attention, perception, and cognition


Ten of the Guilford tests of creative abilities were given to 50 schizophrenic patients. Creativity scores were correlated with overinclusion, activity withdrawal, vocabulary, age, and level of education. While level of education and vocabulary were positively related to creativity scores, overinclusion, activity withdrawal, and age tended to show the opposite trend. Future use of creativity tests in the study of schizophrenia was discussed. (16 references)—Author abstract.


Hallucinating and nonhallucinating schizophrenics and normal subjects were tested to determine differences in patterns of errors in trials which tested the effect of semantic integration and laterality on recall. Sentences of two levels of semantic integration (i.e., well integrated or poorly integrated) were presented to subjects monaurally, in the presence of binaural noise. The results from the hallucinating and nonhallucinating groups were different, with the nonhallucinators being less accurate, discriminating semantic integration level on left rather than right ear input, and making more fragmented errors. Little support could be found, however, for attributing this pattern of performance to specific aspects of the procedures. It therefore appears that the nonhallucinators
process information differently than hallucinators, and these differences may reflect alterations in language development. It is also speculated that such differences might consistently interfere with the development of brain asymmetry. (28 references)—Author abstract, modified.


Thirty-five lists of seven digits were presented to schizophrenic and normal subjects, with items in the different serial positions being probed randomly in a series of seven recall trials. Input interference resulting from interpolation of items between presentation and recall of the probed item was the same for both groups, and output interference was found to be greater for schizophrenics than for normals. Significant differences in error patterns were also found, and it was concluded that output interference is a major causative factor in the schizophrenic recall deficit. (34 references)—Author abstract, modified.


The validity of Loren Chapman's theory of schizophrenic thought disorder was tested in a diagnostic cross-validation study. The vocabulary test from the Shipley/Hartford Scale served as the control task, and the multiple choice vocabulary test used by Boland and Chapman to disclose a schizophrenic deficit related to thought disorder served as the experimental task. Two groups of hospitalized psychiatric patients—one group classified as schizophrenic and the other as psychiatric controls—served as subjects, with both groups performing below the normal level reported by Boland and Chapman, but somewhat above the mean level of the chronic schizophrenics they tested. The schizophrenic group performed similarly to the psychiatric controls on the experimental task, indicating that some factor other than schizophrenic thought disorder was being measured by the experimental task. (28 references)—Author abstract, modified.


Eight thought-disordered schizophrenics, eight non-thought-disordered schizophrenics, and eight normal subjects each completed four repertory grids, formed by combinations of two types of construct (psychological and physical) and two types of element (photographs and known people). McPherson and Buckley's finding that thought-disordered schizophrenics are relatively less disordered when using physical constructs than when using psychological constructs was replicated. Further, this specificity of schizophrenic thought disorder was extended from grids using photographs of strangers to grids using known people, thus contradicting an explanation of schizophrenic grid performance (William 1971) in terms of cue insensitivity. (16 references)—Author abstract.


The performance of 20 acute schizophrenics and 10 depressives, matched for age, verbal intelligence, and premorbid functioning, was assessed on a choice reaction time card sorting task. Stimulus and response uncertainty were varied independently, and there were two main conditions—distraction and no distraction. The schizophrenics were slower than the depressives over all the functions examined in the study, and were also significantly more affected by increases in response uncertainty. Although there was a tendency for the schizophrenic group to be more affected by distraction and by increasing stimulus uncertainty, these differences were not significant. Neither was there a significant interaction between the effects of stimulus and response uncertainty or between distraction and stimulus uncertainty. The effects of distraction increased, however, with increasing response uncertainty. The results are discussed in relation to two models of information processing (see Broadbent 1971 and Sternberg 1969) that allow a detailed examination of the cognitive abnormalities found in schizophrenia. (42 references)—Author abstract.


The theory of information processing formulated by Broadbent (1971) was used in an attempt to clarify the nature of dysfunction in the selective attention of schizophrenics. Short-term memory tasks, in which instructions were presented before or after the test material, were given to 10 schizophrenics, 10 depressives, and 10 normal subjects, all of whom had been matched for age and intel-
ligence, in order to determine whether the schizophrenic has a defective filter mechanism (i.e., an inability to exclude items on the basis of a clear physical cue). Overall performance of normal subjects proved significantly superior to that of both psychotic groups, but the depressive and schizophrenic groups did not differ significantly. Although there was a tendency for schizophrenics to benefit less than depressives from preinstruction, it is suggested that filtering difficulties may not be specific to schizophrenia. Alternative conceptualizations of the cognitive abnormalities shown by schizophrenics—slowness of information processing and difficulties in response selection, for example—may be more useful in describing some of the cognitive abnormalities related to schizophrenia. (24 references)—Author abstract, modified.


In a study examining the differing explanations of schizophrenic processing deficit offered by Chapman and McGhie and by Yates, 32 schizophrenics, classified on the acute/chronic and paranoid/nonparanoid dimensions, and eight neurotics were tested on two dichotic listening tasks. One task gave reaction time measures of processing speed at three rates of stimulus presentation; the other assessed stimulus detection and channel selectivity using signal detection methods. The results supported Yates and indicated that schizophrenics can attend successfully to one of two competing channels. Neither reduced sensory sensitivity nor response bias appeared to affect the performance of any group of subjects. Slowness of processing was shown to be a deficit characteristic of chronic, particularly paranoid, schizophrenics, although the factors responsible for this slowness remain a matter for empirical investigation. (25 references)—Author abstract.


A model of the pathological state of the sensory system of schizophrenics is proposed. The model indicates that schizophrenics suffer from a disturbance of integrative function that changes the magnitude of the decision-making threshold, while maintaining the sensory system intact. Further investigation is recommended to confirm the validity of the proposed model. (3 references)—Journal abstract, modified.


Perception of elementary semantic language structures was investigated in 15 male schizophrenic patients. The studies emphasized identification of acoustic stimulus analysis rather than past speech experience. No differences were found between the speech perception of schizophrenics with malignant disease development and that of normal subjects. (6 references)—Journal abstract, modified.


The dynamics of the parameters of the sensory process were investigated in 15 normal and 12 schizophrenic subjects, using a modified version of the Bardin psychophysical testing method. In an emotionally meaningful situation, schizophrenic patients showed some peculiarities in regulation of the perceptual process which were expressed as a decrease in sensory sensitivity, in disturbances of the decisionmaking mechanism, and in lack of ability to evaluate the significance of stimuli. The data obtained by psychophysical testing confirm the analysis of perceptual data previously obtained by evoked potential methods. (31 references)—Journal abstract, modified.


A retrospective investigation to assess the validity of the Grid Test of Schizophrenic Thought Disorder (Bannister and Fransella 1966 and 1967) is reported. Analysis of the data provided some support for the test's validity, but it failed to discriminate between clinically assessed thought-disordered and nontought-disordered patients at an acceptable level of significance. Furthermore, the rate of misclassification was too high to justify the test's
use in the assessment of an individual case. The results are compared with the findings of other published studies, and methodological weaknesses, due to the retrospective nature of the study, are also discussed. (10 references)—Author abstract.


Problems of symptomatology of speech disorders in schizophrenics are discussed. Attention is focused on the primary general symptoms of speech disorders, i.e., breakdown in the sense and formal structure of a statement. Specific topics treated include semantic incoherence as a reflection of the patient's internal world, the use of nouns and adjectives, the use of grammatical and semantic ties, the nature of verbal perseveration, and rhythmic disorders. (56 references)


The theory of cognitive differentiation between paranoid and nonparanoid schizophrenics was tested, and it was demonstrated that paranoids used a conceptual style of responding more than nonparanoid schizophrenics. Eight male nonparanoid, eight paranoid, and eight nonschizophrenic control subjects responded to ambiguous slides of common objects presented in several different contexts in a visual discrimination task. As predicted, paranoids gave responses following dominant conceptual cues significantly more than nonparanoid schizophrenics. Paranoids and controls followed these cues with equal frequency, but paranoids tended to follow them more when success was hindered. This evidence of cognitive differentiation between schizophrenic subtypes warrants cross-validation on a larger sample. (13 references)—Author abstract, modified.


