Symptom Formation among Older Patients in a Psychiatric Clinic Population

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ALTHOUGH mental illness affecting the aging and the aged constitutes a primary socio-medical problem in almost all countries of the world, there is little information available to describe the patterns of psychiatric disorder manifested by non-institutionalized older persons (1, 5). For this reason, the authors and various co-workers have been conducting a series of studies to investigate the nature and type of the mental health problems presented by older outpatients attending a metropolitan psychiatric clinic. The purpose of this report is to summarize some of our findings.

Subsequent to a preliminary survey of the records of closed cases at the Malcolm Bliss Psychiatric Clinic, St. Louis, Missouri (7), and a careful analysis of these clinical records, it became apparent that the presenting complaints of these patients were the most obvious and objective measures of their problems. It has been pointed out that the patient comes to a medical facility for the relief of his symptoms and assumes that he may be able to function successfully in his community if these symptoms can be alleviated (8). The principal goal of our studies has therefore consisted in the logical analysis of patient complaints and in the development and validation of objective techniques for their assessment.

It seems clear from our earlier reports that it is possible to relate the behavior of complaining in older patients to age, sex, and diagnosis, as well as to medical, social, and psychological variables. Under the conditions of a routine physician-patient interview, older

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patients generally complain less and have less variety to their complaints than do younger patients, although age difference does not affect the *kinds* of complaints that patients make. In a more structured test situation, age-linked differences in the kinds of problems affecting older outpatients do appear in both cross-sectional and longitudinal investigations; and these patterns of symptom formation associated with aging are dynamic, apparently representing changing psychological defenses mobilized to meet the increasing threats of growing older (4).

METHOD

Our method of studying the complaint behavior of older psychiatric patients has been described in detail elsewhere (6). Essentially, however, it consists of a two-dimensional classification system involving the categorization of a given psychiatric complaint by its dominant or major characteristic which we call the "determinant," and also by its "referent," which identifies any situational factor which the complainer relates in any way to the determinant of the complaint. The seven determinants and five referents found relevant for classification are given below.

Determinants

1. *Affective:* expressing mood disturbance (as elation, depression, discouragement, or irritability).

2. *Anxietal:* expressing anxiety consciously perceived and directly felt (as "nervousness," "uneasiness," "fearfulness," or "worry") or indirectly expressed in terms of *thoughts* which are obsessive or Phobic.

3. *Behavioral:* expressing disturbance manifested by overt action or by changes in overt action patterns.

4. *Mentational:* expressing disturbance pertaining to intellectual functions, memory, orientation, or judgment.

5. *Reality distortional:* expressing gross failure in evaluating external reality, as evidenced by hallucinations, delusions, or autistic or paranoid thinking.

6. *Social welfare:* expressing only a desire for aid in changing a specific situation which is not primarily medical or psychiatric.

7. *Somatic:* expressing a disturbance which the patient typically considers to be physical in origin, and for which he would be likely to seek medical rather than psychological or psychotherapeutic help.

Referents

a. *Physical health:* referring to bodily health or illness.
b. *Mental health:* referring to psychological health or disturbance.
c. *Economic-occupational:* referring to financial or occupational situations.
d. *Interpersonal:* referring to situations primarily in terms of relationships with other persons.
e. *Nonsituational:* no related situation specified.

An example of an item which fits category 1a is: "I am discouraged because I have headaches." The determinant in this item is of an affective nature (i.e., "I am discouraged"), and "because I have headaches" refers to "physical health."

A representative complaint sample was constructed by selecting two complaints to fit each of the 35 possible combinations of complaint categories. This sample has been called the Psychiatric Evaluation Index (PEI). The PEI provides the patient with a structured group of complaints, many of which he finds relevant to his own behavior but which he might forget or ignore if they were not presented to him. The patient is asked to rank-order the sample of complaint statements by means of the Q-sort method, in the order of applicability of the complaints to his own behavior. The PEI may be and has been used to permit professional persons evaluating the patient to rank the patient's complaint behavior as it is observed, and also may be used in studies concerning the relative severity of complaints (21). The PEI also provides a relatively simple and clear-cut common data language for the different professional groups involved in dealing with psychiatric patients, and for the patients themselves, to compare their particular biases in assessing patients' problems (3). The particular design of our evaluation instrument lends itself nicely to hypothesis-testing studies with small samples, utilizing such techniques as the analysis of variance and factor analysis.

