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A SOCIAL AND CLINICAL STUDY OF DELUSIONS IN SCHIZOPHRENIA

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MANY studies show that incidence and prevalence rates of schizophrenia are related to the social characteristics of the patient's environment; hypotheses—such as that of social isolation—have been invoked to account for the association, but for the most part remain unconfirmed. That the symptoms of schizophrenia or that the clinical form of the illness may also be affected by environmental factors is less clearly established. Nevertheless, some interesting observations have been made, by Benedict and Jacks (1954) and by Yap (1951) for example. Sherman and Sherman's (1934) study of delusions in a mixed American population is probably the most detailed investigation of this kind. They found that American men formulated their grandiose delusions in terms of wealth; foreign-born males did so more often in terms of literary or artistic abilities; and in negroes a religious component tended to predominate. White women were less grandiose and more paranoid than men; but in negro women the reverse was found. Hallucinations were more common in women than in men, and far more common among negroes than whites. Somatic delusions were found more frequently in white than in negro families.

Classifying people in terms of birth-place, the Shermans found the highest percentage of paranoid ideas in foreign-born whites. Amongst negroes there were more paranoid delusions in those from the more competitive Northern regions than in those from the South. They also found that paranoid trends were most common in persons of little education, whilst grandiose delusions were most frequent in those who had attended college. Unfortunately their paper does not give figures by which their findings might be evaluated. Tooth (1950) observed that in the Gold Coast (Ghana) the delusions of the more warlike people were more grandiose; those of the more Europeanized were

paranoid. Lambo (1955) on the other hand, found that grandiose delusions occurred in the urbanized and literate Nigerian.

Previous studies relating social factors in the patient's environment and his symptoms have been largely descriptive and anecdotal. The present investigation attempts to categorize the schizophrenic population of a mental hospital according to the types of their delusions and then to estimate statistically the relation between the patient's delusions and data on his family and social environment. Our assumption was that a patient's symptoms can often be more reliably identified and more meaningfully related to his social background than can a diagnosis. Moreover, this might be particularly true of delusions because they have a content which can often be simply described and understood in terms of the patient's social milieu.

The purpose of this study, therefore, was to examine the prevalence of delusions of different content in certain vital, social, and familial groups in a sample of schizophrenics in order to determine whether this feature of the illness could be related in a meaningful way to socio-cultural variables.

PROCEDURE

The patients studied were in-patients at Graylingwell Hospital. They had all been consistently diagnosed by the physicians in charge as suffering from schizophrenia, a schizo-affective illness, or a paranoid state clearly not part of a depressive or organic illness. The diagnosis was independently confirmed by one of the authors (C.L.) examining every patient for evidence of positive schizophrenic features, notably autistic behaviour and the characteristic disturbances of thought and affect.

All the male schizophrenics resident during the first half of 1958 were interviewed, and an approximately equal number of females, selected randomly because of their excess in numbers over the males. Of the 415 patients who were examined, ten were rejected because of uncertainty about the diagnosis, leaving a sample of 405 patients—196 males and 209 females. The mean age of the males was 49.5 (S.D. 14.7) and the females 53.3 (S.D. 14.9). The onset of the illness was taken as the time of first admission to mental hospital. The mean duration of illness of the males was 20.1 years (S.D. 12.7) and of the females 19.6 (S.D. 12.3).

Classification of Delusions

Information about the patient's delusions was obtained, first, from a detailed examination of the patient's ward notes and of reports from other hospitals; secondly, from the ward sister or charge nurse, who was asked about the main delusional themes occurring in the patient's day-to-day talk; third, from interviews with the patient's relatives (these were often uninformative, as relatives seemed to have great difficulty in recalling the patient's delusional statements); and finally, each patient was interviewed and a careful attempt made to elicit his delusions.

