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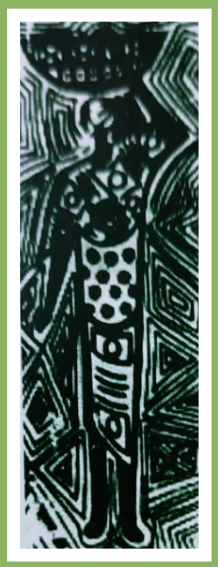

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LETTER TO EDITOR

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Immunotoxiepigenetic Therapeutics: Cornerstone of Paediatric Medicine

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Clarion calls have been made to expand therapeutics to account for immunotoxins and immune dysfunctional processes underlying immune-mediated inflammatory diseases (IMIDs) and infectious diseases. [1, 2] Moreover, Okafor MT's article in a previous edition of the Nigerian Journal of Paediatrics also made the same call. [3] IMIDs share similar aetiology and immune dysfunctional pathways. Abating immune dysfunction in disease pathogenesis via adjunctive lifestyle modification interventions (good diet, adequate sleep and moderate intensity exercise) have been shown to be effective therapeutic adjuncts for managing some IMIDs. [4]

Immunotoxiepigenetic therapeutics is envisaged to prescribe/proscribe therapeutic interventions in line with the rational use of drugs, clinical/laboratory needs of patients, and waxing/waning phenotypic expressions of IMIDs. In so doing, therapeutic dilemmas such as drug resistance and toxicities encountered in therapeutics stand to be stemmed/mitigated *ab initio* in pediatric medicine.

Adjunctive therapeutic roles of immunotoxiepigenetic therapeutics have been highlighted in managing some IMIDs, demonstrating drug treatment requirements for disease management. [5, 6] Reduced drug treatment requirements invariably translate to reduced drug toxicities. Some pediatric toxicities have long-term effects that can be suffered into adulthood. Antimicrobial drug resistance may arise from incessant use of antimicrobials. The role of immunotoxiepigenetic therapeutics in curbing the menace of drug resistance is hinged on the improved efficacy of antimicrobials following adjunctive immune optimization interventions for managing infectious diseases. Moreover, adult antimicrobial drug resistance may accrue from unwarranted childhood antimicrobial drug exposures.

Drug treatment requirement scoring methods have been developed to gauge the effect of immune optimization intervention on drug treatment requirements of some IMIDs in adult medicine. [5] It may be useful to develop scoring methods to gauge the effect of the aforementioned interventions in different paediatric IMIDs/infectious diseases. In so doing, issues of drug toxicities that may linger to adulthood and drug resistance may be tackled before adolescence/adulthood. Therefore, this letter calls for using paediatric drug treatment scoring methods in line with immunotoxipigenetic therapeutics to guide

effective paediatric therapeutic interventions devoid of drug toxicities and resistance.

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