Research involving the development and use of free speech evaluation to measure thought disorder in chronic schizophrenic patients is described. Two populations (one chronically hospitalized, the other nonhospitalized) of 15 chronic schizophrenic subjects each were studied and compared. Severe types of looseness of association were not a prominent finding in the patients studied, although long-hospitalized chronic schizophrenics were found to have significantly higher scores than nonhospitalized chronic schizophrenics on several of the other categories of speech patterns investigated—i.e., paucity of speech, perseveration, repetition, and overall deviant verbalization. The significance of these results is analyzed and discussed, and it is suggested that the differences may be due to severity of illness. It is also believed that the phenomenological scoring system developed and used is reliable and seems to represent a useful tool for the study of many aspects of the schizophrenic patient. (16 references)—Author abstract, modified.


In an examination of the dopamine hypothesis linking abnormal movements in schizophrenia to alterations in brain dopamine levels, the relation of extrapyramidal side effects (EPS) of schizophrenic patients to therapeutic responses to chlorpromazine and trifluoperazine is measured by tremography. Support for the dopamine hypothesis derives from the pharmacologic effects of antischizophrenic drugs; pharmacological manipulations that exacerbate schizophrenic illness, including monoamine oxidase inhibitors, anticholinergics, L-dopa, and methylphenidate; and experiments with models of non-schizophrenic psychosis induced by amphetamines. Several experiments are cited, however, in which alterations in psychotic level fail to show a temporal relationship to changes in dopamine. The dopamine hypothesis is not necessarily disproven by these results, but it is suggested that the discrepancy needs further research. Tremography in both animal and clinical studies is considered an excellent quantitative tool in schizophrenia research. (40 references)
The evidence that dopaminergic transmission in the corpus striatum is impaired in Parkinson's disease suggests that observations of the relationship between Parkinson's disease and schizophrenia may illuminate the pathophysiology of the latter. Four cases are reported in which an illness with schizophrenic symptoms developed in the setting of longstanding Parkinson's disease, and attention is drawn to earlier reports of schizophrenic illnesses that occurred as postencephalitic sequelae in the presence of a Parkinsonian syndrome. These observations appear to conflict with the view that increased dopamine release in the striatum is necessary for expression of schizophrenic psychopathology, but they do not exclude the possibility that increased transmission may occur at other dopaminergic sites in the brain (e.g., the nucleus accumbens, tuberculum olfactorium, or cerebral cortex). Similarly, the hypothesis that the therapeutic effects of neuroleptic drugs result from dopamine receptor blockade cannot be maintained with respect to an action in the striatum in view of the differences between the actions of thioridazine and chlorpromazine in this structure. The hypothesis may be tenable, however, for actions at extrastriatal sites. (6 references) —Journal abstract, modified.

In a contribution to the knowledge of the presence of amine analogues of chlorpromazine in biological fluids, methods of collecting and assaying chlorpromazine-N-oxide and chlorpromazine-N-oxide-sulfoxide from samples of plasma and urine are described. The samples were heparinized plasma (by venipuncture) and urine from 10 acutely treated, responding schizophrenics (previously untreated) receiving 100 mg chlorpromazine three times daily for 36 days; eight patients undergoing long-term treatment (more than 6 months) at low doses (20 mg to 25 mg, three times daily); and 20 patients during and after long-term treatment (more than 2 years) at higher doses (50 mg to 200 mg, three times daily). All plasma samples were collected just before, or 2 to 4 hours after, routine oral doses of chlorpromazine, and urine samples were taken at 24-hour intervals. Gas chromatography was also used. (8 references)

A review of the evidence on the dopaminergic theory of schizophrenia arising from human studies is presented, with research regarding the pharmacologic mechanisms of amphetamine psychosis being integrated with the clinical effects of amphetamines in man. Amphetamine-induced paranoid psychosis, indistinguishable from schizophrenia, appears following high-dose amphetamine ingestion but clears within several days of amphetamine discontinuance. This psychosis is considered the result of the amphetamine itself, and possibly of the false transmitters, hydroxynorephedrine and norephedrine. Psychomotor stimulants such as methylphenidate are shown to exacerbate psychoses, presumably mediated by dopamine, and the effect of physostigmine in antagonizing psychoses activation by methylphenidate is investigated to clarify whether psychotic behavior is controlled by a balance between transmitters or by a single transmitter. The study indicated transmitter balance controlling the worsening properties of drug psychosis, with a two-factor alternative to the dopamine theory being suggested based on the research. Factor one of the alternative theory is the "turning on" of schizophrenia (a process whose mechanism still needs definition), and the second factor is the dopamine-mediated stimulation or "turning up" of schizophrenia. (93 references)

Contrary to reports in the literature, four newly admitted schizophrenic patients worsened clinically when treated with baclofen, a homolog of gamma-aminobutyric acid (GABA), at doses reaching a peak of 80 to 100 mg per day. While baclofen has no effect on GABA content, glutamic-decarboxylase activity, monoamine-oxidase activity, or catecholamine content of the brain, its structural similarity to phenethylamine, a potential and endogenous psychotogen, may be pertinent to the pronounced worsening of thought and behavioral disorders observed.

Clinical-immunological correlations in the study of antithymic antibodies
The appearance of antithymic antibodies in blood sera was investigated in 117 schizophrenics, 84 psychologically normal subjects, and 47 patients with other disorders such as rheumatism and senile psychoses. Cytotoxic reactions showed the existence of the antithymic antibodies in the blood sera of schizophrenic patients to be a constant sign, not dependent on the development type, acuity, or progressiveness of the pathological process. The cytotoxic activity of the blood sera in patients with other disorders did not differ significantly from that of normal subjects. (6 references)—Author abstract, modified.


The effects of 129 compounds on partially purified rabbit lung N-methyltransferase (NMT) were studied in order to find potential new therapeutic agents unrelated to current neuroleptic medication in an approach based upon the excess methylation hypothesis of schizophrenia. N-methyltryptamine (NMeT) and 14C-S-adenosyl-L-methionine (14C-SAM) were used as substrates in this in vitro procedure to form 14C-N, N-dimethyltryptamine (14C-DMT). It was concluded that further studies, including in vivo determinations of NMT inhibition, are needed. (36 references)—Author abstract, modified.


Aspects of the cerebral circulation were monitored daily by cerebral electrical impedance plethysmography in one chronic schizophrenic girl for 9 months and seven other chronic schizophrenic patients for 8 months. An additional manic-depressive patient was monitored while in a remission phase over 2 months. Simultaneous electroencephalogram (EEG) recordings were made on the schizophrenic patients. Daily Malamud-Sands (MS) psychiatric rating scales were completed by a trained nursing staff on all patients, and correlation coefficients were obtained between this behavioral variable and the EEG-measured alpha frequency. Correlations were also run among the dimensions of the MS rating scale, three indices of the cerebral circulation, and two indices of cervical blood flow. Results indicated that the MS scale affords a useful ethological monitor of psychotic behavior and that the cerebral electrical impedance plethysmography and EEG alpha frequency correlate significantly with the fluctuations it records. (41 references)—Author abstract, modified.


The heart rates of psychiatric patients with schizophrenia, reactive depressions, and affective psychoses were compared with those of nonpsychiatric patients. A group of staff members constituted a nonpatient control group. Phenothiazine derivatives were taken by 78 percent of the patients prior to the study. Heart rate was recorded every 5 seconds, before, during, and after a vocal stimulus derived from the patient's anamnesis. All normal persons were given four words: friendship, death, mother, and sexual life. The four patient groups showed a significantly higher heart frequency than the control group. Among the four groups there were no significant differences. Different variables such as sex, age, physical condition, and medical treatment could have influenced the results. (14 references).


A summary is presented of investigations into mammalian enzymes that catalyze formation of methylated hallucinogenic derivatives of biogenic amines. The methylation hypothesis of schizophrenia suggests that psychotics may be capable of synthesizing one or more psychotogens by excessive or abnormal methylation, using as substrates structurally related biogenic amines or their normal metabolites. The di-O-methylated derivative of dopamine, 3,4-dimethoxyphenethylamine (DMPEA), exhibits biochemical effects on dopamine pathways, and behavioral effects inducing hypokinetic syndromes such as catatonia when injected into animals. In a discussion of the aspects of biological O-methylation, the alteration of the activity of the enzyme catechol-O-methyltransferase (COMT) was shown to be associated with schizophrenia, Down's syndrome, and affective disorders. Similarly, in
The catalase activity in the whole blood of patients with nuclear schizophrenia was found to be higher than that in normals, and the catalase activity in leukocytes of the peripheral blood was found to be lower. During insulin shock, the enzyme activity both in the blood and leukocytes of schizophrenics was significantly higher than in normals. It is suggested that the low catalase activity may be due to a drop in the aerobic respiration and oxidative phosphorylation in leukocyte mitochondria.