Having recorded each patient's delusions, they were then put into one or more of the following categories: *religious and supernatural*; *grandiose*; *paranoid*; *sexual*; *hypochondriacal* (beliefs that parts of the body were changed in some way); *inferiority* (delusions of having sinned, for example, or having committed a crime); and *various* (definite delusions but not fitting any of the other headings). To qualify as a delusion a belief had to be manifestly false, or so improbable that it could be taken as such without reasonable doubt. Over-determined ideas, such as of being picked on and done down by family or staff, were not accepted. Similarly, preoccupations, religious or sexual, for

example, were not included unless they contained explicitly false beliefs. Many patients had more than one category of delusion, either because they had a number of distinct or interwoven delusions which fell into different categories, or because a single false belief fell into more than one category. A patient believing himself to be God, for instance, would have been classed under both religious and supernatural, and grandiose. It is important to note that delusions may have occurred at any time in the illness. It was, however, remarkable how consistent delusional themes were, and how the same fixed ideas had been repeated year after year.

A proportion of patients could not, on the available evidence, be categorized as deluded. Some seemed never to have expressed delusional ideas, though they were able to converse coherently; some were persistently mute; others had thought disorders to a degree that rendered the formulation of delusions impossible.

Social and Familial Data

Information on the patient's family and social background was obtained from the notes, from social reports, and from relatives. A form was sent to every relative whose name and address could be traced. The items of information asked were: place of birth; type of schooling; age of leaving school; religion; regular occupation; father's regular occupation; upbringing (parental or other); death, separation or divorce of parents when patient was fourteen years or under; number of brothers and sisters, and the patient's position (eldest, youngest); address prior to first hospital admission; number of persons in the household and their relationship to the patient; and family history of nervous or mental illness. At the end of the form relatives were invited to attend for interview. In all, 397 forms were sent out; 267 completed forms were returned, 119 relatives were interviewed at the hospital, and 18 were visited at home.

Analysis

The data were collected on hand-sorted punch cards. In the analysis, differences in proportions were tested for significance by the Chi-squared test.

RESULTS

Of our 405 schizophrenics 188 (71 per cent.) were found to be deluded and 117 (29 per cent.) were not. Thirty-five per cent. of the non-deluded schizophrenics had such gross thought disorder that no delusions could be elicited; 16 per cent. were mute; and the remainder had never expressed delusions.

The frequency of the different categories of delusion in the deluded group is shown in Table I. In this and in some of the subsequent tables, the total of the figures against the categories may exceed the total number of cases, since more than one category may be found in one individual.

TABLE I
*The Percentage of Different Categories of Delusion
found in the Deluded Patients
(n=288)*

Category	No.	%
Paranoid	205	71
Grandiose	127	44
Sexual	126	44
Religious	61	21
Hypochondriacal	59	20
Inferiority	34	12
Various.. .. .	23	8

THE RELATION OF AGE OF ONSET, SEX, MARITAL STATUS AND
SOCIAL FACTORS TO DELUSIONS

Age of Onset

This was defined as the age on first admission to a mental hospital. The mean age of onset for the men was 28.7 years (S.D. 10.4); and for the women it was 33.6 years (S.D. 12.6). The difference between these means is significant (critical ratio=4.26; $p < .001$). The deluded and non-deluded schizophrenics are compared by age groups in Table II as age of onset increased, fewer patients fell into the non-deluded group.

TABLE II
*The Percentage of Deluded and Non-deluded Patients
in Ten-year Age Groups*
(n=405)

	Age of Onset												T
	10-		20-		30-		40-		50-		60-		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Deluded ..	22	54	105	59	86	83	47	89	14	93	14	100	288
Non-deluded ..	19	46	73	41	18	17	6	11	1	7	0	0	117

When the delusions were categorized, the only category clearly related to age of onset was the paranoid. The proportion of paranoid delusions in the ten-year age groups are shown in Table III.