SYMPTOM PATTERNS

An initial study was conducted by administering the PEI within the context of a complete psychiatric evaluation to 24 consecutive admissions to a municipal psychiatric outpatient clinic.

The analysis of variance was used to test the following null hypotheses with respect to this particular group of patients: (*a*) there are no significant differences among the complaint referents; (*b*) there are no significant differences among the complaint determinants; (*c*) the interaction between determinants and referents for the total group of patients is not significant; (*d*) there are no significant differences among referents for individual patients; and (*e*) there are no significant differences among determinants for individual patients. As a result of the analysis, all these null hypotheses were rejected at or beyond the 1% level of confidence (see Table I).

Table I. Analysis of variance of the complaint Q sorts (using the PEI) of 24 older psychiatric outpatients

Identification[a]	*Source of variation*	*SS*	*df*	*MS*	*Error term*	*F ratio*
A	Referents	229.67	4	57.42	Ac	8.71[b]
B	Determinants	600.50	6	100.08	Bc	13.67[b]
c	Patients	0	23	0		
AB	Referents × determinants	555.95	24	23.17	ABc	5.64[b]
Ac	Referents × patients	606.33	92	6.59	ABc	1.60[b]
Bc	Determinants × patients	1010.30	138	7.32	ABc	1.78[b]
ABc	Referents × determinants × patients	2265.75	552	4.11	e	
e	Within cells	3659.50	840	4.36		
	Total	8928.00	1697			

[a] Capital letters denote fixed constants; small letters denote random variates.
[b] Significant at or beyond the 1% level of confidence.

It is shown by this analysis that the patients in this group endorsed the complaint referents with differential emphasis. The physical health referent was found to receive highest endorsement, while the interpersonal referent was judged (by the patients themselves) to be least relevant to their problems. Significantly different endorsement was also given to the complaint determinants, with affective and anxietal complaints receiving maximum endorsement and reality-distortional complaints receiving minimal endorsement. Since the interaction between patients and referents, as well as the interaction between patients and determinants, was significant, it is apparent that there are individual complaint patterns with respect to these dimensions which will deviate from the typical pattern described above.

Significance of the group interaction between referents and determinants further suggests examination of the individual category combinations. Such examination revealed that the most highly endorsed complaints were those in the physical health-anxiety, economic-anxiety, and nonspecific-anxiety combinations, while the minimally endorsed categories turned out to be nonspecific-reality distortion, economic-reality distortion, and interpersonal-reality distortion. It must be noted, however, that the triple interaction between referents, determinants, and persons was *not* significant, and suggested that while there are systematic group differences for the thirty-five *category* combinations, no such stable patterns of *individual* combinations deviating from the group means were found. A larger sample would probably be needed to investigate such more detailed patterns.

The next question to be examined was whether there were actually as many dimensions required for complaint classification as our system specified. The correlations among the mean scores for the determinants and referents were therefore computed, and a factor analysis was conducted. Table II lists the centroid factor loading after orthogonal rotation.

Table II. Centroid factor loadings after orthogonal rotation for the factor analyses of referents and determinants

Referents	*I*	*II*	*III*
Physical health	0.06	−0.87[a]	0.12
Mental health	0.87[a]	−0.10	0.04
Economic-occupational	−0.75[a]	0.08	0.47[a]
Interpersonal	−0.02	0.13	−0.62[a]
Nonsituational	0.14	0.73[a]	0.06

Determinants	*I*	*II*	*III*	*IV*
Affective	−0.07	−0.14	−0.23	−0.48[a]
Anxietal	0.00	−0.71[a]	−0.10	−0.11
Behavioral	0.05	0.55[a]	−0.19	−0.04
Mentational	−0.44[a]	0.10	0.78[a]	−0.05
Reality-distortional	−0.85[a]	−0.10	0.20	0.18
Social welfare	0.04	0.03	−0.23	−0.61
Somatic	0.74[a]	−0.01	0.12	0.24

[a] Factor loadings of 0.30 or greater are considered to be significant.