The existence of antibrain antibodies during various stages of schizophrenia was investigated using the complex formation reaction (CFR) and the passive hemagglutinin reaction (PHR) in 449 patients. During attacks, antibrain antibodies revealed by CFR and by PHR were found in 41 and 29 percent of the cases, respectively. The beginning of the immunizing cycle was found to be characterized by the appearance of antibodies revealed by CFR. Antibodies depicted by PHR appeared later, and their circulation in the blood was relatively short. The immunization cycle terminated in a gradual decrease in the complement of fixation antibrain antibodies, and during remissions, the frequency of agglutinating anti-bodies did not differ statistically from control levels.

Evolutionary and biological aspects of endogenous psychoses are discussed, based on years of research with animals. Specific topics covered include: reproduction of experimental psychoses; schizophrenia; affective psychoses and genuine epilepsy; catalepsy and paranoid schizophrenia; schizophrenia and hyperkinesia; the effect of a lowered threshold of a biological defense reaction on the spontaneous arousal of endogenous psychoses; changes in syndromes during periodic psychoses; epileptic and cataleptic phenomena in clinical epilepsy; possible genetic bases of schizophrenia and epilepsy; and cataleptic reactions as a biological foundation of schizophrenia.
research has shown remarkable agreement in ascribing the etiology of schizophrenia to the limbic system, including structures of the hypothalamus, nucleus amygdalae, hippocampus, fornix, gyrus cinguli, and the frontal occipital brain. According to studies by Fuxe and others (1970), endocrine maturational and functional disorders are due to pathologies of the limbic, extrapyramidal/motor, and hypothalamic/hypophyseal neuroendocrine system, which can also cause psychological disorders. Supportive evidence from the field of psychopharmacology includes a discovery by Borenstein et al. of a psychotropic drug, a sulpiride/pyrrolidinyl/benzamide derivative, that has endocrinologic, but not the anticipated extrapyramidal side effects. (20 references)


The functional state of lymphocytes in cultures of the peripheral blood of schizophrenics is described. The ultrastructural organization (electron microscopy), chromatin activity (microfluorometry), velocity of ribonucleic acid (RNA) synthesis (autoradiography), and RNA and deoxyribonucleic acid content (cytophotometry) were examined. All studies revealed a high level of cell physiological activity, and phytohemagglutinin, acting on the lymphocytes of the schizophrenics for an hour, either stimulated the lymphocytes or inhibited the initially high level of cell activity. (9 references) — Journal abstract, modified.


Recent research data from the fields of genetics and biochemistry that bear on the etiology of schizophrenia are of interest to social workers who are repudiating the “medical model” as a basis for practice. Since there is rapidly growing evidence that psychogenic and sociocultural elements may not produce schizophrenia, except in the presence of certain biological factors, experiential theories, the development of biochemical “markers” that could be used to establish a diagnosis of schizophrenia, genetic theories, and mono- and polygenic hypotheses are considered, and biochemical evidence is examined. Implications for social work include: (1) provision of a device to predict risk of schizophrenic breakdown in individual cases; (2) advance identification of the at-risk population in order to provide supportive and preventive services; (3) enhancement of the patient advocacy role; and (4) prediction of a potential increase in morbidity rates of schizophrenia due to outpatient treatment made possible by psychopharmacological developments (i.e., increased fertility of schizophrenics and the genetic implications). (23 references)


Amyloid deposits were investigated in the brain and internal organs of schizophrenic patients over 60 years of age who had died of various somatic diseases. Brain amyloidosis was found in 52 percent of the cases, cardiac amyloidosis in 34 percent, and pancreatic amyloidosis in 12 percent. The corresponding data in a control group of psychologically normal subjects of the same age who had died of the same somatic diseases were 46 percent, 25 percent, and 24 percent. Senile amyloidosis was found to begin in schizophrenics 60 years and older and in mentally healthy patients 65 years and older. Hyperplasia of the microglia was observed in the cases of brain amyloidosis. (27 references) — Journal abstract, modified.


The existence of brain autoantigens in the blood of 200 schizophrenics was investigated. It was found that the introduction of brain autoantigens caused the formation of antibrain antibodies in experimental animals. Brain autoantigen, limited by the species, was also present, suggesting the possibility of autoimmunization. It was demonstrated that the autoantigen is stable to organic solvent activity in the paranoid form of schizophrenia, and that in epilepsy and viral encephalitis its inactivation is also marked. It is therefore suggested that brain autoantigen in different forms of schizophrenia is qualitatively heterogeneous. (13 references) — Journal abstract, modified.

2603. Prilipko, L.L., and Vostrikova, S.A. Uvelichenie

Independent studies showing a difference between the EEG frequency spectra of test and control groups are compared. The test groups included patients with schizophrenia, dyslexia, reading disability and left preference, and the EEG differences between the test and control groups were shown to be similar across all studies. It is suggested that the common attribute of the test groups relates to the functional organization of the brain and that investigation of EEG correlates of this phenomenon may be of value to research into the biological basis of psychiatric illness. (14 references)—Journal abstract.


The pharmacology of sulpiride and sultopride, two benzamide derivatives, is discussed. Chemical structures were given for four benzamides: metoclopramide (Primperan), sulpiride (Dogmatil), sulpiride (Lon 1418), and tiapride. Sulpiride was given to 112 patients (49 men and 63 women), 300-400 mg I.M. daily for the first week, and 1,200 mg per day orally for 3 additional weeks. Diagnoses were: schizophrenia in 67; nonschizophrenic delirious psychoses in 36 (12 acute, 24 chronic); and depressive psychoses in 9. Good results occurred in 10 acute delirious psychotics, half of the chronic delirious psychotics, and 32 schizophrenics. In a related experiment, sultopride was given to 30 patients—2 acutely delirious, 1 chronically delirious, and 27 schizophrenic. The subjects were all male and ranged from 19 to 70 years of age, nearly all being under 40 years old. Half of the schizophrenics had been ill less than 5 years. Patients the first few days received daily doses of 800 mg parenterally, and after that 800-3,600 mg per day orally. Results after 28 days were good in 11, medium or slight in 9, no effect in 8, and aggravation in 2. Side effects of sulpiride were extrapyramidal effects, insomnia, galactorrhea, and amenorrhea, and occasionally orthostatic hypotension and vertigo. Side effects of sultopride were extrapyramidal effects, somnolence, galactorrhea, and depression. No development of addiction occurred. (20 references)


Since one important clue to a deteriorating stage of schizophrenia is a type of sleep disorder, the relationships among hallucination, REM sleep, and the effects of psychotropic drugs are discussed. Studies of REM sleep and the effects of REM deprivation conducted by Dement (1959), Zarcone (1969), and Azumi, Takahashi, and Kikui (1967) are reviewed. Two improvements in schizophrenic sleep disorders are attributed to chlorpromazine: first, normalization of the decrease of deep sleep among schizophrenics; and second, regulation of REM sleep and REM action. Some literature indicates that lack of 5-hydroxytryptophan (5-HTP) would reduce the barrier between REM sleep and awakening. However, this is still hypothetical, and no proof is shown. (41 references)


Twenty-six schizophrenic patients (40 to 55 years old), 21 nonschizophrenic patients (40 to 55 years old), and 18 staff controls (25 to 40 years old), all from the same unit of a public psychiatric hospital, were questioned about hand preference. Schizophrenics showed somewhat more confusion about hand preference than other subjects, but otherwise patterns of hand preference did not differ for the three groups. The inclusion of schizophrenics among those groups identified with laterality disturbances was not supported. (6 references)—Author abstract.

2608. Zahn, T.P. On the bimodality of the distribution of electrodermal orienting responses in schizophrenic

Data are presented from four studies on the electrodermal orienting response (OR) in drug-free schizophrenics that fail to confirm Gruzelier and Venables’ report of a markedly bimodal distribution of ORs in schizophrenic populations. A review of the findings of earlier studies, none of which confirm the bimodal hypothesis (although some used patients taking phenothiazines), shows that differential effects of drugs, although probably an important factor, cannot account entirely for the discrepancies in results. It is hypothesized that due to changes in hospital discharge policies, the groups of patients tested by Gruzelier and Venables, compared to those tested in earlier studies, were more heavily weighted with phenothiazine-resistant patients. These patients may either have come from the extremes of the responsivity distribution or have atypical reactions to neuroleptic drugs. (14 references)—Author abstract.

