SCHOLARLY PUBLICATIONS
School of Medical Sciences
KIIT Deemed to be University

Journal Name: **Bulletin of the World Health Organization** **IF: 8.4**

Title: Health literacy and tuberculosis control: systematic review and meta-analysis

Author: Chauhan A., Parmar M., Dash G.C., Chauhan S., Sahoo K.C., Samantaray K., Sharma J., Mahapatra P., Pati S.

Details: Volume 102, Issue 6, June 2024

Abstract: Objective: To identify literature on health literacy levels and examine its association with tuberculosis treatment adherence and treatment outcomes. Methods: Two authors independently searched Pubmed®, Embase, CINAHL, PsycINFO, Scopus, LILACS, Global Health Medicus and ScienceDirect for articles reporting on health literacy levels and tuberculosis that were published between January 2000 and September 2023. We defined limited health literacy as a person's inability to understand, process, and make decisions from information obtained concerning their own health. Methodological quality and the risk of bias was assessed using the JBI critical appraisal tools. We used a random effects model to assess the pooled proportion of limited health literacy, the association between health literacy and treatment adherence, and the relationship between health literacy and tuberculosis-related knowledge. Findings: Among 5813 records reviewed, 22 studies met the inclusion criteria. The meta-analysis revealed that 51.2% (95% confidence interval, CI: 48.0-54.3) of tuberculosis patients exhibit limited health literacy. Based on four studies, patients with lower health literacy levels were less likely to adhere to tuberculosis treatment regimens (pooled odds ratio: 1.95; 95% CI: 1.37-2.78). Three studies showed a significant relationship between low health literacy and inadequate knowledge about tuberculosis (pooled correlation coefficient: 0.79; 95% CI: 0.32-0.94). Conclusion: Health literacy is associated with tuberculosis treatment adherence and care quality. Lower health literacy might hamper patients' ability to follow treatment protocols. Improving health literacy is crucial for enhancing treatment outcomes and is a key strategy in the fight against tuberculosis.

URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11132163/pdf/BLT.23.290396.pdf

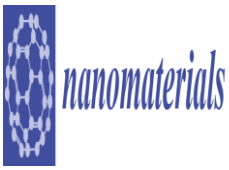
Journal Name: **Nanomaterials** **IF: 4.4**

Title: Chitosan Nanoparticle-Mediated Delivery of Curcumin Suppresses Tumor Growth in Breast Cancer

Author: Mishra, B; Yadav, AS; Malhotra, D; Mitra, T; Sinsinwar, S; Radharani, NNV; Sahoo, SR; Patnaik, S; Kundu, GC

Details: Volume 14, Issue 15, August 2024, Article number 1294

Abstract: Curcumin is a nutraceutical known to have numerous medicinal effects including anticancer activity. However, due to its poor water solubility and bioavailability, the therapeutic impact of curcumin against cancer, including breast cancer, has been constrained. Encapsulating curcumin into chitosan nanoparticles (CHNPs) is an effective method to increase its bioavailability as well as antitumorigenic activity. In the current study, the effects of curcumin-encapsulated CHNPs (Cur-CHNPs) on cell migration, targeted homing and tumor growth were examined using in vitro and in vivo breast cancer models. Cur-CHNPs possessed a monodispersed nature with long-term colloidal stability, and demonstrated significant inhibition of cell viability in vitro, which was potentiated by 5-Fluorouracil (5-FU). Outcomes of the in vivo imaging studies confirmed effective tumor targeting and retention ability of Cur-CHNPs, thereby suppressing breast tumor growth in mice models. Overall, the results demonstrated that Cur-CHNPs could be an effective candidate drug formulation for management of breast cancer.



URL: https://www.mdpi.com/2079-4991/14/15/1294