TABLE III
*The Proportion of Deluded Patients with Paranoid Delusions
in each Ten-year Age Group*

Paranoid (%) ..	Age of Onset					
	10-	20-	30-	40-	50-	60-
..	64	55	74	89	100	93

This finding accords with the clinical experience that the paranoid delusions are commoner in schizophrenia of late onset.

Sex

Seventy-seven per cent. of the 209 female patients were deluded, compared with 65 per cent. of the 196 males ($\chi^2=7.37$; $p < .01$). This difference is unlikely to be due to the females' higher age of onset, because the only delusional category clearly related to age of onset, the paranoid, had an identical incidence in the two sexes (Table IV). Among the women there were 381 delusions of all categories, compared with 254 among the men ($\chi^2=4.31$; $p < .05$). In our sample, therefore, not only were women more often deluded, but they had more categories of delusion per person than the men had.

A comparison of the incidence of the different categories of delusion in men and women showed a very significantly higher incidence of sexual delusions in the women; they also had more "various" delusions (Table IV). Males, on the other hand, had nearly twice as many delusions of inferiority, but the difference was not quite significant statistically.

Many of the delusions of "inferiority" had a depressive colouring although they occurred in a clearly schizophrenic context. They included ideas of sin or crime, of poverty, and of unworthiness of some kind. Examples were beliefs of being a murderer, of being a thief, and of having blasphemed; such beliefs usually lacked the appropriate affect, or were associated with thought disorder.

"Various" delusions included many different false beliefs; for example, that a relation was in the hospital, or that the patient was an animal. It is

perhaps of interest that delusions involving ideas of the incorporation of people, things or animals were not infrequent; their occurrence largely explained the excess of the "various" delusions in the women.

TABLE IV
Categories of Delusion in Males and Females

	Males (127)		Females (161)		χ^2	p
	No.	%	No.	%		
Religious	23	18	38	24		
Grandiose	52	41	75	47		
Paranoid	93	73	112	70		
Sexual	38	30	88	55	17.65	< .001
Hypochondriacal	25	20	34	21		
Inferiority	20	16	14	9	3.40	< .1
Various	3	2	20	12	9.77	< .01

Marital Status

Thirty-five per cent. of the deluded were ever-married, compared with 13 per cent. of the non-deluded. This difference, which is highly significant ($p < .001$), is probably to be attributed to the earlier age of onset and consequent failure to marry of the non-deluded patients. Table V compares the incidence of delusions by categories for the ever-married and single.

TABLE V
Categories of Delusion and Marital Status

	Ever-Married (n=100)		Single (n=188)		χ^2	p
	No.	%	No.	%		
Religious	14	14	47	25	8.46	< .01
Grandiose	45	45	82	44		
Paranoid	82	82	123	65	8.74	< .01
Sexual	50	50	76	40		
Hypochondriacal	18	18	41	22		
Inferiority	7	7	27	14	3.40	< .1
Various	7	7	16	9		

The incidence of religious delusions was significantly higher in the single. This is not a consequence of the association found between class and religious delusions (Table VI), since there was a larger proportion of single persons in Classes 4 and 5 and a smaller proportion in Classes 1 and 2.

It is of interest that the incidence of sexual delusions was higher in the ever married than in the single, although the difference was not significant.

The higher incidence of paranoid delusions in the ever-married is probably due to the later age of onset in this group compared with the single. However, 69 per cent. of ever married women under forty at age of onset had paranoid delusions, and only 59 per cent. of single women in this age range, but this difference is not significant.

The only other finding which approached significance was the higher incidence of delusions of inferiority in the single. When both marital status and sex were taken into account, single males had significantly more delusions of inferiority than married females (15 per cent. compared with 2 per cent.; $p < .01$).

Religion

Categories of delusion were randomly distributed amongst the different religious denominations.

Social Class

Patients were classified, on their best regular occupation, into the Registrar General's five social classes. Married women were classed by their own and their husband's regular occupation, and if these were different, the higher was chosen. A few people with no fixed occupation were classed by the occupation of their parents. All but nine of the 405 patients were classifiable in this way. In the analysis Classes 1 and 2, and 4 and 5, have been combined.

