COULD SUNBATHING SAVE YOU FROM PSYCHOSIS?

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1. OBJECTIVES

Although easily replenished by skin in response to sunlight exposure, vitamin D deficiency is diagnosed in a staggering proportion of the population. In this review, we aim to investigate the **correlation between vitamin D deficiency and psychotic disorders**.

2. BACKGROUND

VITAMIN D

- Metabolic and endocrine regulation
- Bone structure maintenance
- Calcium homeostasis
- Immunity-boosting
- Anti-inflammatory
- Neuroprotective

VITAMIN D Deficiency

- Cognitive impairment
- Mood disorders
- **Psychotic disorders?**

3. METHODS AND MATERIALS

Systematic literature review

Articles published in the last 5
years on PubMed

Query “vitamin D AND (psychosis OR
psychotic OR psychotic disorder)”

Full-text articles + inclusion &
exclusion criteria

4. RESULTS

- There is strong association across literature between lower vitamin D levels and psychotic disorders, namely schizophrenia, schizoaffective disorder and first episode of psychosis.
- Recent studies emphasize the correlation with more severe negative and depressive symptoms in psychotic disorders, as well as with global cognitive deficit.
- Neonatal vitamin D deficiency also appears to be associated with increased risk of schizophrenia.
- Nevertheless, studies on vitamin D supplementation still seem inconclusive, with potential benefits in cognition but no significant impact in psychosis.

5. CONCLUSIONS

Evidence on vitamin D deficiency and its association to psychotic disorders remains relatively unclear. Further evidence from larger-scale studies is needed.

6. REFERENCES

Firth, Shizo Billetin 2018; Krivoy, Lancet 2017; Adamson, Psych Res 2017; Nerhus, J Clin Psych 2017; Eyles, Nature, 2016; Boerman, J Clin Psychopharm 2016; Nerhus, Schizo Res 2016; Kelley, J Dev Origins Health and Dis 2016; Chiang, BMJ 2016. Graham, Early Interv Psych 2014.