

Taken together with the beneficial effects of phenothiazines in schizophrenia, such drugs may therefore greatly reduce psychiatric hospital bed requirements in due course if properly used, much as other chemotherapy has the need for isolation hospitals and sanatoria for the physically ill, leucotomy being the equivalent of thoracoplasty in this analogy perhaps and electroplexy that of artificial pneumothorax. The speed with which this takes place will still, however, depend upon socio-psychological hygiene for the residually mentally infirm in the sense of community care of those ecological dimensions best suited to such patients' spared abilities.

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INVOLUTIONAL PSYCHOSIS

DEAR SIR,

Further to my letter in the correspondence columns of the June issue of the *British Journal of Psychiatry*, I find that in that letter I discussed the case of *independent* events but I see that in my paper I referred to generically identical mutations in identical cells—and these are not independent. Therefore I am

happy to agree with Dr. Pike that if the random initiating events are generically identical in character, then for $L \gg n$, and $mt \ll 1$, Poisson's law applies.

In my paper, I should have written the following: Assume: (i) that a disease is confined to a subpopulation constituting a fraction P_0 of the general population at birth, (ii) age-specific mortality rates in the subpopulation and the general population are similar; (iii) the disease is initiated by n specific and statistically *independent* random events that are equally effective in any sequence; and (iv) the average rate of occurrence of each independent mutation is k . Then the age-specific prevalence, N_t , of individuals at age t with at least one of each of the n independent events is given by: $N_t = P_0 (1 - e^{-kt})^n$.

The observed conformity of age-specific and sex-specific initiation-rates for involutional psychosis to the equation:

$$dN/dt = 3k P_0 t^3 e^{-kt^{4/4}} (1 - e^{-kt^{4/4}})^2$$

is therefore consistent with the view that the disease is initiated in predisposed individuals by three independent "forbidden clones" (arising in any one of the $3!$ possible sequences) each one of which is triggered-off by a set of four dependent-type random events.

I am grateful to Dr. Pike for pointing out my misinterpretation, and I apologize, sir, for having misled your readers with respect to this important detail.

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