

Schizophrenia: Effects and its' correlation with consanguineous marriage

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Imagine not being able to tell, if you are talking to a real person or just to a figment of your imagination.

Imagine, hearing somebody comment in the back of your head about each and everything you do, each and every thought you have.

Imagine, not being able to trust your own judgements, your own thoughts, and ideas.

Psychiatric disorders are crippling, and they are often highly complex. They cannot be reduced to a few symptoms like the ones stated above, and schizophrenia is one of them. It is a heterogenous disorder, which causes a variety of trouble. But it all leads to one common effect: an alteration of the patient's conception of reality. The patient, by experiencing numerous symptoms, is unable to distinguish between what is real and what is not.

This disorder forces the patient to be illogical, delusional, and paranoid. It forces the patient to hallucinate: to "hear voices", to "see images" and to "smell god". These are some of the positive symptoms (things that start happening as a result of the disorder). Some negative symptoms, (things that stop happening after the disorder) are, inability to initiate tasks, express emotions, find pleasure, speak and think. They become different people with different personalities and become unrecognizable to even their loved ones.

But why? Why does a twenty-year-old suddenly start to not understand reality?

Pathological findings¹ prove that alterations of mesolimbic dopaminergic pathways and the prefrontal cortex, which are associated with behavior and personality, is the most likely cause of origin. This biological change can be triggered by both genetic and environmental factors, with genetics being the overpowering factor.

Due to the strong link between genetics and this disorder, consanguineous marriages tend to heighten the risk of developing the disorder. Studies conducted in Taiwan, Egypt, and middle eastern countries^{2,3,4} have been able to prove this theory. In a cross-sectional study⁴, conducted in Qatar, they had noted that nearly

40% of the entire sample of schizophrenic patients were children of consanguineous parents. A case-control study³ conducted in Mansoura hospital, Egypt, had produced similar results. The strong correlation was proved using DNA based estimates of consanguinity. They had also stated that if the results of the study could be reproduced again, using another sample, that would raise public health concerns which required immediate attention. Yet, we should also keep in mind that factors like socioeconomic status and environmental issues would have played a bigger role in increasing susceptibility to the disorder in developing countries like Egypt.

But how would this information help us as Sri Lankans? What difference will it make? What would this data speak about Sri Lanka, which still has populations favouring consanguineous relationships and marriages?

By understanding the presence of such a strong correlation, one should become more vigilant. It has been a traditional practice among certain Sri Lankan communities to keep marriages within close family circles. Thus, diseases like thalassemia are reported in different pockets in the country. Schizophrenia has not yet been a topic of discussion. Science, with new discoveries, changes the way people think and apply for the overall benefit. In a country like Sri Lanka with strong cultural, historical and social roots, application of socially sensitive scientific breakthroughs will have to be implied gradually.

References

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