treatments like antidepressants are effective but not universally successful, prompting interest in adjunctive therapies. Omega-3 fatty acids, particularly eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), are thought to offer neuroprotective and anti-inflammatory benefits that may help manage MDD. This systematic review and meta-analysis assessed the efficacy of omega-3 supplementation in reducing depressive symptoms, improving remission rates, and enhancing overall treatment outcomes in adults with MDD.

Methods: We conducted a systematic search of PubMed, PsycINFO, Scopus, and Google Scholar to identify relevant studies published up to March 2024. We included randomized controlled trials (RCTs) and observational studies that investigated omega-3 supplementation in MDD. Studies were selected based on their focus on depressive symptom reduction, remission rates, or relapse prevention. Data were extracted by two independent reviewers, and statistical analysis was performed using random-effects models for meta-analysis.

Results: Twenty studies, including 15 RCTs and 5 observational studies with 2,300 participants, met inclusion criteria. Omega-3 supplementation significantly reduced depressive symptoms compared with placebo, with a pooled effect size of Hedge's $g = -0.45$ (p<0.01). The most pronounced effects were observed in individuals with moderate-to-severe depressive symptoms. Subgroup analysis revealed that EPA supplementation was more effective when combined with antidepressants. Omega-3 supplementation was generally well tolerated, with mild gastrointestinal side effects.

Conclusion: Omega-3 supplementation, particularly EPA and DHA, is effective in reducing depressive symptoms in adults with MDD. Its favourable safety profile makes it a promising adjunctive treatment, especially for patients who do not respond fully to antidepressants. Further research is needed to optimize dosage and identify patient characteristics that predict the best outcomes.

Machine Learning in Schizophrenia: A Systematic Review and Meta-Analysis of Diagnostic and Predictive Models

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Aims: Schizophrenia is a psychiatric disorder characterized by diverse clinical presentations, posing challenges in early diagnosis and prognosis. Machine learning (ML) has emerged as a promising tool to enhance diagnostic accuracy, predict disease progression, and personalize treatment strategies. This systematic review and meta-analysis synthesized current evidence on the application of ML in schizophrenia diagnosis, prognosis, and treatment response prediction.

Methods: A search was conducted across databases including PubMed, Embase, Scopus, Web of Science, and IEEE Xplore, adhering to PRISMA guidelines. Studies employing ML algorithms for schizophrenia classification, risk prediction, or treatment response modelling were included. Extracted data encompassed ML model types, sample sizes, data modalities (e.g., neuroimaging, clinical, genetic), and performance metrics such as accuracy, sensitivity, specificity, and area under the curve (AUC). A meta-analysis was performed to estimate pooled diagnostic performance, with heterogeneity assessed using I² statistics and publication bias evaluated via funnel plots and Egger's test.

Results: A total of 31 studies involving task-based functional MRI (t-fMRI) data were included in the meta-analysis. The pooled sensitivity and specificity for ML-based schizophrenia classification were both 0.83 (95% CI: 0.78–0.88), indicating a high level of diagnostic accuracy. Notably, studies focusing on selective attention tasks demonstrated higher specificity (0.86) compared with those assessing working memory tasks (0.79). Significant heterogeneity (I² = 72%) was observed, attributable to variations in neuropsychological domains, participant demographics, and clinical features.

Conclusion: Machine learning exhibits substantial potential in improving schizophrenia diagnosis and outcome prediction, particularly when utilizing task-based neuroimaging data. However, challenges related to data heterogeneity, external validation, and clinical implementation persist. Future research should focus on standardizing ML methodologies, integrating multi-modal data, and enhancing model interpretability to facilitate translation into clinical psychiatry.

Pedagogical Practices That Enhance Medical Students' Capacity for Creative Thought: A Qualitative Study

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Aims: In the medical field, there is a growing emphasis on fostering creativity and innovation in medical students to prepare them for the unpredictable nature of patient care. This study aimed to explore the perspectives of both lecturers and medical students on the current teaching practices and their influence on the development of creative thinking skills.

Methods: The study was conducted as qualitative research at the Malaysian Faculty of Medicine and Health Sciences and included a purposeful sample of eight medical students and seven lecturers. Data were gathered through individual semi-structured interviews held via the Google Meet platform and analysed using a thematic analysis approach.

Results: The findings indicate that learner-centred approaches, such as problem-solving exercises and group discussions, seminars, debates, and dramas have a positive impact on enhancing their creative thinking abilities. The use of technology-assisted teaching methods, including e-learning and simulation labs, was also perceived as inspiring, however, limitations in technical infrastructure were noted. Challenging activities like assignments, games, competitions, and online tests encourage creative learning. Hands-on activities, such as bedside teaching and clinical skill learning, are also valuable in learning clinical skills in unique ways, but their effectiveness could be reduced by environmental and personal factors. Furthermore, practicing para-curriculum activities in a supportive and relaxed learning environment was identified as fostering a culture of original thought.

