SCHOLARLY PUBLICATIONS
School of Medical Sciences
KIIT Deemed to be University

Journal Name: Nature Medicine **IF: 50.0**

Title: Impact of the indigenous rotavirus vaccine Rotavac in the Universal Immunization Program in India during 2016–2020

Author: Nair, N.P.; Reddy, S.N.; Giri, S.; Varghese, T.; Thiyagarajan, V.; Muliyil, J.; Hemavathy, P.; Khakha, S.A.; Arora, R.; Gupte, M.D.; Tate, J.E.; Parashar, U.D.; Mohan, V.R.; Kang, G.; Mittal, M.; Rao, S.K.; Gupta, V.; Vashishtha, Gupta, R.K.; Chaudhary, P.; Jain, H.; Mathew, M.A.; Mansingh, A.; Patnaik, R.; Mahapatro, S.; Majhi, S.K.; Mohanty, P.; Ray, R.K.; Mohanty, S.K.; Nayak, M.K.; Mohakud, N.K.; Mohanty, M.D.; Kumar Prusty, J.B.; Choudhury, J.; Dash,

Details: Volume 31, Issue 11, November 2025

Abstract: In 2016, India introduced Rotavac (G9P[11]), an indigenous oral rotavirus vaccine administered at 6, 10 and 14 weeks of age through the Universal Immunization Program. Evaluating its effectiveness under routine programmatic conditions is critical, given the variable performance of rotavirus vaccines in low- and middle-income countries. Here we assessed Rotavac's real-world effectiveness and impact across 31 hospitals in 9 states between 2016 and 2020 using a test-negative case–control design. Overall, 24,624 children were enrolled in surveillance (62% male and 38% female). Of 8,372 children aged 6–59 months eligible for effectiveness analysis (1,790 rotavirus-positive cases and 5,437 rotavirus-negative controls), 6,646 received 3 doses and 581 were unvaccinated. The adjusted vaccine effectiveness of 3 doses against severe rotavirus gastroenteritis was 54% (95% confidence interval (CI) 45% to 62%), with 1,574 vaccinated cases versus 5,072 vaccinated controls. Among children aged 6–23 months (1,486 vaccinated cases and 4,595 vaccinated controls), genotype-specific adjusted vaccine effectiveness was 51% (95% CI 36% to 62%) for G3P[8], 81% (95% CI 73% to 87%) for G1P[8] and 64% (95% CI 21% to 83%) for G1P[6]. Following vaccine introduction, rotavirus positivity among hospitalized children declined from 40% to 20%. These findings confirm that Rotavac provides substantial protection against severe rotavirus disease, including nonvaccine strains, and performs comparably to internationally licensed vaccines in similar settings.

URL: https://www.nature.com/articles/s41591-025-03998-9

SCHOLARLY PUBLICATIONS
School of Medical Sciences
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Journal Name: International Journal of Biological Macromolecules **IF: 8.5**

Title: Resveratrol nanoparticles inhibit epithelial-to-mesenchymal transition in oral cancer via p53-independent p21-mediated downregulation of survivin

Author: Bhal, S.; Paul, S.; Das, C.; Acharya, S.S.; Goswami, A.; Jit, B.P.; Mahapatra, S.R.; Bal, N.C.; Kundu, C.N.

Details: Volume 334, December 2025

Abstract: Resveratrol, a phytochemical, exhibits anticancer potential, including in oral cancer. Our preliminary finding has elucidated the potentiality of nano-formulated Resveratrol (Res-Nano) in the inhibition of oral cancer stem cell (CSC) growth by deregulating the major signaling pathways (Wnt and Hedgehog) through activation of tumor suppressor proteins p53 and p21. CSCs undergo an epithelial-to-mesenchymal transition (EMT) to orchestrate and execute the mechanistic underpinning of tumorigenesis and metastasis. However, there is a paucity of evidence regarding the influence of Res-Nano in p53-independent, p21-driven EMT regulation in oral CSCs. EMT is induced by the transcriptional activation and subcellular localization of several EMT regulators including survivin. To explore the exact role of p21 and survivin in EMT, we employed an orosphere model system derived from the p53-mutated oral cancer cell line H357 and examined the impact of Res-Nano on the EMT process. Interestingly, Res-Nano increased the p21 expression and reduced the survivin expression in orosphere but not in epithelial or PEMT stages. Res-Nano deregulated p21 and survivin interaction and promoted p21-dependent survivin downregulation by inducing dephosphorylation of survivin. Moreover, the results from biochemical analysis suggested that Res-Nano inhibited the metastasis and angiogenesis in oral cancer in a p21-dependent manner. Notably, Res-Nano treatment in the xenograft mice model has shown a reduction of tumor volume, regained body weight, and significant changes of metastatic and angiogenic markers, suggesting the effectiveness of Res-Nano. Altogether, our evidence highlighted the potentiality of Res-Nano in modulating EMT of oral CSCs by promoting survivin degradation via a p53-independent pathway.

