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Newton, Veronica

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### Original Citation

Newton, Veronica (2014) Concept Analysis of Limited Joint Mobility in the foot. In: SOMM Conference 2014, 15th March 2014, London, UK. (Unpublished)

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# Concept Analysis of Limited Joint Mobility in the foot

## 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



**The Prayer Sign** a clinical technique to assess the presence of LJM in the hands Frost (2001).

## Conclusions

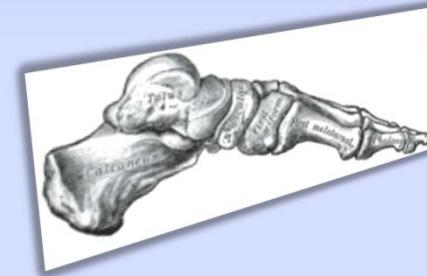
The empirical referents within a concept analysis framework are measures of the defining attributes. This concept analysis has developed a theoretical framework of three domains to facilitate understanding of LJM in the foot.

**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

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Veronica Newton  
Senior Lecturer in Podiatry  
University of Huddersfield  
School of Human and Health Sciences  
Division of Podiatry and Clinical Sciences  
Supervisors  
Dr Karen Ousey  
Professor Kim Burton  
Tel: +44 (0) 1484 473787  
Email: v.newton@hud.ac.uk