**childhood psychoses**


Psychoanalytic play therapy applied to schizophrenic and autistic children is described. Problems in establishing self and object constancy are considered basic to the inability of such children to resolve the struggle for autonomy and as leading to stagnated psychic growth. The therapist must consider the problems he seemingly creates for such children and must identify the optimal play space, or Spielraum, so that the child may gradually make contact with self and object and with inner and outer reality. Peculiar transference and countertransference situations are likely to develop and should be exploited if they lead to communication and eventual modification of the psychotic behavior. Scientific understanding in the service of restoring the patient’s capacity for autonomy and self-control is considered the primary treatment goal. It must not be sacrificed to expediencies of control and conformity as proposed by advocates of behavior modification principles. (15 references)


The reasons for the perceptual generalization in the Piaget test were investigated in 10 schizophrenic children. The most typical responses in teaching the children to distinguish and measure different properties of objects were: a complete or partial refusal to accomplish the assignment; a substitution of measurements by a perceptual comparison; and difficulties in the narration of personal activity in well-developed speech. Better results, however, were attained with children who were emotionally positive. The genesis of these disturbances was concluded to be autistic. (12 references)—Journal abstract, modified.


The peculiarities of depressions in children suffering from schizophrenia are described. In addition to simple inhibited forms, complicated depressions accompanied by excitement and anxiety are observed. In contrast to the depressions of adults, the affect of sadness is not obvious in these children; however, prevailing symptoms of dullness, moodiness, whining, vegetative disorders, and vague anxiety do correspond with the depressive/paranoid syndrome in adults. The agitated form finds expression in the rejection of the depressions and in the raptus melancholicus, and dysphoric features may also be present. Suicidal ideas and tendencies, however, are rare. These complicated forms are either acute or subacute, as distinct from slowly developing inhibited depressions, and the most frequent are polymorphous conditions in which emotional disturbances go with neurosis-like hypochondriacal and delusional symptoms. Differential diagnostic difficulties originate from the fact that the depressive states are accompanied by exogenous and endogenous damage and from the isomorphism which is so characteristic of children, and observation of the disease’s evolution is considered the main determinant in diagnosis. Attention is also drawn to the complications of psychopharmacological drugs which manifest themselves in depressions. (9 references)—Author abstract, modified.

2612. Vrono, M., and Bashina, V. Sindrome Kannera i
A comparative study of various indices of development of 32 children with Kanner's syndrome of early infantile autism and 268 children with an early onset of the schizophrenic process is described. A close tie between Kanner's syndrome and childhood schizophrenia is indicated. An analysis of genealogical data shows the genetic relationships between the two entities. (15 references)—Journal abstract, modified.

**cross-cultural studies**


A detailed description of a clinical observation of a delusional psychosis is given, followed by interpretations of the case by French psychiatrists (chronic hallucinatory delusion with mystical content) and Soviet psychiatrists (schizophrenia with a course intermediate between shift-like and continuous paranoid schizophrenia). The French and Soviet diagnostic approaches are discussed and compared. (41 references)—Journal abstract, modified.

**descriptive studies**


The connection between the menstrual cycle and acute psychiatric treatment is examined in 34 fertile women. At the time of admission, 15 patients were in premenstruum, 5 in menstruum, 8 in ovulation, and 6 in middle phase. The diagnosis showed 15 schizophrenics, 7 affective psychotics, and 1 alcoholic psychotic, with 11 patients suffering from psychogenic disorders. Symptoms were classified as: 1) perturbation of behavior; 2) mental disturbance; 3) emotional disturbance; 4) hallucinations; and 5) anxiety. The results showed that 60 percent of the schizophrenic patients were in the premenstruum, confirming the assumption that the premenstruum constitutes a risk period for schizophrenic patients. (7 references)

To determine how age affects female psychiatric syndromes, 114 women were divided into two groups according to fertility, with the groups subsequently being compared as to diagnosis, age, and anamnesis. Age varied between 18 and 80 years, and among the 54 fertile patients, 26 suffered from schizophrenia and 9 from affective psychosis. The nonfertile group was composed of 26 schizophrenics and 5 affective psychotics. The nonpsychotic cases were classified as neurosis, pathological disturbances of personality, and abuse of alcohol and drugs, and symptoms were classified as behavior disorders, mental disturbances, emotional disturbances, hallucinations, and anxiety. Results showed a high representation of maladaptive behavior among the fertile women, with mental disturbances constituting the major symptoms of the nonfertile group. (2 references)


General problems of emotions and expression are discussed. Consideration of expression as a paralanguage suggests that emotions and expression have a mutual conditioning influence on each other, and the concept of emotional relations as an expression phenomenon is stressed. The concept is supported by results of an experiment in which experts distinguished the mimics of normal subjects and schizophrenic patients, due to the abnormal increase in extreme positive and negative marks in schizophrenics. (15 references)—Journal abstract, modified.

A survey of extant records about mental disorder in Britain from the 1st century A.D. to the 17th century is provided. Of particular interest are chapters concerned with King Henry VI and a series of pilgrim patients who allegedly underwent miraculous cures at his tomb at Windsor in the late 15th century. A diagnosis of schizophrenia for Henry VI is presented along with some information about his personality and mental breakdown.


Clinical/catamnestic manifestations of unfavorably developing cases of schizophrenia were investigated in 85 patients aged 60 to 83 years. Subjects included patients frequently admitted to mental hospitals and those living there permanently, and the majority had developed schizophrenia as children or young adults. Clinical/psychopathological traits of chronic psychotic conditions in schizophrenia in old age were accordingly compared to those traits at the inception of the disease, and the effect of old age on the development of unfavorable schizophrenia was also analyzed. (5 references)—Journal abstract, modified.


In a study of left handedness, the distribution and combinations of characteristics in laterality were examined in terms of finger linkage, folding of hands, and eye direction in 610 females and 660 males. Bimanual correlation of the finger ridges was found in 560 females and 560 males, and chronic schizophrenics of both sexes more frequently slowed left handedness, left-type finger linkage, and a left-directing eye. There were more males with a higher ridge on the left hand or equal ridges on both hands, and it was concluded that the genotypical traits phenotypically expressed in these signs exert a modifying influence on the clinical features of schizophrenia. (18 references)—Journal abstract, modified.


Primary and secondary diagnoses of 1,195 defendants admitted to an urban forensic service were conducted to examine the likelihood of psychiatric illness resulting in criminal or violent behavior. Data indicated that personality disorders dominated referral patterns, and of those conditions which could produce thought disorders, schizophrenia was most prevalent. An analysis of the occurrence of schizophrenia among defendants charged with homicide in St. Louis revealed a rate of schizophrenia similar to that found in the general population, with organic brain syndrome resulting in a large proportion of assultive behavior. Alcohol and drug abuse were the most common secondary diagnoses, and in general, no correlation between psychiatric diagnosis and types of criminal activity was found. (31 references)—Author abstract.


A case study is presented in which first admission schizophrenic patients were found to report more recent life events overall and more events categorized as undesirable (familial, financial, relocational, and legal) than controls. Interpretation of the observations should be ventured cautiously, however, given the small difference between schizophrenics and controls, the small number of subjects, the retrospective strategy, and the failure of events, either "independent of one's control" or characterized as "threatening," to confirm the positive relationship of recent life events to the occurrence of schizophrenic episodes. Results show that the overall difference between schizophrenics and normals in reporting recent events appears to be smaller in magnitude than the difference found between depressives and normals, and the significance of events for schizophrenics and for depressives is also different. The number, type, severity, and pattern of recent life events reported by schizophrenics suggest a precipitating role of events rather than a formative one. (18 references)—Author abstract, modified.
The peculiarities of the fixated set in schizophrenia are discussed on the basis of research results, with inerrness, lability, and variability being noted as different disease courses. Schizophrenic patients also were studied with the aid of Murray’s Thematic Apperception Test and the Rorschach test and results are discussed as they reflect patient age, form, type of development, and stage of disease.—Journal abstract, modified.

34 patients with anorexia nervosa syndrome were studied, and it was found that this condition, which was initially related to the syndrome of dysmorphophobia/dysmorphomania, was reduced to exhausted forms of digestive behavior (particularly vomiting behavior) as the schizophrenic defect increased and lost its connection with dysmorphic experiences. From the beginning, anorexia nervosa was connected with affective disturbances, cenesthopathic/hypochondriacal complaints, and a gradual personality deterioration. The schizophrenic defect in such cases did not attain the degree of an apathico/abulic syndrome and had traits of organicity. (6 references)—Journal abstract, modified.