URL: https://www.sciencedirect.com/science/article/abs/pii/S0141813025095169?via%3Dihub

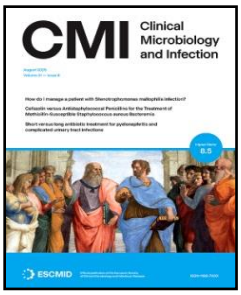
Journal Name: Clinical Microbiology and Infection **IF: 8.5**

Title: Survival and quality-of-life in mucormycosis: a multicentric ambispective cohort study

Author: Verma, Sarthak & et al.

Details: 2025

Abstract: Objectives: We aimed to evaluate long-term survival and identify predictors of mortality among patients hospitalized with mucormycosis. Methods: This prospective, multicentre cohort study included patients hospitalized for mucormycosis across 26 sites in India from March to July 2021. Follow-up data were collected at 1-, 3-, 6-, and 12-month intervals post-discharge through telephonic or in-person interviews with patients or caregivers. Primary outcomes were survival, sequelae, and quality of life, assessed using the EURO-QOL 5D-5L scale. Survival analyses were performed using the shared frailty Cox proportional hazards model for predefined subgroups. Additional sensitivity analyses using inverse probability of censoring weights and marginal structural modelling were conducted to account for loss to follow-up and the time-varying nature of the treatment and confounders. Results: Of the 686 patients, 101 deaths (14.7%) occurred within 1 year, with a median survival time of 230 days. The majority of deaths (64.3%) occurred early, i.e. during hospitalization. Independent predictors of mortality included orbit involvement (hazard ratio [HR]: 2.0, 95% CI: 1.2–3.4), intracranial/cerebral involvement (HR: 2.6, 95% CI: 1.5–4.4), admission to an intensive care unit (HR: 6.4, 95% CI: 3.5–11.6), poor glycaemic control (HR: 2.3, 95% CI: 1.1–4.7), and other comorbidities (HR: 1.6, 95% CI: 1.0–2.5), and those associated with lower mortality were combination antifungal therapy (HR: 0.2, 95% CI: 0.1–0.4) and receipt of surgical treatment (HR: 0.1, 95% CI: 0.07–0.2). Survivors demonstrated improved quality of life, especially those who were gainfully employed. Sensitivity analysis indicated no major impact of loss to follow-up on survival. Discussion: Poor glycaemic control, severe disease, and involvement of the orbit or intracranial/cerebral regions predict higher mortality in mucormycosis. Aggressive therapeutic strategies, including combination of antifungal therapy and surgical interventions, substantially improved survival. The study highlights the importance of integrating psychological rehabilitation and socioeconomic support into management protocols to enhance the quality of life among survivors.



URL: https://www.sciencedirect.com/science/article/abs/pii/S1198743X25002861?via%3Dihub

SCHOLARLY PUBLICATIONS
School of Medical Sciences
KIIT Deemed to be University

Journal Name: Alimentary Pharmacology and Therapeutics **IF: 6.7**

Title: Systematic Review: Stigma Associated With Inflammatory Bowel Disease

Author: Giri, S.; Harindranath, S.; Chandnani, S.; Jena, A.; Sharma, V.; Sebastian, S.

Details: Volume 62, Issue 11-12, December 2025

Abstract: Background: Stigma, including perceived, enacted, and internalised forms, is associated with inflammatory bowel disease (IBD), affecting quality of life, delaying treatment, and impairing social interactions. Aim: To summarise existing data on stigma related to IBD. Methods: We searched MEDLINE, Embase and Scopus from inception to September 2025 for studies reporting the prevalence, assessment, predictors, and outcome of stigma in IBD. Results: We analysed 73 studies to explore stigma in IBD, its predictors and outcomes. There was significant heterogeneity in the methods of assessment of stigma due to the lack of standardised scales. Perceived stigma is common, with a prevalence rate of up to 85.6% in adults and 87% in children. Stigma manifests with concerns about being judged, body image issues, difficulties in relationships, and workplace discrimination. However, enacted and internal stigmas are less frequently reported. Multiple predictors of stigma in IBD have been identified. Greater disease complexity and symptom frequency are associated with higher levels of perceived stigma. Low public awareness and knowledge of IBD contribute to increased stigma. These lead to psychological impacts such as anxiety and depression, social isolation and healthcare challenges, including reduced treatment adherence, ultimately reducing quality of life. Conclusion: This highlights the heterogeneity in stigma assessment methods and the need for more standardised research. It also emphasises the importance of addressing stigma through increased awareness, support and interventions aimed at enhancing resilience and coping skills.

