

March 13, 1969

Dr. Hudson Hoagland
222 Maple Avenue
Shrewsbury, Massachusetts 01545

Dear Hudson,

Thank you for reading the manuscripts about sex-ratio and schizophrenia and for your comments. The data are small and require further duplication and elaboration and we are proceeding with two projects - one to replicate the first study and one to predict the sex of offspring based upon the maternal clinical picture.

I agree that the proposed hormonal mechanism is speculative. However, the clinical trials cited in the manuscripts suggest that the administration of testosterone or progesterone can enhance the therapeutic effect and decrease the relapse rate from ECT. Torghelle's successful testosterone-ECT treatment of chronic, therapy-resistant schizophrenic women further suggests that these hormones may affect the psychotic process.

The difference in production of testosterone and progesterone between male and female fetuses is a crucial question. Whether the difference is in amounts or in functional activity of fetal testosterone or in the fetal metabolism of placental progestins to androgenic forms is not yet known, but such a difference would indeed strengthen the argument. The possibility that these hormones may affect the chromosomal DNA codons in the defective offspring (all defects were in the CNS) is particularly interesting, in view of Dalton's reports of increased intellectual function in children whose mothers received high dosages of progestins in the early pre-partum period.

The questions you raise should stimulate Taylor and Levine in further investigation and they and I thank you for your time and comments. They will be presenting this data at the Society of Biological Psychiatry in May and I look forward to discussing this further at that time.

Sincerely yours,

Max Fink, M.D.
Professor of Psychiatry

MF:kp