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Editorial

Toll Like Receptors-Crispr/Cas Signalosome in Psycho-Sexual Health: Enigmatic Neuro-Medicine Snapshot

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Toll-like receptors (TLR 1-13), an enigmatic repertoire of trans-membrane pathogen recognition receptors, initiate inflammatory responses to foreign pathogens in the aberrant physiological milieu in complex biological system(s) [1]. Intriguingly, cellular-molecular-genetic neuro-immune cross-talks at the intricate maternal-fetal interface, coupled with Artificial Intelligence provide novel insights in embryonic induction, fetal cardiac activity and notochordogenesis. Medical bio-technology with emphasis on CRISPR-Cas has emerged as a pivotal neuro-immuno-modulator of neuropsychological diseases in genetically susceptible cohorts of ethnically diverse socio-cultural backgrounds; I speculate that precision neuro-medicine involving unique artificial intelligence algorithms in conjunction with human genome-editing accelerates detection of definite DNA and RNA sequences moderating gene expression levels and subsequently fine-tune the neurological labyrinth, for eventual biomarker development as well as design of pharmacological scaffolds in neuro-psychosexual diseases [2,3]. Psycho-sexual issues including marital relationship incompatibility, distress, domestic violence, depression and physical/mental trauma associated with childlessness demand urgent attention in recent times so as to reduce the disproportionate share of mental disorders (cognitive impairment, bipolar/obsessive compulsive disorder), encountered amongst women coping with infertility [4,5]. Winding through the "neuro-endocrine maze" by immunotherapeutic targeting of cell surface and transmembrane signaling moieties primarily TLRs (1-13), Autophagy (Atg2-3-5-7/Beclin-1), Frizzled receptors/Wnt ligands, coupled with AI offer novel mechanistic insights in mental health management of infertile couples coping with psychosexual distress owing to their inability to successfully fulfill the dream of nurturing a baby for gaining personal emotional satisfaction [6,7]. Eventually, shared decision-making on cost-effective preventive neuro-psycho-sexual healthcare utilization would foster significantly higher patient-satisfaction rates amongst *Mycobacterium tuberculosis* positive infertile cohorts of women with partners/husbands symptomatic of azoospermia, asthenospermia, oligospermia, and meaningfully provide a roadmap for strategic public health policy implementation globally.

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