URL: https://onlinelibrary.wiley.com/doi/10.1111/apt.70448

Journal Name: World Journal of Gastroenterology **IF: 5.4**

Title: Colonoscopy in the artificial intelligence era: Spotlight on adenoma miss rate

Author: Panda, K.; Pati, G.K.; Dash, D.P.

Details: Volume 31, Issue 39, October 2025

Abstract: This letter addresses the recent systematic review and meta-analysis by Wang et al, which evaluated the role of artificial intelligence-based computer-aided detection (CADe) in reducing adenoma and polyp miss rates during colonoscopy. We commend the authors for highlighting adenoma miss rate (AMR) as a more clinically meaningful endpoint than the traditionally used adenoma detection rate. Their findings demonstrate a significant reduction in AMR and polyp miss rate with CADe-assisted colonoscopy, particularly in small and sessile serrated lesions. However, limitations, including limited study numbers, tandem study design of included studies, and heterogeneity of CADe systems, warrant cautious interpretation. We discuss the broader implications of these findings for real-world practice and future research directions. This letter reinforces the importance of AMR as a performance metric and supports the continued integration and evaluation of artificial intelligence technologies in endoscopic practice to enhance colorectal cancer prevention strategies.

URL: https://www.wjgnet.com/1007-9327/full/v31/i39/110886.htm?appgw_azwaf_jsc=kU6S2Bl_VBpx8Tnj8AqCspIspWyzX3stuS_T7xXUj9Y4jORWc0lhRTRvuo-higoFaalGsNRklUHm04k7jcerT7SW9hlO_BYYswu4osnbQTj6zD8uc55bbASgBQg3m1MJU8V3dZeMe6ij8zcc9gtTunXYJEfm9NPSiFhBONmDJsD3ueD-fy8ssbitoAQ1ST4CL8Cc1_cNtpjNeqUZZZNMKOpQugAFNBxyYpfh_Q-8Q8EqGCeqZPEIL1eb2rdNpqSMOR_k6bKFJlmT8Ff2a5Rk-

Journal Name: Immunologic Research **IF: 3.3**

Title: Sustainability, intelligence, and more immunology: time to get back to the future!

Author: Ahmed S.

Details: Volume 73, Issue 1, December 2025, Article number 3

URL: https://link.springer.com/article/10.1007/s12026-024-09554-w

SCHOLARLY PUBLICATIONS
Kalinga Institute of Medical Sciences
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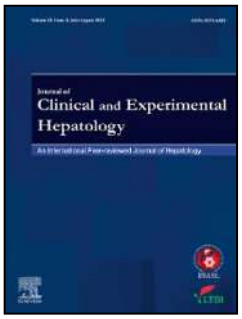
Journal Name: Journal of Clinical and Experimental Hepatology **IF: 3.2**

Title: Lifestyle Intervention is Effective in Reversal of Fibrosis in NAFLD Patients: Results from a Retrospective Real-World Study

Author: Singh S.P.; Anirvan P.; Chouhan S.; Panigrahi M.K.; Khatua C.R.; Hota S.; Rath M.M.; Kar S.K.; Misra B.; Nath P.; Sahu S.K.; Narayan J.; Singh A.