There was no difference in the social class distribution of the deluded and non-deluded schizophrenics. The incidence of the delusional categories and their relation to social class is shown in Table VI.

TABLE VI
Categories of Delusions and Social Class
(n=283)

	Class 1-2 (n=70)		Class 3 (n=124)		Class 4-5 (n=89)		χ^2	p
	No.	%	No.	%	No.	%		
<i>Religious</i>	22	31	28	23	11	12	8.56	< .02
<i>Grandiose</i>	36	51	56	45	31	35	4.68	< .1
<i>Paranoid</i>	51	73	89	72	62	70		
<i>Sexual</i>	31	44	59	48	33	37		
<i>Hypochondriacal</i> ..	16	23	28	23	15	17		
<i>Inferiority</i>	6	9	15	12	13	15	1.35	< .3
<i>Various</i>	4	6	16	13	3	3	6.85	< .05

There was a clear gradient in the relation between religious, grandiose and inferiority delusions and class. In the first two instances there were more of these delusions in the upper than in the lower classes, but the .05 level of significance is not reached in the case of grandiose delusions. The gradient was in the opposite direction with delusions of inferiority; their incidence was least in Classes 1 and 2, intermediate in Class 3, and highest in 4 and 5, but the differences between classes is not significant.

The similarity in gradient of religious and grandiose delusions is of interest. It is partly accounted for by the tendency of these types of delusions to be interlinked, as only 33 per cent. of the religious delusions occurred alone or in combination with categories other than grandiose, whereas 67 per cent. occurred with grandiose delusions.

Social Mobility

The social mobility of the patients was examined by comparing their social class with that of their parents. Information about the social class of both patient and parent was available in 333 cases. Eighty-eight per cent. of the 58 upwardly mobile were deluded compared with 70 per cent. of the 135 who were of the same status and 69 per cent. of the 140 who were of a lower status than their parents ($\chi^2=8.01$; $p<.01$).

The difference was mainly accounted for by the presence of a large proportion of married women, upon whom a higher status had been conferred, in the upwardly mobile deluded group. Thus 74 per cent. of the group were women, and 68 per cent. of these were married. Only 41 per cent. of women who were downwardly mobile or of the same status as their parents were married.

When the direction of class mobility was related to delusional categories, the upwardly mobile women were the only patients in whom an association

was found. Fifty-seven per cent. of them had grandiose delusions compared with 39 per cent. of women of the same status as or lower status than their parents, although the difference is not quite significant at the 5 per cent. level ($\chi^2=3.26$; $p<.1$).

Educational Status

To obtain further information on the relation of delusions to class, we categorized patients into two groups on the basis of their educational history. The "high status" group had had an independent, grammar or high school, technical, or university education. The "low status" group had had a primary or elementary (including secondary modern) education only. All but 51 patients could be classified. Seventy-eight per cent. of 120 in the high status group were deluded compared with 70 per cent. of 234 in the low status group ($\chi^2=3.00$; $p<.1$).

When the categories of delusion in the two groups were compared, however, (Table VII), the differences found corroborated the findings by social class (Table VI).

TABLE VII
Delusional Categories and Educational Status

	High Status (94)		Low Status (163)		χ^2	p
	No.	%	No.	%		
Religious	26	28	30	18	2.73	<.1
Grandiose	51	54	60	37	7.40	<.01
Paranoid	65	69	117	72		
Inferiority	10	11	22	13		

There were significantly more grandiose delusions in those of higher educational status. Religious delusions were also more frequent in patients of higher educational status, but the difference is not significant.

Domicile

The classification into urban or rural was undertaken only for those patients who were resident in West Sussex at the time of the onset of their illness; it was based on the boundaries of the urban and rural districts. No difference in the proportions of deluded and non-deluded patients and no difference in the categories of delusions was found between urban and rural dwellers.

