PSYCHO-SOCIAL FACTORS IN REHABILITATION OF THE CHRONIC RHEUMATOID ARTHRITIC*

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For the past two years we have engaged in a research project devoted to the problems of rehabilitation among chronically disabled rheumatoid arthritis patients. To be admitted to the study, patients had to be severely disabled, and their disease process had to be still in an active phase. Our objective was to determine the feasibility of a combined programme of hormone therapy and physical medicine rehabilitation procedures. Previous papers (Rusk and Lowman, 1953; Lowman and Lee, 1953; Lowman, 1953) have reported the factors considered most important in establishing and attaining goals with such chronic arthritis patients; among these, the psycho-social aspects of the problem were prominent.

Many writers support the hypothesis that the psychological status of the rheumatoid arthritic warrants consideration as specific to this disease. Some investigators have proposed that this "rheumatoid personality" is a stigma which antecedes the disease and predisposes psychosomatically to its development as a clinical entity (Johnson and others, 1947; Rome, 1949; Halliday, 1944; Ludwig, 1952, 1954). We have looked out for any personality structure characteristic of arthritics and its influence on the possibilities of rehabilitation. We have also tried to distinguish the motivated from the non-motivated patient, since rehabilitation is a protracted and expensive treatment. We have previously reported the high incidence of passivity and dependence in the chronic rheumatoid group, and in analysing our patients from a psycho-social standpoint, we have looked for characteristics among the successful and unsuccessful groups of rehabilitees which could be used as yardsticks in selecting those patients for rehabilitation who will be most likely to derive benefit from the treatment.

Method of Study

In the first year of this study, 239 candidates for treatment were referred to us. From this large group, 37 were selected for special analysis as they fulfilled the criteria of being both severely disabled and still in the active phase of the disease. These 37 patients were hospitalized and treated by a staff devoted full-time to the study, and the psycho-social data used was obtained during hospitalization. Initially, each patient was seen by both the psychologist and the social worker. During the social worker's initial interview, a comprehensive history was obtained of psycho-social development from early childhood to the onset of the arthritis, and subsequent adjustments to the illness. The psychologist's initial evaluation was based on such psychological tests as the Wechsler-Bellevue; on projective tests, including Thematic Apperception, Rorschach Ink Blot, and Figure Drawing; and on vocational tests, such as Kuder Preference, Purdue Pegboard, and others as indicated.

With this initial data, the social worker and the psychologist discussed the patient's problems from a psycho-social standpoint with the psychiatrist, and from this conference a plan for subsequent rehabilitation was formulated. The plan for treatment depended upon the patient's capacity and desire for developing and utilizing insight, his quality of adjustment, and the nature of his environmental, social, and emotional problems. These initial decisions were subject to review during hospitalization, and weekly staff meetings were held to co-ordinate reports on behaviour and progress.

Social and Psychological Features of the Group

Before taking the patients separately, it is important to consider the descriptive analysis of the larger patient population with which we have been dealing. A detailed analysis was made for the first 29 patients.

Sex.—Thirteen were males and sixteen females.

Mean Age.—47 years.

Age at Onset of Arthritis.—The mean was 36 years (ranging from under 20 to over 45).

Marital Status.—Of the 29 patients, only ten were still married; this is less than would be expected for this age group and indicates the presence of problems of heterosexual adjustment. Almost 50 per cent. of the patients had restricted heterosexual relationships, and were frequently fearful, and distrustful of persons of the opposite sex. One-third of the patients had never married, and for only one-third was the marriage permanent. Although death was a rather frequent reason for

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termination of marriage, this had occurred in all cases within a few years of marriage and was so early that remarriage might have been anticipated. Either overt or covert conflict in the marital relationship was extremely prevalent; at most, only three marriages seemed to involve no more than the reasonable amount of conflict. Two-thirds of the patients did not want children and among those who expressed a desire for children the expression was frequently marked with ambivalence with rarely a positive interest.

Racial and Cultural Background.—Of the 29 patients, 25 were white and 4 were Negroes. Only seven were of second generation or longer descent, the rest being either first generation Americans or foreign born, so that the group does not represent a normal population with respect to nationality. The significance of this can only be speculative, but some of their problems were related to difficulties in cultural adaptation.

Religious Background.—The group was not typical of a normal population, two-thirds being Catholics. Irrespective of religious denomination, a rigid religious training seemed to be a significant factor, twelve of the 29 patients (nine Catholics and three Protestants) having been brought up in homes with strict religious adherence.

Economic Background.—This compared closely with that of a normal population; the majority of the patients had accomplished only a poor or fair standard of living, but this was due to the handicap of poor health and could not be considered significant. Most of the patients had not qualified for any particular trade or profession, but one-half of them had relatively stable work histories.

Family Background.—Here the most outstanding feature was the high incidence of changes in family structure. For only nine of the 29 patients did the family structure remain stable throughout early childhood. One-half of the patients were separated from at least one parent because of death or for some other reason before they were 7 years old, and most of them had to make subsequent adjustments following the remarriage of parents, etc. The predominant influences on personality development had been negative. In 22 out of the 29 cases, the maternal attitude appeared to have been predominantly negative, and for 21 of the patients the paternal attitude was a negative one. Most frequently the mothers had been dominating and controlling, and the fathers passive, ineffectual, disinterested, and seldom available.