34 patients with anorexia nervosa syndrome were examined in 48 patients. In 16 cases where patients recovered, clinical disturbances were found to resemble acute reactive paranoid conditions. In the remaining 31 cases, characterized by pure paranoid disorders, there was a formation of paranoid development, found to be linked with psychic traumatizations. Prognostic and differential criteria of acute paranoid reactions are also discussed. Both forms were closely linked with psychic trauma and were distinguished from schizophrenia by their sensitivity to situational psycho-genic factors and the absence of specific schizophrenic personality changes. An absence of clear delineating characteristics for separate borderline variations was also noted. Paranoid development was concluded to occupy an intervening spot between reactive psychosis and neuroses and psychopathy. (7 references)—Journal abstract.

Manifestations of the early stages of schizophrenia were examined in 385 schizophrenics, including 96 cases erroneously diagnosed as schizophrenic. Early signs of schizophrenia were found in 84.3 percent of the patients, and in 50 percent, factors predisposing to schizophrenia or initial manifestations were established. It is suggested that schizophrenia may be correctly diagnosed in its early stages if personality disturbances and the course of the initial phase of the disease are taken into account, as well as the influence of such factors as heredity, age, and events which provoke the disease process. It is also emphasized that the early forms of schizophrenia are often atypical and incomplete in their clinical picture, where seemingly neurotic and psychopathic phenomena often predominate. (25 references)—Journal abstract, modified.

The complex of interrelated syndromes of psychosensory pathology, phobic obsessions, forcible states, deper-sonalization, psychic automation, and hallucinatory/delusional disorders comprising psychic alienation as the psychopathological basis of schizophrenia is discussed. Manifestations of psychic alienation in the premorbid period, the initial stage, and the psychotic stage are also reviewed, considering the genesis and significance of psychic alienation.—Journal abstract.

The influence of the psychogenic factor on the clinical picture and course of schizophrenia is discussed, noting that the role of the psychogenic factor is most apparent during the advanced stages of schizophrenia. Here, it can cause exacerbation of the main symptoms, short-term excitatory hysterical reactions, and depressive or depressive/paranoid states that partly reflect the stress-provoking situation. During the remission phase, the occurrence of a psychic trauma is in many cases responsible for the exacerbation of schizophrenic symptoms, and may be seen as interacting with endogenous factors to influence the whole course of disease development.—Journal abstract, modified.


Followup Rorschach tests were given to 11 schizophrenic men and 19 schizophrenic women on the average of 29.7 years after diagnosis, and no significant changes were found when comparing form movement and color responses. There were significantly more animal and popular responses, however, and this change was said to justify a conclusion that in the 30 schizophrenics—all more than 65 years old—aging was reflected in the Rorschach test in the same way as in nonschizophrenic people. Since previous studies had shown fewer popular responses among senile people than among normal adults (the opposite results were obtained in this study), it is hypothesized that a structural change was evident in the personality of the schizophrenic. The differences also seem to indicate a tendency toward better adaptation to reality, better solution of compulsive problems, and disappearance of dissociative tendencies. (40 references)


An investigation of the age of onset of eight schizophrenic syndromes appearing in 3,500 schizophrenic patients is reported. The combination of the influence of age factors with the influence of sex factors is discussed, and special age-specific forms of schizophrenia encountered in adolescence and in old age are described. (7 references)—Journal abstract, modified.


Linguistic and semiotic therapy is studied as part of psychiatric theory. It is concluded that verbal and kinesic communication constitute essential aspects in psychiatric diagnosis, as determined by a semasiological analysis of a letter written by a schizophrenic patient. The study concentrated on the patient's choice of using "my person," "I," and "me," and overall the letter expressed a general depersonalization. Further, mood causality and coherence were inconsistent. It is therefore suggested that the theoretical question of collaborating psychiatry and linguistics should include an analysis of empirical problems. (29 references)


Unfavorable variants of attack-like schizophrenia of long duration were investigated in 102 patients aged 61 to 73, and it was noted that there was a definite interconnection between series of attacks, biological crises of old age, and a previous development of the basic disorder. Increased severity in the development of disorder was expressed only in a transient, increasing number of attacks, proceeding in the form of series of acute, clinically similar psychotic conditions not leading to significant deterioration. (9 references)—Journal abstract, modified.


Data on age, sex, and social/occupational adaptation of schizophrenics who committed socially dangerous acts during their illness are presented. The data are based on statistical analysis of registered mental patients in a large city, with the recidivism rate for schizophrenic patients committing socially dangerous acts being 4.3 times higher.
for males than for females (the rate for all schizophrenics was only 23.8 percent higher for males). The indices of working capacity correlated with frequency of dangerous acts. Those committing such acts had lower educational backgrounds and poorer work capacity. It is therefore suggested that these data be used in a wide-range evaluation of the possible risk of dangerous acts committed by schizophrenic patients. (26 references)—Journal abstract, modified.


Paralogic awareness is a special phenomenon frequently found in schizophrenic patients in which the patient typically identifies his own awareness with that of another person, being fully aware that both are looking at each other. Elements of the transposal found in Sartre's key philosophical concept, the “look,” but are identified in psychiatric textbooks only as ideas of reference, a connection with psychopathological states that Sartre fails to make. This elaboration of paralogical mechanisms and common psychopathological experience into extensive philosophical conceptualizations is criticized. (7 references)—Author abstract, modified.


The importance of clinical studies in the areas of neurophysiology, psychopharmacology, genetics, biochemistry, immunology, and related fields is discussed, and models of the sequence of formation of psychopathological syndromes and disorders are presented. Special emphasis is placed on the role of the clinical picture in multi-disciplinary research on schizophrenia.


The first practical approach toward carrying out the intent of the conservatorship law, as specified in California’s Lanterman-Petris-Short Act, is reported. The law provides a mechanism for putting the patient under the care of a conservator if the patient is unable to provide for such personal needs as food, clothing, and shelter. A test consisting of behavioral tasks, and specifically designed to meet the legal definition of grave disability, was given to 51 patients who had been grouped according to chronic organic brain syndrome, chronic schizophrenia, or other. It was found that the grave disability of the organic brain syndrome patients was fairly predictable from their mental status examination, while that of chronic schizophrenic patients was unpredictable. Thus, the application of the behavioral test for an appropriate determination of ability to perform functions specified in the law was required. The method described is currently recognized by public and legal agencies in southern California and has been used in court. (4 references)


Judicial situation was identified as a factor precipitating symptoms in 140 patients with continuous schizophrenia. The initial signs of schizophrenia appeared shortly after conviction, and reflected either the entire situation or individual facets of the situation including a relatively monotonous clinical condition. These signs were rarely manifested in remote periods of the disease, and the shorter the period from judicial situation to onset of the disease, the more the clinical picture of schizophrenia was found to resemble that of a psychogenic disease. (28 references)—Journal abstract, modified.


Audiometric studies of 272 patients with psychoses such as schizophrenia, presenile psychoses, or alcoholic hallucinations are analyzed, with auditory adaptation to threshold stimuli and time of reverse adaptation being examined. In most cases, adaptation either was not attained, or was lengthened, and no nosological specificity for adaptational disturbances was found. In cases of auditory hallucinations, the index of adaptational time had no principal differences. These facts seem to indicate that the adaptational shifts are general, nonspecific
mechanisms in the pathogenesis of psychoses. (14 references) — Journal abstract, modified.


The significance of exogenous factors in the development of attacks in schizophrenia was studied in 206 inpatients and 1,124 outpatients in a district psychoneurological clinic in Moscow. The frequency of combined attacks with exogenous factors was not correlated with the severity of schizophrenic symptoms, nor was it found to be directly correlated with the existence or absence of exogenous factors in the manifest attack. (29 references) — Journal abstract, modified.

**diagnosis**


A study of 20 schizophrenic patients and their extended families supports the hypothesis that minimal brain dysfunction (MBD) is the major etiologic and pathogenic factor for one subgroup of adult schizophrenics. Data on treatment are also provided. Among the cortical problems created by MBD are: difficulty in establishing self-boundaries and coordination; feeling of perplexity; difficulties with written and spoken words and abstract conceptualization; poor impulse control and defenses; and overload by external stimuli and subsequent disorganization. These phenomena in turn can cause secondary emotional problems, especially during the school years. Therapeutically, this group is characterized by a poor response to phenothiazines, and accordingly, energizers, together with diphenylhydantoin and haloperidol, are often useful. Prevention of overload and genetic counseling may also be indicated. (23 references) — Author abstract, modified.