One hundred and sixty-four of the deluded patients were living in Sussex at the time of their first admission to hospital. There were 82 born in West Sussex ("natives") and 82 born anywhere outside West Sussex ("immigrants"). Paranoid delusions were more frequent amongst "immigrants" (83 per cent.) than amongst the "natives" (67 per cent.) ($\chi^2=5.50$; $p<.02$). This difference appeared to be due to an excess of females over 30 among the "immigrants". A further comparison was made, therefore, between female "natives" and "immigrants". Only 66 per cent. of 15 "natives" aged 30 or over at onset had paranoid delusions, in contrast to 93 per cent. of 43 "immigrants" of comparable age distribution ($\chi^2=4.47$; $p<.05$).

The incidence of delusions in siblings of different positions was compared (Table VIII); a difference was found for paranoid and grandiose delusions only. Significantly more paranoid and fewer grandiose delusions were found in youngest compared with eldest children. Only children had the highest incidence of paranoid delusions, but their number was small (18) and the finding is not statistically significant.

TABLE VIII

	Eldest (65)		Youngest (71)		Only (18)	
	No.	%	No.	%	No.	%
Paranoid	36	55	55	77	15	83
Grandiose	33	51	24	34	8	44

Paranoid Eldest v Youngest $\chi^2=7.47$ ($p < .01$)

Grandiose Eldest v Youngest $\chi^2=4.01$ ($p < .05$)

Number of Sibs in the Family

There was no relation between delusional content and number of sibs in the family.

Loss of Parent

Eighty patients suffered the loss of a parent by death, separation or divorce before the age of 15. There were no differences between the categories of delusion in patients who had lost parents in childhood and those who had not.

Analysis of Content

In order to explore further the relation between social variables and delusional categories a more detailed analysis of the content of grandiose and paranoid and sexual delusions was carried out.

Grandiose Delusions

The content of patients' grandiose delusions was subdivided into delusions of authority and power, of wealth, of social status, and of special skill or ability (Table IX).

TABLE IX

Comparison of Content of Grandiose Delusions between Classes

	1 and 2 (36)		3 (56)		4 and 5 (31)	
	No.	%	No.	%	No.	%
Authority and Power ..	6	17	5	9	6	19
Wealth	6	17	5	9	9	29
Social Status	13	36	28	50	18	58
Skill	12	33	17	30	17	55
Other	8	22	10	18	3	10

No significant differences in the distribution by class of these subdivisions was found. However, there was a greater incidence of delusions of power and authority in men compared with women (Table X).

TABLE X

Comparison of Content of Grandiose Delusions between Sexes

	Male (52)		Female (75)	
	No.	%	No.	%
Authority and Power ..	14	27	3	4*
Wealth	9	17	11	15
Social Status	26	50	33	44
Skill	19	37	25	33
Other	6	12	15	20

* Males v Females $\chi^2=13.92$; $p < .001$

Paranoid Delusions

The content of the patients' paranoid delusions was sub-divided according to the persecuting agency (Table XI).

Many patients named only "people" without explanations of who they were or why they were persecuting. Some cited specifically those with whom they were in close contact: work-mates, neighbours or members of their families. Some cited named agencies: Jews, Freemasons, Communists, The Order of Buffaloes, and so forth. There was a tendency for patients in Classes 1 and 2 to cite named agencies, whereas those in Classes 4 and 5, if they named any specific group, more often cited the police. Thus, the 16 patients in Classes 1 and 2 named the police only 5 times and other groups 21 times, but the 14 patients in Classes 4 and 5 named the police 10 times and other groups only 8 times.