Details: Volume 15, Issue 6, November–December 2025, Article number 102598

Abstract: Background: Nonalcoholic fatty liver disease (NAFLD) is a lifestyle disorder, and lifestyle intervention (LI) remains the cornerstone of NAFLD management. Despite this, in recent years, the focus has been primarily on developing newer drugs and not on LIs, presumably due to a lack of medication adherence. We aimed to investigate the ability of LI to reverse fibrosis in NAFLD patients. Methods: Seven hundred seventy-six patients were retrospectively included, of which 565 patients were analysed. Anthropometric and biochemical parameters and 2D-SWE measurements of all patients were recorded before and after LI. Results: Weight reduction was observed in 85.2% of the patients. The mean body mass index (BMI) decreased from 26.08 ± 3.53 kg/m^2 to 25.06 ± 3.19 kg/m^2 (P < 0.001) in the cohort. The mean waist and hip circumferences decreased significantly from 98.87 ± 8.72 cm to 94.40 ± 7.67 cm and from 103.63 ± 7.91 cm to 101.98 ± 7.17 cm, respectively (P < 0.001). Significant reductions in serum low-density lipoprotein (112.93 ± 33.23 mg/dL to 104.12 ± 31.10 mg/dL, P < 0.001) and very low-density lipoprotein (34.05 ± 19.43 mg/dL to 30.26 ± 12.58 mg/dL, P < 0.001) levels were also observed post-intervention. Decrease in liver stiffness was observed in 67.9% of the patients, and a one-stage reduction in fibrosis was observed in 40.5% of the patients, while a 2-point reduction in liver stiffness was observed in 52% of the patients; reversal of hepatic steatosis occurred in 16.4% of the patients. A significant reduction in liver stiffness was seen post-intervention (7.21 ± 1.84 kPa to 6.61 ± 1.59 kPa, P < 0.001). BMI reduction correlated positively with a decrease in liver stiffness (r = 0.43, P < 0.001). Conclusion: LI when sustained over a year can improve liver stiffness in NAFLD, even in a real-world setting.



URL: https://www.sciencedirect.com/science/article/pii/S0973688325000982?via%3Dihub

SCHOLARLY PUBLICATIONS
Kalinga Institute of Medical Sciences
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Journal Name: BMC Medical Education **IF: 3.2**

Title: Perceived stress and academic achievement among medical students with different chronotypes: a cross sectional study on first year medical students from India

Author: Manjareeka M.; Dasgupta S.; Kanungo P.; Das R.C.

Details: Volume 25, Issue 1, December 2025, Article number 723

Abstract: Background: Chronotype, which denotes an individual's preference for morning or evening activity patterns, has been linked to variations in cognitive performance, sleep behavior, and stress levels. This study investigates the association between chronotype, perceived stress, and academic performance among first-year medical students. Methods: A cross-sectional descriptive study was conducted among 148 medical students at a private university. Chronotype was assessed using the Munich Chronotype Questionnaire (MCTQ), and perceived stress was measured using the Perceived Stress Scale (PSS). Academic performance was categorized into "Excellent" (marks > 65%) and "Average" (marks < 55%). Statistical analyses included independent t-tests, chi-square tests to evaluate differences and associations. Results: Morning chronotypes demonstrated significantly higher academic performance, with 49.1% in the "Excellent" group compared to 29% of Evening chronotypes (p =.03). Perceived stress scores were significantly higher among Evening chronotypes (24.9 ± 12.1) than Morning chronotypes (20.7 ± 9.3, p =.028). Furthermore, Evening chronotypes exhibited longer sleep latency (41.17 ± 13.35 min vs. 14.49 ± 12.14 min, p <.001) and greater variability in weekend sleep schedules (p <.001). Gender differences in stress and academic performance were minimal and not statistically significant. Conclusion: Chronotype significantly affects academic performance and stress levels among medical students, with Morning types performing better academically experiencing less stress. Tailored strategies like flexible scheduling and sleep hygiene promotion can help Evening chronotypes overcome challenges, improving academic outcomes and psychological well-being.

URL: https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-025-07281-w

SCHOLARLY PUBLICATIONS
School of Medical Sciences
KIIT Deemed to be University

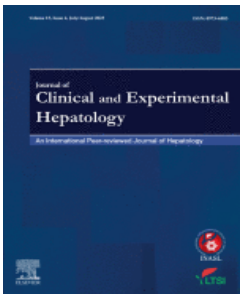
Journal Name: Journal of Clinical and Experimental Hepatology **IF: 3.2**

Title: Indian National Association for the Study of the Liver Position Statements on Prevention, Diagnosis, and Management of Hepatitis B Virus Infection in India