2640. Boyarshinova, T.N. Voprosy o psikhologicheskoy diagnostike vyalotekushchey shizofreniy (podannym Tematicheskogo Appertseptivnogo Testa). [The psychological diagnostics of sluggish schizophrenia (based on data from the Thematic Apperception Test).]


The diagnostics of subtle, slightly expressed disorders of mental activity were investigated in 15 healthy subjects and 43 schizophrenics. Responses to the Thematic Apperception Test indicate that the following plots are characteristic of schizophrenic patients: (1) description of the fate of heroes engaged in actions of national significance; (2) the use of irrelevant and meaningless details; and (3) emphasis on one or two details without regard to the rest of the picture. These features were concluded to be useful in clinical practice as a supplementary diagnostic method in evaluating schizophrenia. (3 references) — Journal abstract, modified.


The stability and descriptive usefulness of mental status information, as determined by psychometric testing in schizophrenics, were studied, with interest in the demarcation of psychiatric syndromes becoming emphasized as prerequisite to the determination of psychiatric etiologies. Mental status information factors were isolated using the inverted factor techniques and were tentatively evaluated on a sample of 18 new subjects added to the validation group. Two of the factors are appropriate concepts in describing the validation cases, but only one was judged to be clinically useful. This factor was interpreted as early or nonregressive schizophrenia. A large majority of subjects described by the factor had a diagnosis of latent schizophrenia, as defined by the World Health Organization. Results indicate that an orthogonal solution according to the varimax criterion might be a too rigid rotational principle in explorative studies of heterogeneous groups, and therefore rotational criteria based on psychiatric meaningfulness, or the use of carefully selected marker variables (score profiles for individuals or groups), are thought to be preferable. (26 references)


Different theories and concepts of borderline schizophrenia are presented, including theories concerning the alternating juxtaposition of psychotic, neurotic, and normal reactions in the borderline schizophrenic. Personality characteristics such as hypersensitivity, low
frustration level, sado-masochism, and intense aggressivity are also discussed, and an analysis is made of the principal psychic functions such as thought, affectivity, anxiety, aggressivity, sexuality, and interpersonal relations. One of the first classifications of borderline schizophrenia as a clinical entity was organized by Schmidelberg in 1959, but Grinker, Werble, and Drye now approach the study in a different way. They have established an ordinal scale of 10 steps, permitting an evaluation of 93 variables to borderline schizophrenia. (43 references)


Psychopathological signs determining diagnostic difficulties in schizophrenic patients in forensic psychiatric practice are described, with emphasis on the exogenous and homonomous factors that make diagnosis difficult. Clinical traits of the 200 patients are analyzed and compared to data characterizing schizophrenic patients in the total population. (130 references)—Journal abstract, modified.

epidemiology


Clinical/statistical characteristics in the development of circular schizophrenia in 645 patients are reported. It is demonstrated such parameters as clinical structure of attack and remission, duration of attack, number of previous attacks, sex, and age are closely related to type of attack, and implications for the prognosis and classification of circular schizophrenia are considered. (24 references)—Journal abstract, modified.


A study on the incidence of schizophrenia, manic-depressive psychosis epilepsy, and general paresis in Korea is reported. The study was made during a 7-year period between 1960 and 1966 and included a total population of 122,186 from six island and five rural towns. There were 276 persons (.226 percent) identified as mentally ill, and 14 tables present general incidence, corrected incidence, and age and sex distribution of the patients as well as information regarding age of onset, duration from onset, premorbid personality and body type of patients, hereditary loading, religion, educational status, marital status, status at the first consultation, status of sociocultural change, and status of social adaptation. Data are then compared with similar incidences listed in seven other studies.


The incidence of schizophrenia in depopulated areas of Japan and the relationship between the several types of this disease and the rate of suicide in these areas are discussed. Increased frequency of mental illness and suicide appears to be related to environmental changes caused by the need to work away from hometowns (especially in urban population centers), since mental illness and suicides increase in inverse proportion to diminishing populations. Culture shock arising from contact with the large cities is suggested as the cause, and measures to alleviate it are suggested.


Three hundred ninety-three schizophrenic patients who had been treated at the Aarhus Psychiatric Hospital (Denmark) in 1953 were compared with 282 schizophrenics from a 1962 census at the hospital in terms of: marital statistics, cost of care and other economic aspects, readmission rates, duration of hospitalization, deaths and causes, time interval between onset of illness and hospitalization, and discharged patient data. Speculations on these findings are included. (32 references)

Forty-one persons were identified as mentally ill from the total population of 14,720 in the town of Inn-Je. Findings of a census survey indicate: (1) of the mentally ill, 19 (13 percent) were schizophrenic, 21 (14 percent) were epileptics, and 1 was manic-depressive; (2) 14 of the 19 schizophrenics were male; (3) 84.2 percent of the schizophrenics were migrants, and 68.42 percent migrated with their parents after the onset of the disorder; and (4) 71.43 percent of the epileptics were treated with anticonvulsants, while 78.95 percent of the schizophrenics were simply neglected without even proper custodial care. Tables on age distribution, body types, education, religion, family relationships, and marital life are presented and compared with other studies. (27 references)—Author abstract, modified.

family


Arieti’s and Laing’s definitions, theories, and therapies relating to schizophrenia are compared. Arieti sees schizophrenia as a medical disease “in” a person; Laing views it as a label for a social fact that is really a political event. Both psychiatrists regard the family, with its conflicting and disturbing patterns of communication, as a major factor in the etiology. Laing regards schizophrenic actions as rational; Arieti sees them as irrational, though originally the response to the family conflict made sense. The major ideological difference in therapy is that Laing encourages schizophrenics to go further into their private worlds whereas Arieti attempts to restore his patients to “normality” as soon as possible. (16 references)


The clinical characteristics of paternal parents of schizophrenics were analyzed after studying 60 paternal parents of schizophrenics and 100 paternal parents of nonpsychiatric patients. Findings of questionnaire and clinical interviews indicated that: (1) 81.6 percent of the fathers of schizophrenics came from a family of six or more; (2) compared with the control group, a high percentage of the fathers of schizophrenics had a history of psychiatric illness; (3) paternal parents of the schizophrenics showed poor interpersonal relationships in their families and expressed dissatisfaction in their sexual, marital, and occupational life; and (4) schizophrenics experienced separation from their father before puberty due to the fathers’ economic and marital problems, while nonpsychiatric patients experienced separation from their fathers after puberty. It is suggested that there are four types of paternal parents of the schizophrenic: pseudomutual, paranoid, and overtly rejecting; overprotective, obsessive, and covertly rejecting; indulgent, dependent, and weak; and authoritative, domineering, and tyrannical. (34 references)—Author abstract, modified.


A model for co-therapy with families in which one child has been diagnosed as schizophrenic is discussed. Male and female therapists adopt structured roles that are used as a paradigm for exploring family patterns. The stages of therapy described include: (1) initiation of therapy, (2) breaking of fusion, (3) repair of alienation, and (4) solidifying the marital alliance and generational boundaries. This paradigm employs a three-generational hypothesis that defines schizophrenia as a lifelong, restricting mode of relating within the primary family triad. The child is thereby rendered vulnerable to repeated psychotic episodes. Followup periodic family therapy to prevent regression is considered essential. (37 references)—Journal abstract, modified.


A consensus Rorschach was given to the families of 36 male schizophrenics, 13 psychiatrically hospitalized nonschizophrenic controls, and 38 normal controls with the goal of differentiating the families of schizophrenics from the other two groups of families. After the family agreed on a response, each member was asked to write the response on a separate sheet of paper. This study focused on these written responses, the product of the interaction, rather than on the process of reaching agreement. A system was developed to score the responses based on the degree of shared meaning achieved by the family. Adequate interscorer reliability was obtained. The scores significantly differentiated the three groups. More families of schizophrenics had low scores indicating lack of shared meaning than families of hospitalized and normal controls. In the normal control group, more
upper class families had high scores than lower class families, whereas in the schizophrenic group there was a trend in the opposite direction. (19 references)—Journal abstract.