TABLE XI
Analysis of Paranoid Delusions and Class

Persecutor	1 and 2 (51)		3 (89)		4 and 5 (62)	
	No.	%	No.	%	No.	%
People not further specified ..	14	27	26	29	29	47
Defined group	16	31	22	25	14	23
Close associates, work-mates, neighbours	18	35	32	36	16	26
Family	10	20	24	27	9	15

Sexual Delusions

An analysis of the content of the sexual delusions of the 38 males and 88 females showed that the commonest type of delusion in both men and women was a false belief of imposed heterosexual activity (Table XII). Women more often believed they were married or pregnant; these delusions were as common in the ever-married as the single. In the men, on the other hand, false beliefs of marriage, betrothal, or of being father to children occurred more frequently in the single. None of the women, in contrast to the men, had delusions centred on masturbation.

TABLE XII
Breakdown of Sex Delusions

Prominent themes of delusions	Males			Females		
	Ever married (n=10)	Single (n=28)	Total	Ever married (n=40)	Single (n=48)	Total
Heterosexual activities imposed upon the patient	2	9	11	14	17	31
Homosexual activities imposed upon the patient	0	2	2	1	4	5
Infidelity of spouse	6	0	6	6	0	6
False belief of marriage or betrothal	1	7	8	10	13	23
False belief of pregnancy or having children	0	3	3	11	16	27
Masturbation	0	7	7	0	0	0
Other (e.g. sexual activities of others, and miscellaneous sex delusions)	0	4	4	2	12	14

DISCUSSION

In this paper we have attempted to examine the interaction between the schizophrenic patient and his social environment by using a procedure different in certain respects from that used by previous investigators; environmental

variables (social and familial) were related to a specified clinical feature of the illness (delusions). It was expected that this procedure might offer certain advantages.

First, associations found between either the occurrence of delusions or between the type of delusion and some social characteristics might clarify the nature of the interaction between the patient and his environment. Immigrants, for example, were found to have more paranoid delusions than the native-born. This relation between the content of the symptoms and the social situation of the patient is consistent with the social isolation hypothesis—that these patients are ill because they have little interaction with others in their environment. Secondly, a particular symptom or clinical feature, such as a delusion, can be more reliably identified than can a diagnosis such as schizophrenia. Thirdly, any significant relationships found between a social factor and a delusional category could be explored further by analysis of the content of the delusion. In this way the association could be more fully examined and hypotheses developed. And fourthly, in the case of delusions, complementary categories could be described and related to the social variables; hence there were more numerous opportunities for identifying consistent trends or patterns in the data than when a diagnosis is related to the variables.

The method, however, is open to a number of criticisms. The patients' delusions were categorized on the information collected by one observer from a number of sources, including a clinical examination of the patient. The categorization was not, in the majority of cases, difficult, but it would have been preferable had we been able to obtain a measure of reliability on the basis of an independent assessment by a second observer. Another limitation was that every delusion found in one patient was categorized. It would have been more satisfactory to have ranked each patient's delusions in order of their clinical prominence. We did, however, obtain some consistent trends which suggest that the findings were based on reliable observations. Grandiose delusions, for example, were found to have the same relation to social status whether this was estimated by education or by the Registrar-General's classes; moreover, they were found to have a clear class gradient. Such regularities are unlikely to have occurred by chance.

The association found between categories of delusion and social factors are open to a number of interpretations. We were, however, impressed by the trends observed with grandiose delusions, which suggested a rather direct translation of social position into delusional content. Grandiose delusions were found to have a higher incidence in patients of higher social class and superior educational status; they therefore occurred more commonly in those groups of the population which are the more highly valued, and carry the most prestige. Moreover, the eldest sibling had more grandiose delusions than the youngest. On the other hand, schizophrenics of lower social status had fewer grandiose delusions, and also tended to have more delusions of inferiority. It seemed, therefore, that instead of patients of low status compensating with delusions of grandeur, it was the opposite which occurred. It was the better educated, those of higher class, the upwardly mobile, the oldest child—the top-dog, in short—who had grandiose ideas; those of inferior status in terms of class and education were not only less grandiose, but tended to have more delusions of inferiority. This association between class and the beliefs and behaviour of the schizophrenic favours the view that the social environment engenders behavioural characteristics, rather than the alternative hypothesis,

which states that the association observed between social class and schizophrenia, say, is a secondary and spurious one due to drift.

