University of Huddersfield Repository

Newton, Veronica

Concept Analysis of Limited Joint Mobility in the foot

Original Citation


This version is available at http://eprints.hud.ac.uk/20102/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/
Background

**Limited Joint mobility** (LJM) is one of the earliest clinically apparent long term complications of Type 1 Diabetes – Lindsay (2005).

A **concept analysis** approach was used to review available literature focusing on LJM in the foot. Clinical features of LJM were explored and the potential consequences to tissue changes appraised, to provide a clearer exposition of this condition and the factors underlying it. This work has application to a wide community of practitioners to illustrate the presence of LJM and the potential effects on joint function which may lead to ulceration of the Diabetic foot.

Research Design and Method

Concept analysis is a method of research which contributes to a body of knowledge or developing theory about specific concepts or phenomenon Walker and Avants (2005)

Three Broad goals

**Analysis** - dissect out relevant literature

**Synthesis** - combine the seemingly isolated components together

**Derivation** - employ analogy/develop theory to make sense of the evidence

Results

This concept analysis has identified literature on LJM falls into three domains:

1) **Structural effects**
2) **Functional effects**
3) **Tissue properties**

Conclusions

The empirical referents within a concept analysis framework are measures of the defining attributes. This concept analysis has developed a theoretical framework of three domains to facilitate understanding of LJM in the foot.

**Foot Function models** can examine the biomechanical paradigms underpinning range of motion at joints

**Structural** models to measure the behaviour of soft tissues in weight bearing and non weight bearing states.

**Tissue properties** of LJM will be investigated given the association of connective tissues changes affected by glycosylation in patients with diabetes.

References

Lindsay, J.R. et al Reduced prevalence of Limited Joint Mobility in Type 1 Diabetes in a UK Clinic Population over a 20 year period. Diabetes Care 28: 658-661, 2005.