Author: Arora A.; Sharma P.; Dhiman R.K.; Duseja A.; Saraswat V.; Mohan V.G.; Sarin S.K.; Acharya S.; Singh S.P.; Rao P.N.; Rai R.R.; Anand A.C.; Dwiwedi M.; Misra S.P.; Goel A.; Kumar A.; Tyagi S.K.; Eapen C.E.; Babu S.; Jayanthi V.; Nundy B.; Puri P.; Kulkarni A.; Shalimar; Dadhich S.; Goswami B.D.; Malhotra P.; Thomas V.; Agarwal P.K.; Bhaumik P.; Kar P.; Wadhawan M.; Kumar M.; Chawla Y.; Mandot A.; Shukla A.; Madan K.; Saigal S.; Saraf N.; Kapoor D.; Chaubal C.C.; Pande G.; Bhadhuria A.; Venkatakrishnan L.; Sharma B.C.; Taneja S.; Chowdhary A.; Penackel C.; Maiwall R.; Nijhawan S.; Singh K.R.; Dixit V.K.; Sheony K.T.

Details: Vol. 15, Issue 6, November 2025

Abstract: Hepatitis B virus (HBV) remains a significant global health problem, particularly in India, where its prevalence is gradually decreasing, both in the general population and among healthcare workers. The management of HBV treatment should be individualized based on key factors such as HBV DNA levels, alanine transaminase (ALT) levels, and the presence of comorbid conditions like diabetes mellitus (DM), metabolic dysfunction associated steatotic liver disease (MASLD), pregnancy, cirrhosis, and decompensated cirrhosis. Hepatitis D was not considered a prevalent condition; thus, testing for it was not emphasized. Special conditions, including immunosuppression and steroid therapy, were also discussed, and INASL provided comprehensive guidelines to address these unique scenarios in HBV management. High-resistance-barrier drugs like tenofovir alafenamide (TAF) were highlighted for their effectiveness and safety, particularly in pregnant women. Vaccination was strongly recommended for special risk groups, including healthcare workers and high-risk populations, while the debate on universal screening and vaccination continues, weighing its potential benefits against logistical challenges.



URL: https://www.sciencedirect.com/science/article/pii/S0973688325001082?via%3Dihub

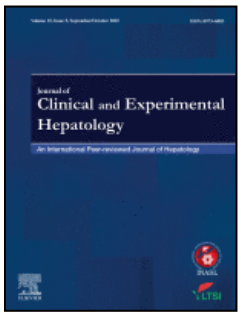
Journal Name: Journal of Clinical and Experimental Hepatology **IF: 3.2**

Title: Budd–Chiari Syndrome and Pregnancy—A Review

Author: S., Giri, Suprabhat; S., Malakar, Sayan; S., Sahoo, Shradhanjali; T., Tripathy, Taraprasad; R.K., Patel, Ranjan Kumar; D.L., Praharaj, Dibya Lochan; A., Chandra Anand, Anil

Details: Vol. 16, Issue 1, January 2026

Abstract: Pregnancy is a hypercoagulable state, increasing the risk of venous thrombosis, including Budd–Chiari syndrome (BCS). Historically, pregnancy was contraindicated in BCS due to risks like hepatic dysfunction, thrombosis, bleeding, and poor fetal outcomes. However, better diagnostic modalities, greater awareness, and treatment advances, such as anticoagulant therapy, endovascular interventions like hepatic vein angioplasty with or without stenting, transjugular intrahepatic portosystemic shunt (TIPS), and liver transplantation (LT), have enabled more favorable outcomes. When BCS presents during pregnancy, diagnosis can be challenging, often mimicking other pregnancy-related liver conditions. Doppler ultrasonography is the preferred diagnostic tool during pregnancy, with cross-sectional imaging reserved for doubtful cases and planning intervention. Anticoagulation is the cornerstone of medical therapy for BCS diagnosed in pregnancy, preventing thrombus progression. Radiological interventions like hepatic vein stenting and TIPS are options, particularly for those not responding to medical therapy, though radiation exposure is a consideration, and dose-reduction strategies are employed. LT is a consideration for acute liver failure, with good maternal but suboptimal fetal outcomes. For women with pre-existing BCS planning pregnancy, preconceptional management is crucial. This includes individualized risk assessment, optimizing BCS treatment, and screening for thrombophilia. Delayed diagnosis, advanced age, and progression to cirrhosis may all contribute to infertility in BCS, which need to be considered. However, successful BCS treatment can improve fertility and pregnancy outcomes. Antenatal, perinatal, and postpartum management requires careful monitoring of liver function, portal hypertension, anticoagulation, and fetal well-being, aimed at preventing complications like hemorrhage. Proactive management significantly improves the prognosis for pregnancy in BCS patients.



URL: https://www.sciencedirect.com/science/article/pii/S0973688325006760?via%3Dihub