A modification of the Camberwell Family Interview Schedule, a research instrument used by Brown et al. (1962 and 1972) to demonstrate that level of emotion expressed by relatives shortly after a schizophrenic patient's hospital admission is strongly associated with symptomatic relapse during the 9 months after discharge, was developed and tested. Abbreviations in the original interview schedule were made so that the areas most likely to produce criticism (shown to be the single most important measure contributing to the overall expressed emotion index) are given priority in the sequence of questioning. The abbreviated version reduces the time required to administer the interview schedule from 4-5 hours to 1-2 hours. The patterns of emotional response of the relatives of 37 schizophrenic patients and the relatives of 31 depressed neurotic patients to whom the modified interview schedule was successfully administered are discussed. (10 references)

**genetics**


A spectrum concept of schizophrenia is described which hypothesizes that classical schizophrenia results at least in part from a genetic diathesis; that certain other, usually milder, psychopathological states, which do not satisfy the classical criteria for the diagnosis of schizophrenia, represent varying clinical expressions of the same diathesis; and that all of these states can, therefore, be said to constitute a genetically based spectrum of schizophrenic disorders. This concept is not new in its broad outlines, but it has had an increasing impact within psychiatry in recent years. Most importantly, it provides a conceptual framework for a variety of schizophrenia studies, particularly those dealing with biological markers, genetic vulnerability, clinical phenomenology, and modes of inheritance. A program of research which has attempted to test the concept, and to identify, describe, and classify the components of the genetic spectrum from a diagnostic point of view, is reviewed. Its methodology makes possible an approach to schizophrenia which simultaneously takes into account its two most vexing problems—nosology and etiology. (57 references)—Author abstract.


Families of 56 patients with late-onset affective psychoses with phasic or circular development were studied and compared with families of patients with manic-depressive psychoses with early onset. In the former group there was a smaller incidence of affective psychoses than in the early-onset group, but the incidence was still higher than in the general population. There were also more common cases of schizophrenia, which seemed to increase from generation to generation. The children of patients with late-onset affective psychosis did not show any psychoses of an affective character, and the morbidity risk of schizophrenia in these children was close to that found in children of patients with shiftlike schizophrenia. The data demonstrate that the genetics of late-onset affective psychoses are more similar to schizophrenia than to the classical manic-depressive psychoses with early onset. It is suggested that only some cases of late-onset depression are of a nuclear manic-depressive nature, while the remaining cases may be a specific manifestation of a schizophrenic predisposition. (29 references)—Journal abstract, modified.

**high risk studies**


Electrodermally labile children of schizophrenic, manic-depressive, and normal parents were identified as either uniphasic or biphasic responders in each of three phases of a psychophysiological experiment. Psychological disturbance ratings, based upon test protocols, were determined independently. Analysis of the relationship between electrodermal response configuration and rated
psychological pathology showed that biphasic responders were evaluated as more disturbed than uniphasic responders. The results were interpreted within a framework provided by Edelberg’s work on the information content of the electrodermal recovery limb, and were seen as relevant to notions regarding schizophrenic information processing. It was hypothesized that in this situation, uniphasic responding reflected an adaptive defense against stimuli perceived as potentially threatening, whereas biphasic responding indicated overprocessing and inappropriate goal orientation. (12 references) — Author abstract.

An attempt to identify the incidence and characteristics of genetic diathesis or vulnerability in children of schizophrenic parents was made, and an investigation of neurological functioning in these children is presented. A sample of 100 school age children, 50 children with one schizophrenic parent, and 50 control cases, further subdivided into children living in urban nuclear families and those from the kibbutz society, were examined. In the neurological examination, the emphasis was on “soft signs” such as the assessment of fine motor coordination, perception, visual/auditory integration, vestibular functioning, adventitious motor overflow, and primitive postural reflexes. It was considered that the best general measure of neurological deficit or immaturity would be a cumulative assessment of the indications of nonoptional functioning. Results suggest that the schizophrenic disorder possibly may be transmitted through a single dominant gene. Results comparing city versus kibbutz subjects are also presented. This paper was given at the 1972 Bled Conference on Genetic/Constitutional and Early Childhood Factors in Risk. (3 references)

A research strategy for studying risk for schizophrenia during adolescence and early adulthood is proposed. The overall strategy consisted of four stages. First, an attempt is made to identify conditions which current evidence suggests may contribute to the onset and course of development of schizophrenic behavior. Precursor variables appearing to have significance were social competence level before onset of schizophrenia and attributes of the intrafamilial environment. Second, a cohort of adolescents was studied intensively to isolate those who might possess attributes considered likely precursors of adult schizophrenia. Systematic consistencies between familial interaction patterns and adolescent behavior have been found. Third, the adolescent cohort is followed into adulthood to assess the extent to which the precursors predicted adult psychopathology. The assessment is made by an interview with the target case, and by inventories of drug use and sexual experience. Fourth, specific retrospective studies with a new sample of acute, young adult schizophrenics provide the opportunity to cross-validate the predictive significance of the precursors identified in the prospective study. (18 references)

Characteristics observed, such as the existence of a symbiotic family leaving no possibility for individuation for the child and the parentification of the child through various generations, are discussed. Combined treatment of the nuclear family followed by treatment of the extended family through three or four generations is proposed as a means of gaining access to the psychotic environment of the child. This article is followed by a comment by a reader who elaborates on the author’s discussion of the symbiotic family. (13 references) — Journal abstract, modified.

An investigation of children of schizophrenic mothers is presented emphasizing family therapy as a means of preventive intervention. Psychiatric and somatic disorders occur frequently in children of schizophrenic mothers thereby placing these children in a situation of high risk.

prognosis

A 12-year followup study of 153 subjects diagnosed as suffering from schizophrenia or paranoid psychoses is


reported. Subjects had their key discharge in the years 1959-61 and were first followed up at 12 months after discharge. Important findings were that outcome was related to mental state on discharge and also to the factor of continued neuroleptic medication. At this second followup, 12 years later, the important issues that have emerged are the differences in outcome between men and women and the apparently high death rate for men. The outcome in terms of work, readmission to hospital, and death was much worse for male subjects. (9 references)—Author abstract.


Results of a long-term followup study of 757 schizophrenic patients are presented. A clinical analysis of the patients and the prognostically favorable and unfavorable factors affecting them is given, and the different stages of recovery manifested are reviewed. (11 references)—Journal abstract, modified.


A followup study of 61 shiftlike schizophrenics with long-term remissions is reported. In 45 cases, the disease was diagnosed as recurrent schizophrenia, and in 16 it was characterized as shiftlike. The premorbid personality did not include any psychopathic traits, and the manifest attacks had an acute onset, without a previous sluggish development. Episodes were complete, with a successive development of symptoms. The remissions following acute conditions were of good quality. Following catatonic/hebephrenic episodes, there were also long-term remissions, although of a lesser quality, and prognosis in these cases was unfavorable. (4 references)—Journal abstract, modified.


Child guidance clinic records are used to explore the childhood symptoms exhibited before the onset of disease of 45 male schizophrenic adults. Refined outcome categories, which reflected the independent judgments of two clinical raters, led to the comparison of poor outcome with more favorable outcome cases in terms of antecedent characteristics. Five rationally derived childhood symptom scales were used. The psychotic scale was significantly related to poor outcome, while acting-out and aggressive symptom scales were related to more favorable adult outcomes. Neurotic and neurological scales did not predict outcome. Low childhood IQ and poor peer adjustment were significantly related to poor adult outcome. Sample limitations and comparison with results from other studies were discussed. (17 references)—Author abstract, modified.

2664. Serebryakova, Z. Sravnitel'naya kharakteristika trudosposobnosti i bol'nykh shizofreniyy s raznymi tipami techeniya bolezennego protsessa. (Po dannym epidemiologicheskogo issledovaniya.) [Comparative characteristics of the working capacity of schizophrenic patients with different types of development of the morbid process. (According to data of an epidemiological investigation.)] Zhurnal Nevropatologii i Psikhiatrii imeni S. S. Korsakova (Moskva), 75(9):1396-1399, 1975.

A comparative study of the working capacities of 1,413 schizophrenic patients, most of them suffering from periodic schizophrenia, is reported. The drop seen in the percentage of working patients from attack to attack is discussed, and the effect of the patients' pre-illness professional qualifications on adaptability to work is also evaluated.—Journal abstract, modified.


In 59 patients over 60 years of age with shiftlike schizophrenia, clinical traits and the development of long-term hypersthenic, paranoid, and psychopathological remissions were studied. The development of such remissions reflected the tendency to a regressive course and a stabilization of the process in old age. There was a slow extinguishing of mood swings observed in the majority of cases in the initial stages of remission. There was also an alleviation of productive disorders as well as a certain compensation of negative disturbance. At ages 55-65, the patients displayed a long-term stable condition, with a monotonous mood, rudimentary psychotic symptoms,
certain personality abnormalities, and an increased level of social adaptation and working capacity. (10 references)—Journal abstract, modified.