Paranoid delusions did not relate to class or educational status. They increased with increasing age of onset and had a higher incidence in patients who were youngest sibs. We also found an interesting relationship to immigration. Immigrants to West Sussex had a significantly higher incidence of paranoid delusions than the native born. Part, but not all, of this difference could be accounted for by the high incidence of paranoid delusions in the women in the older age groups. The findings, while confirming the common clinical observation that paranoid features occur more frequently in schizophrenia of late onset, suggest that part of this association with age may be a social effect. There is considerable evidence for the view that the incidence of social and mental disorder in a society is partly determined by loneliness of its members, by the extent to which they are bound by common standards and beliefs, and by the degree to which they are aware of performing a socially valued role in it. Immigrants, particularly in later life, are less likely to be as fully assimilated into the community as are natives. It is therefore of interest from the standpoint of the social isolation hypothesis that paranoid delusions are more common in this group than chance could account for. The elderly also have a poorly defined role in our society, so their awareness of lack of a useful social function may similarly be a factor determining the high incidence of persecutory content in the delusions of the schizophrenics of late onset. The finding, therefore, that ideas of persecution are common in those who might be described as "borderline members of the community" predisposes one to interpret their clinical characteristics in terms of this social experience.

Sexual delusions differed between men and women. They were more frequent amongst the women, and tended to occur more in the married than in the single. The question arises whether these differences are determined by the different sexual mores of men and women in our culture. A further analysis of the delusional content of the sexes was therefore attempted, though the numbers were small. Paranoid sexual ideas, such as of imposed intercourse, were greater in the females, particularly in single females. Delusions of being married, betrothed, pregnant, and of having children also had a higher incidence in the females, but again more so in the single than in the married. The only delusional content which was more evident in males than females was, in the single, of masturbation and, in the married, of the spouse's infidelity. The content appears to reflect the more obvious sexual prohibitions and demands regarding the two sexes in our society—the greater social restrictions on intercourse, for example, in the single females as compared with the single males, the greater pressure on women to conform as regards marriage, and the more explicit condemnation of masturbation in men.

The trends obtained in these comparatively few cases make it likely that differences of these kinds exist between the content of sexual delusions in men and women and that a more extensive analysis might uncover some of the effects of sexual mores on mental illness.

Religious delusions, in our patients, tended to occur more often in Classes 1 and 2 than in 4 and 5. This finding differs from that obtained by other workers studying more primitive, mixed communities, where the less educated have tended to formulate delusions in religious and supernatural terms. The explanation may lie in the fact that in our patients there was a tendency for religious

and grandiose delusions to occur together. Not a few delusions (for example, messianic beliefs) had to be categorized as both religious and grandiose.

In conclusion, the differences of incidence of delusions found in family and social groups suggest that relating the form and content of some psychiatric symptoms, rather than diagnosis, to social variables is a useful method of exploring the effects of environment on mental illness.

SUMMARY

We aimed to relate some clinical features of a mental illness (rather than the presence of the illness itself) to social factors; the possible advantages of this method are discussed. We determined (in a sample of hospitalized schizophrenics) the prevalence of delusions of different categories and examined their relation to the patients' age, sex, and some of their social and familial characteristics. Some definite trends emerged:

Delusions with religious or supernatural content were more frequent in persons of higher social status. They were also more frequent in the single than the married.

Grandiose delusions were more frequent in persons of higher social or educational status, and in eldest as compared with youngest siblings. Delusions of inferiority tended to have the opposite distribution.

Paranoid delusions increased in frequency with increasing age of onset. They were more common in "immigrants" to West Sussex than in "natives"; and they were more common in youngest compared with eldest siblings.

Sexual delusions occurred much more often in women than men, and tended to be more common in the married than the single.

Some of these relationships are analysed further, and their implications are discussed.

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