy, run out of energy quickly, like someone flipped a switch)
  - How body feels (worn out, increased sensitivity to light, noise, taste, touch; I cannot move)

**Essence of meaning: location of effect**

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**ITALY n=16**

- **MIND**
  - Neuro-cognitive functions (memory)
  - Psychological process (interests and motivation, emotions)

- **BODY**
  - Basic physiological functions (sleep quality, hunger)
  - Body functionality (available energy, muscle physiology)

- **RELATIONSHIPS**
  - Care-giver patient relationship (level of autonomy, type of support sought)
  - Relational orientation (openness vs. withdrawal)

**Essence of meaning: psycho-social impact**

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**THAILAND n=10**

- **INTERMITTENT**
  - Loss of mental strength (angry, more emotional, bored, discouraged, feel lifeless, withdrawn, worried, anxious)
  - Difficulty sleeping (half asleep and half awake, dazed, dog sleep)

- **ESSENTIAL/CONSTANT**
  - Feeble/easily tired (too tired to breathe, short of breath, increased need to breathe deeply, too tired to do work, burned out/no energy too tired to respond to others, want to lie down)
  - Altered cognition (forgetful, absent minded, can’t think, unable to find words/voiceless)

**Essence of meaning: temporality**