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.

