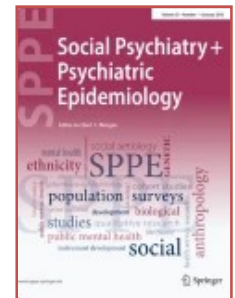Title: Perinatal depression and its associated risk factors during the COVID-19 pandemic in low- and middle income countries: a systematic review and meta-analysis

Author: Behera D., Bohora S., Tripathy S., Thapa P., Sivakami M.

Details: 2024

Abstract: Purpose: Perinatal depression significantly impacts maternal and child health, with further complexities arising during the COVID-19 pandemic. This review is the first to comprehensively synthesize evidence on the prevalence of perinatal depression and its associated risk factors in Low- and Middle-Income Countries (LMICs) during the pandemic period. Methods: The study protocol was registered in PROSPERO (CRD42022326991). This review followed the John Briggs Institute (JBI) guideline for prevalence studies. A comprehensive literature search was conducted in six databases: PubMed, Scopus, Web of Science, PsycInfo, CINAHL, and ProQuest. Pooled prevalence estimates were computed for both prenatal and postnatal depression. Identified risk factors were summarized narratively. Results: A total of 5169 studies were screened, out of which 58 were included in the narrative review and 48 [prenatal (n = 36) and postnatal (n = 17)] were included in the meta analysis. The pooled depression prevalence for prenatal women was 23% (95% CI: 19–27%), and for the postnatal women was 23% (95% CI: 18–30%). Maternal age, education, perceived fear of COVID-19 infection, week of pregnancy, pregnancy complications, and social and family support were identified as associated risk factors for depression. Conclusions: Our review demonstrates an increased prevalence of perinatal depression during the COVID-19 pandemic in LMICs. It sheds light on the significant burden faced by pregnant and postnatal women and emphasizes the necessity for targeted interventions during the ongoing and potential future crisis.

 URL: https://link.springer.com/article/10.1007/s00127-024-02628-y

Title: To Leave No One Behind: Assessing Utilization Of Maternal Newborn And Child Health Services By All The 13 Particularly Vulnerable Tribal Groups (Pvtgs) Of Odisha, India

Author: Ghosal, Jyoti; Bal, Madhusmita; Das, Arundhuti; Panda, Bhuputra; Ranjit, Manoranjan; Behera, Manas Ranjan; Kar, Sonali; Satpathy, Sudhir Kumar; Dutta, Ambarish; Pati, Sanghamitra

Abstract: BackgroundIndigenous tribal people experience lower coverage of maternal, newborn and child healthcare (MNCH) services worldwide, including in India. Meanwhile, Indian tribal people comprise a special sub-population who are even more isolated, marginalized and underserved, designated as particularly vulnerable tribal groups (PVTGs). However, there is an extreme paucity of evidence on how this most vulnerable sub-population utilizes health services. Therefore, we aimed to estimate MNCH service utilization by all the 13 PVTGs of the eastern Indian state of Odisha and compare that with state and national rates.MethodsA total of 1186 eligible mothers who gave birth to a live child in last 5 years, were interviewed using a validated questionnaire. The weighted MNCH service utilization rates were estimated for antenatal care (ANC), intranatal care (INC), postnatal care (PNC) and immunization (for 12-23-month-old children). The same rates were estimated for state (n = 7144) and nationally representative samples (n = 176 843) from National Family Health Survey-5.ResultsThe ANC service utilization among PVTGs were considerably higher than national average except for early pregnancy registration (PVTGs 67% versus national 79.9%), and 5 ANC components (80.8% versus 82.3%). However, their institutional delivery rates (77.9%) were lower than averages for Odisha (93.1%) and India (90.1%). The PNC and immunization rates were substantially higher than the national averages. Furthermore, the main reasons behind greater home delivery in the PVTGs were accessibility issues (29.9%) and cultural barriers (23.1%).ConclusionOurs was the first study of MNCH service utilization by PVTGs of an Indian state. It is very pleasantly surprising to note that the most vulnerable subpopulation of India, the PVTGs, have achieved comparable or often greater utilization rates than the national average, which may be attributable to overall significantly better performance by the Odisha state. However, PVTGs have underperformed in terms of timely pregnancy registration and institutional delivery, which should be urgently addressed.

URL: https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-023-01101-7

Journal Name: International Journal of Laboratory Hematology   **IF: 3**

Title: Diagnostic insights from chemometric analysis of hemogram inflammatory indexes in male smokers with and without asthma or chronic obstructive pulmonary disease

Author: Singh, Brajesh; Dutta, Vijay; Singh, Smiti; Pundit, Priyanka

Details: March 2024

Abstract: Background: Diagnosis of asthma and chronic obstructive pulmonary disease (COPD) becomes difficult in a primary healthcare center due to ambiguous interpretation of spirometry and lack of facility to access established biomarkers. While routine hematological indices are easily available and accessible. The study aimed to evaluate the role of different hemogram indexes in males in COPD, asthma, and healthy smokers. Materials and Methods: Lung function tests and complete blood count (CBC) were done for 50 male subjects each from asthma, COPD, and healthy smokers. Multivariate analysis (MVA) was performed on blood indices data set. Receiver operating characteristic (ROC) curve was plotted to observe the performance of indexes. Pearson correlation was used to establish association between the lung function and blood indices. Results: Most of the indices were elevated in COPD. Whereas, asthma patients showed a significant increase in eosinophil basophil ratio (EBR), lymphocyte-monocyte ratio (LMR), and mean platelet volume-platelet count ratio (MPR). Orthogonal (O)- Partial Least-Squares Discriminant Analysis (PLSDA) and variable importance in projection (VIP) score established EBR, neutrophil-lymphocyte ratio (NLR) and LMR, as discriminants for asthma. Whereas, Systemic Inflammatory Response Index (SIRI), NLR and EBR were the key variables for COPD. NLR (r = -0.73, p < 0.001) and SIRI (r = -0.71, p < 0.001) were found to be negatively correlated with forced expiratory volume in 1 s (FEV1) percentage of the predicted value (%pred) in asthma and COPD, respectively. EBR showed the sensitivity and specificity of 96% and 86% respectively in asthma. NLR was having sensitivity of 82% and 90% specificity in COPD. Conclusion: Our study in males shows routine hematological indices as being cost-effective, feasible, and seem to have tremendous potential as screening markers among chronic respiratory diseases in a primary healthcare center.

 URL: https://onlinelibrary.wiley.com/doi/10.1111/ijlh.14264