Conclusion: This study suggests that a comprehensive approach to medical education that integrates creative pedagogy can be instrumental in fostering creativity in medical students. Providing opportunities for creative thinking through workshops and addressing technical infrastructure limitations in technology-assisted teaching methods could be considered in enhancing the creative curricula in the South East region. The findings underline the importance of a learner-centred approach and a supportive learning atmosphere in promoting creative learning.

IMG Doctors' Experience of Starting Their First Job in the UK – Cross-Sectional Survey Study

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Aims: To identify the difficulties International Medical Graduate (IMG) doctors face when starting their first job in the UK.

Methods: A survey was created on Google Forms. It included questions about the basic demographic of the IMG doctor, their experience of getting support and the difficulties they faced when they first started working in the UK. The survey had a mixture of tick boxes and free text options. The survey was distributed using social media forums and shared across IMG doctors' social media groups. The survey link was open from December 18 to December 31, 2024. We received a total of 367 responses and 300 relevant responses were analysed, they represent the IMG doctors currently working in the UK and starting in the last 3 years.

Results: The 61% (185) responders were females, 35% (107) were male and the rest did not disclose their gender. Around 50% (148) were in their first year of job in the NHS while the rest were within 3 years of working in the UK. Only 7% (23) started their first job in the UK on a training grade whereas the rest had their first job as non-training grade or locally employed doctors.

76% (228) reported that they received shadowing periods as part of their first job experience and 70% (200) reported getting formal induction when they first started. 46% (125) were given access to the portfolio and 49% (134) had access to the study budget. 40% (122) did not feel they had enough senior support when they first started working in the UK. The free text boxes asked for suggestions around how the experience of IMG doctors can be improved in the UK and the responses indicated better induction as the most important factor.

Conclusion: The unique learning needs of the IMG doctors should be identified, and support systems should be in place accordingly. An IMG doctor-focused and tailored induction is required for the newly starting doctors. The shadowing period can also be a particularly useful tool in helping people understand the new systems and improve their confidence, but it is not offered to all new doctors.

Some IMG doctors may require enhanced supervision during the initial months, this can be delivered by peer and senior support. IMG doctors should feel welcomed in the new team as it helps to build psychological safety which can help to improve their performance.

Mental Health Burden, Professional Shortage, and a Proposal to Utilize Task-Shifting Approach to Address Mental Health Needs in Remote Areas of Sindh Province, Pakistan

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Aims: This study aims to report the outcomes of mental health (MH) camps organized at various locations on a voluntary basis in District Tharparkar, an underserved area in the Sindh province of Pakistan. The camps aimed to screen, assess, educate, and treat patients with MH disorders. The study also reported the distribution of prevalent MH conditions in the Tharparkar area, barriers to attaining MH, and a possible solution to the MH professional shortage in remote areas.

Background: Mental disorders have become increasingly prevalent in Pakistan, affecting millions of people while there is a significant shortage of MH practitioners. MH camps play a crucial role in increasing awareness among the general population, reducing the stigma associated with MH conditions and offering an opportunity for the underserved population to approach MH professionals. Nonetheless, a more permanent solution is needed to address the needs of the patients in underserved remote communities.

Methods: A pre-structured Case Report Form was prepared to document the baseline characteristics, including family income, distance from a psychiatrist, duration of illness, perception regarding patients' illnesses, healthcare visits in the last 6 months, and diagnosis of the patients.

Results: In 2022, a total of 460 patients were screened, and 164 (35.6%) were diagnosed with or considered for MH disorder. Out of these 164 patients, the mean age was 29.44 years (1–76). There were 94 (57.3%) males and 70 (42.7%) females. The average household income was PKR 25,758 (<£100), and the mean distance to a psychiatrist was 99 minutes, whereas the mean duration of presenting illness was 4.36 months. Depression was the most common illness reported (32%), followed by anxiety disorders (12%), psychotic disorders (9%), substance use (3%), and bipolar disorder (2%). Other mental health disorders were found in 28% of patients, and in 14%, diagnosis was not established.

Conclusion: More than half of patients sought help from a general practitioner in the last 6 months with the presenting complaints. The distance from the psychiatrist who serves as the primary care provider for MH needs in Pakistan and financial constraints are additional barriers for individuals residing in Tharparkar to attain help for MH needs. Therefore, task-shifting to general physicians