Prevalence and determinants of depression in older adults: a meta-analysis


Objective: To systematically review the prevalence and determinants of depression in older adults with a minimum follow-up of 1 year.

Methods: A systematic search of MEDLINE, PsycINFO, CINAHL, EMBASE, and Scopus databases was conducted. Studies on non-institutionalized older adults (aged ≥ 65 years) were included if they reported the prevalence of depression and the proportion of older adults with depression by gender, age group, country, and socioeconomic status.

Results: A total of 43 studies met the inclusion criteria. The prevalence of depression in older adults was found to be 11.9% (95% CI 8.1%–15.7%), with a wide variation across studies. The prevalence was higher among women than men, and the prevalence was higher in older adults aged 75 years and older compared to younger adults. The prevalence of depression was higher in non-Western countries compared to Western countries. The prevalence of depression was also higher in lower socioeconomic status compared to upper socioeconomic status.

Conclusion: The prevalence of depression in older adults is substantial and varies widely across studies. Understanding the determinants of depression in older adults is crucial for the development of effective interventions to prevent and treat depression in this population.

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5) **Direct Loading of Implants**

Pär-Olov Östman DDS, PhD, MD, Private practitioner, Falun- and Biomaterial group, Sahlgrenska Academy, Gothenburg - Clinical Implant Dentistry and Related Research, Volume 7, Supplement 1, 2005

Paper IV

20 consecutive patients with totally edentulous maxillas were included in the study. The criteria for direct loading was insertion torque 30 Ncm and an ISQ > 60 on the most posterior implants and a sum of 200 ISQ (average 50 ISQ) on the 4 anterior implants. The overall conclusion with the thesis is that dental implants can be direct loaded with a good result if high primary stability can be obtained and if a stable provisional bridge with good occlusion is splinting the implants.

6) **Diagnosis of Implant Stability and its Impact on Implant Survival: A Prospective Case Series Study**

Daniel Rodrigo, Luis Aracil, Conchita Martin, Mariano Sanz


The evaluation of RFA values to assess implant secondary stability (Osstell 2) demonstrated a statistically significant correlation with implant outcome. In fact, no implant with ISQ > 60 failed, while 19 % of implants with ISQ < 60 failed.

7) **The relationship between resonance frequency analysis (RFA) and lateral displacement of dental implants: An in vitro study**


Journal of Oral Rehabilitation 2012

Both RFA and displacement measurements correlated with bone density. It is concluded that RFA measurements reflect the micromobility of dental implants, which in turn is determined by the bone density at the implant site. The correlation between ISQ and micron was non-linear and micro motion was reduced with app. 50 % from 60 ISQ to 70 ISQ.

8) **Implant Stability Quotient (ISQ) vs Direct in Vitro Measurement of Primary Stability (Micromotion): Effect of Bone Density and Insertion Torque**

Paolo Trisi PhD, Teocrito Carlesi DDS, Marco Colagiovanni DDS, Giorgio Perfetti MD, DDS

Journal of Osteology and Biomaterials, Volume 1, Number 3, 2010

Results showed a high dependence between the observed micromotion and the ISQ values, indicating that micromotion decreased with increasing ISQ values. An in vitro study and the results cannot be directly transferred to clinical applications.

9) **Determination of Primary Stability: A Comparison of the Surgeon’s Perception and Objective Measurements**


The accuracy of primary stability prediction is not good enough to prevent mistakes when using an immediate loading technique, thus a more systematic use of objective measurements has to be encouraged.

- Perception of low RFA-values was correct in 19% of the cases (81 % was either medium or high RFA-value).
- Perception of medium RFA-value was correct in 43% of the cases (57 % was either low or high).
- Perception of high RFA-value was correct in 85% of the cases (15 % was either low or medium).

10) **Implant Stability Measurements Using Resonance Frequency Analysis: Biological and Biomechanical Aspects and Clinical Implications**

Sennerby L, Meredith N.


This article summarizes much of the science around Osstell and ISQ. It describes what implant stability is and how it can be measured. It talks about clinical implications of measuring ISQ, as well as how different ISQ levels and ISQ trends can be interpreted.

RFA is a proven scientific method with more than 670 scientific publications. A searchable database can be found at: [www.osstell.com/knowledgebase](http://www.osstell.com/knowledgebase)