**Psychological Theory**


Although there are striking similarities between dream and psychotic states, the two processes are quite distinct. Activities of condensation, displacement, symbolization, and projection are found in both processes; but for the normal individual, the dream acts as a guardian of the integrity of the self—as a safeguard against psychosis. Very little is known of the function of the dream for the psychotic (in particular, the schizophrenic). The structure of the normal dream experience appears to consist of the formation of a dream space (the development of an interior world where the self can work out certain drives) and a dream screen (a protective shield between the self and the exterior world). The schizophrenic does not have this dream machinery: his hallucination takes place in the exterior world; “dreaming out” replaces the function of the dream. A case study illustrating the theoretical presentation is included. (39 references)

**Treatment**


A flexible dosage protocol in 24 acutely manic or schizophrenic patients using intramuscular haloperidol is reported. No evidence for consistent superiority of high doses was found, but a highly individual dose response in 11 patients who achieved remission on doses of 10 to 45 mg is noted. Agreement with other investigators who recommend flexible dose strategy in administering antipsychotics is offered, contingent on constant clinical monitoring of therapeutic response versus side effects. It appears that maintenance dosage will be a fraction of remission-inducing dosage although wide individual variation may be anticipated.


The four concepts of acceptance, awareness, acknowledgment, and authenticity are suggested as important principles in guiding encounters between the psychiatric nurse and the schizophrenic patient. The nurse is encouraged to accept her own shortcomings in order to be nondefensive and secure enough to accept the patient’s perceptions of his experiences. She must possess self-awareness and awareness of what the patient is attempting to communicate, as well as a willingness to acknowledge the patient her ability or inability to understand him. An example described a nurse acknowledging to a patient that she does not understand his repetitive, symbolic language. The patient then realizes the necessity for communicating in a more meaningful way. Role playing must be transcended and authenticity maintained if a nurse is to use herself therapeutically with patients. (6 references)


Primary considerations in individual psychotherapy with the schizophrenic patient are examined, with emphasis on the important ongoing psychogenic experiences that are relevant for understanding and treatment of the condition. The dangers of continuing to reduce schizophrenic illness to biological causes are cited, and a treatment approach that views the condition as resulting from the interplay of biological and psychodynamic factors is recommended. The manner in which the psychodynamics of the schizophrenic/psychotic patient differ from those of the neurotic is discussed to illustrate the complex and severe ego-functioning impairments that exist in the former. These must be handled effectively in the transference/countertransference relationship, despite problems of communicating with the patient and of motivating him to cooperate to uncover underlying ego conflicts and psychotic imagery. The goal is to achieve personality integration by overcoming patients’ oral, anal, and aggressive needs; organizing their conflicting ego components into a personal self-identity; and affirming the personality through the basic symbols that emerge from the depths of the patients themselves.

Problems in the evaluation of psychotropic drugs include the methodological aspects of: criteria for treatment; the need for a worldwide scale for comparing results; safety problems; and ethical and legal issues. Based on a World Health Organization report, two distinct phases of the use of a drug before it is made generally available are suggested: (1) an exploratory stage, wherein the biochemical properties of the drug, the nature of its effect, maximum dosage and tolerance, and its potential use in particular diseases are analyzed; and (2) a stage of controlled clinical treatment of patients, wherein its efficacy, precise dosage, possible use in conjunction with other drugs, and the criteria for patient selection are investigated. These problems are discussed in relation to the specific diseases of manic-depression, schizophrenia, and various phobias. (42 references)


Experiences of 3 years of followup treatment at an Australian outpatient clinic for schizophrenic patients on Modenticate therapy are described, and indications of problems in Australia differing from those in England are presented. Charts and descriptions are included of: the flow of the clinic routine; the distribution differential of schizophrenic diagnoses over an Australian migrant population within the clinic; and the length of hospital stays before and after treatments. Outpatient care is coupled with community health nursing which provides maintenance visits and assessments in the patient's own home. The community nursing program has been effective in keeping the patients out of the hospitals and in hospital/community/patient/family liaison. The concept of "total patient care" combining psychotherapy, family therapy, community nursing visits, and chemical restraint of psychopathic episodes is seen to be effective. (12 references)


To determine the efficacy of group therapy in improving self-concepts in chronic schizophrenics, 12 schizophrenic patients (6 from each of 2 locked wards) were selected as experimental subjects, along with paroled control subjects. The experimental subjects met with the investigator twice a week for 12 weeks. A therapeutic technique similar to group psychotherapy and remotivation therapy was used. Patients were encouraged to participate in activities such as drawing, reading, cooking, art appreciation, and music. Nursing intervention was used to facilitate an increase in self-esteem. All subjects were asked to respond to Osgood's semantic differential scale for self-concept on three occasions (before activity group therapy, midway in the series, and after the end of activity group meetings). Analysis of data concerning self-concepts revealed that scores for patients participating in activity group therapy increased during the group sessions. It is concluded that nurses can alter self-concepts of chronic schizophrenic patients by using activity group therapy in various clinical settings. (3 references)


The principal methods used in the field of behavioral psychotherapy are discussed in general terms, including systematic desensitization by reciprocal inhibition, aversion therapy, and operant conditioning. Examples are presented in the areas of anxiety neuroses in both adults and children, sexology, alcoholism, and schizophrenia. It is suggested that more emphasis be placed on the conditioning process, which is neglected in American psychotherapy. (23 references)


Brainstorming, the creative psychological method of Osborn, was used in an experiment as an innovative group therapy procedure with psychotic patients. Conducted over 1½ years with 28 patients (24 chronic schizophrenics, 2 epileptics, 1 depressive, and 1 encephalodematous) and 12 healthy controls, the experiment included 7 groups in 116 sessions. The goal was development of certain mental capabilities, or general mental activity, through the resolution of regulated play tasks. Groups alternated between convergent mental tasks (20 questions and combinations of logical games) and divergent, open-end tasks (namings names and animals beginning with a certain letter, and suggesting words on certain themes). Nonverbal divergent games consisted of drawing and arranging objects. Both the numerical and subjective findings indicate that special, divergent theme brainstorming group therapy appears to be a suitable method.
for mental maintenance, sustaining the mental elasticity of psychotic patients. This effect is transferred and generalized in the psyche, and arouses and broadens the patient’s interest, reinforces striving for new knowledge and intellectual activity, increases vocabulary, makes thinking more elastic, and provides an experience of achievement. (11 references)


A mirror study to show the consumption of inpatient psychiatric treatment resources before and after treatment with perphenazine enanthate (PE) is described. The patients, who served as their own controls, were given PE at two mental hospitals on a depot basis. The trial group were 24 outpatients and inpatients with schizophrenia. The actual treatment period with PE was at least 1 year. A period of time immediately prior to therapy was established as the control period. Oral neuroleptics were prescribed for patients during at least 75 percent of the control period. The number of admissions per year and the number of treatment days per admission were less during the PE period compared with the control period. The results show significantly lower consumption of inpatient psychiatric resources during the PE period expressed as admissions per year and number of treatment days per admission. The registered reduction is also possibly due to the PE treatment program and the possible influencing factors are discussed. (15 references)


Dosage considerations for the average schizophrenic patient are discussed in a letter to the editor. Although clinically the physician is concerned with patients who are chronically assaultive, and disruptive, and who terrorize the staff and other patients, drug megadoses can restore patient calm and staff functioning. A therapeutic dose can be substituted at this point by intramuscular administration.


Behavior therapy was studied in five chronic schizophrenics who had been ill from 5 to 31 years. The patients were all female and ranged in age from 31 to 69 years old. All had been treated unsuccessfully with tranquilizers and psychotherapy. Two of the patients were hebephrenic, and the other three were both catatonic and paranoid. Case reports are given for the patients. The behavior therapy was done in a group setting and utilized self-control by means of a contract and modeling. The group defined the goals and made the behavioral analysis. Reinforcement was by tokens. Videotapes were used for criticism. All five patients improved. One left the hospital and another was able to work half-time in a sheltered workshop. The other three patients were able to work half-time or full-time in the hospital occupational workshop. (51 references)


The process of pharmacotherapy was investigated in 60 schizophrenics with a slow progressive development of the disease. A group of 41 subjects was distinguished, using both clinical and psychopharmacotherapeutic analysis. The main clinical trait of this group was atypical affective disorders that were closely connected with psychopathological disorders of other registers. Using preparations exerting an antidepressive or antimanic effect, it was possible to attain deep remissions in simple schizophrenia with a significant social/occupational readaptation. (20 references)—Journal abstract, modified.