These findings suggest that only three referent and four determinant dimensions would be required to account for the variance in this particular sample. The referent factors involved first of all a factor which may be interpreted as concern with the symptom specificity of the referent, since it contains a positive loading on physical health

and a negative loading on the nonspecific referent. The second referent factor apparently involved an object-person dimension, since its primary loadings at opposite poles were on the economic-occupational and interpersonal referents. The third factor apparently involved a dimension ranging from psychiatric to environmental problems, with opposite loadings on the mental health and economic-occupational referents. It is of interest to note that the factors involving physical health and mental health were clearly orthogonal to each other and thus would seem to involve independent dimensions in terms of our present complaint classification system (or at least for this sample of older patients).

The first *determinant* factor involved a dimension ranging from somatic to psychological problems. This factor loaded positively on somatic symptoms, negatively on reality-distortion, and slightly negatively on mentational problems. The second factor was clearly an anxiety factor (or rather, involved the symptomatic handling or anxiety) since the behavioral determinant appeared at the positive end and the anxiety determinant at the negative end. The third determinant factor was involved with intellectual control since it had a singular loading on the mentational determinant. The fourth determinant factor involved a dimension ranging from emotional to situational disturbance, with a positive loading on the affective determinant and a negative loading on the social welfare determinant. (It should be stressed that this particular factor structure is clearly relevant only to the sample utilized, and while one might hypothesize that a similar factor structure is likely to be found in other comparable samples, it would not necessarily apply to populations at other ages or of different socio-economic composition.)

There were also certain sex differences among complaints. Thus, women's complaints were loaded with somatic and reality-distortional determinants and were rarely related to situational stresses. Men, on the other hand, tended to relate their current psychiatric problems to economic or occupational stresses. It was possible also to obtain sortings on 11 of our patients by close relatives. Agreement varied depending upon the nature of the complaints. There was high agreement between patients and their relatives on complaints involving the patients' dependency needs, somatization of symptoms, and loss of intellectual function. There was moderate agreement on complaints involving the determinants of reality distortion and behavioral change, as well as complaints involving interpersonal, economic, and nonspecific referents. Almost no agreement between patients and relatives appeared on the anxietal and affective determinants or on

the physical health and mental health referents. The more pronounced the specificity of the symptom, the better was the agreement between the ratings of the patient and those of his relatives or of professional personnel observing the patient.

SUMMARY

In the particular sample examined, older patients attending a municipal psychiatric clinic, the majority of complaints manifested were related to the areas of physical health and economic-occupational situations. Interestingly enough interpersonal problems seemed to be of relatively lower importance for these subjects. The specific determinants of the complaints noted were typically in the areas of anxiety, mood disturbance, and loss of intellectual control. Endorsement of complaints involving reality distortion were limited, probably due to the fact that our selection procedure eliminated patients with schizophrenic disorders. A factor analysis of the complaint dimensions resulted in the isolation of at least three orthogonal referent factors and four orthogonal determinant factors, thus further indicating the relevancy of our multidimensional classification system and its use as a common data language.

REFERENCES

1. Davis, D., J. M. A. Weiss, E. F. Gildea, and I. N. Mensh. 1959. Psychiatric problems of later life: II. Clinical syndromes. Am. Practitioner and Dig. Treatment 10: 61.

2. Schaie, K. W., L. A. Rommel, and J. M. A. Weiss. 1959. Judging the relative severity of psychiatric outpatient complaints. J. Clin. Psychol. 15: 380.

3. Schaie, K. W., L. A. Rommel, and J. M. A. Weiss. 1961. The multiprofessional intake assessment of older psychiatric patients. J. Psychiat. Research 1: 92–100.

4. Weiss, J. M. A., L. R. Chatham, and K. W. Schaie. 1961. Symptom formation associated with aging: Dynamic pattern. A.M.A. Arch. Gen. Psychiat. 4: 22–29.

5. Weiss, J. M. A., E. F. Gildea, D. Davis, and I. N. Mensh. 1958. Psychiatric problems of later life: I. Nature and scope. Am. Practitioner and Dig. Treatment 9: 1955.

6. Weiss, J. M. A., L. A. Rommel, and K. W. Schaie, 1959. The presenting problems of older patients referred to a psychiatric clinic. J. Gerontol. 14: 477.

7. Weiss, J. M. A., and K. W. Schaie. 1958. Factors in patients' failure to return to a psychiatric clinic. Diseases of Nervous System 19: 429.

8. Whitehorn, J. C. 1956. Strategy and tactics in psychiatric therapy. In Theory and treatment of the psychoses: Some newer aspects. St. Louis, Mo., Washington University Studies.