The relationship of the patient with his siblings was often one of competition and jealousy, with associated feelings of inferiority characteristic of sibling rivalry (observed in thirteen out of 29 cases). Only three patients gave histories indicative of healthy relationships among siblings.

Educational Background.—Here the patients compared closely with the general population. Only six completed high school or higher education. The major reason for terminating schooling was lack of interest or effort in continuing schooling after starting employment.

Among early childhood interests, physical activities were predominant and were emphasized by twelve of the 29 patients. Success in competitive sports was described by several of the patients.

Precipitating Factors of Disease.—The patients attributed their illness to a variety of causes, but most often related it to other health problems or to environmental factors, such as poor working conditions, over-exertion, accident, tight shoes, etc. Most patients did not spontaneously refer to emotional traumata, but in discussing life histories a chronological relationship of such traumata was frequently noted. Among twelve of the patients, serious illness, death, or separation from an immediate family member occurred just before the onset of the disease. In five patients the arthritis followed childbirth or began concurrently with the responsibilities of child care, and in three others it developed at the time they became engaged or just after marriage. Several patients described conflicts with authority (employers, etc.) just before the onset of arthritis. Evaluation of the possible relationship between onset of disease and emotional trauma presents many difficulties. The patients frequently did not consider these experiences to be traumatic, but in their total histories their evaluation of emotional strains frequently indicated similar omissions, repressions, or confusion, so that no valid conclusions could be drawn regarding the chronological relationship between emotional stress and the onset of arthritis.

Psycho-Social Consequences of Illness.—The development of the arthritis in these patients caused changes in nearly every area of life, from employment to recreational activities; 21 of the 29 patients were employed at least part-time at the onset of the arthritis, and all these had been financially dependent for at least one year prior to admission to the research project. Increased social dependence most frequently was reported by patients in describing changes in their social situations. Only three patients reported an unaltered dependency status; these were patients who refused to ask for help from relatives, or who had no families to which to turn.

The two other most common areas of change were in family roles and extra-curricular activities. The latter change might have been expected in higher incidence except that many of the patients had no outside interests for curtailment. The shift in family role took the form of relinquishing of the care of children to relatives, moving the parents' home, and in other social adjustments necessitated by the illness.

In nearly every instance the illness functioned as a defence for the patient against his environment, by providing a punishment of self or family, a means of enforcing environmental control, or a means of establishing or justifying dependence. For several patients the arthritis provided a satisfactory excuse for his withdrawal from the environment and an adequate rationalization for his feelings of inadequacy. The implications of these defences and the need for illness were manifold, and were of paramount influence in rehabilitation progress. For some patients their "ego strength" was sufficient to minimize their need for such a self-destructive defence, but for others the environment was too threatening to permit the surrender of illness.

Preliminary Results

From the 29 hospitalized patients, six failures and six successful rehabilitees were selected. The data on these twelve patients were then analysed in greater detail in the hope of establishing common denominators which might serve as positive and negative indicators (Tables I-III). By definition, the successful rehabilitee was one who was able to utilize his remaining physical resources to a reasonable degree. Conversely, the failure was able to use few or none of his physical resources and made little or no attempt towards self care and independent living. With one exception, all these cases had been under observation for from 6 to 12 months. Patients not clearly classifiable as successful or unsuccessful were not included, but are now subjects for testing the hypotheses developed by this comparative analysis.

The results are of necessity preliminary ones since this research project has now completed only two years of its projected 5-year course.

Summary and Conclusions

On the basis of the psycho-social data so far accumulated, it may be said tentatively that the most successful chronic rheumatoid arthritic rehabilitee was a second-generation American, of poor socio-economic status, and of moderate religious practice. He was capable of handling heterosexual conflicts, and of taking decisive action in terminating the relationship in situations of marital discord. He began work early without direct pressure and maintained a good work history. Economically, he attained a fair or reasonable standard of living, superior to that of his early family status, and maintained his home independently with his spouse. Financially, he was independent for at least 5 years before the onset of his illness. The median length of illness and the median age at onset of illness were similar to those of the unsuccessful rehabilitee, but there was a greater variability in both duration of illness and age at onset among successful rehabilitees.

TABLE I
SOCIAL BACKGROUND

Life History		Successful	Unsuccessful
Early Family Background	Birthplace	2nd-generation American or more	1st-generation American or foreign-born
	Socio-economic Status	"Poor" early background	"Fair" or "good"
	Religious Training	Moderate religious practices	Strict religious practices
Adult Social Adjustment (heterosexual adjustment)	Age began "Dating"	Mid or late 'teens	Early 'teens or after age 20
	Nature of Marital Relationship	No present marital conflict; either terminated unsatisfactory marriage or did not marry	Marked marital conflict with inability to resolve or terminate unsatisfactory marriage
	Age at Marriage	If married, marriage at reasonable age (19 to 25 yrs)	Marriage outside usual age range —premature or delayed
Education and Work	First Employment	Began work in 'teens; little direct pressure to begin work and no pressure against working	Delayed employment (after age 20) some with pressure against working, and others with great pressure to begin working
	Adult Economic Achievement	Maintained "fair" or reasonable standard of living	"Poor" standard of living
	Changes in Economic Situation from Early Childhood	Attained status superior to early family economic status; no decline	Remained the same or declined
Situation before Illness	Financial Independence: (no essential difference in occupation between groups)	Financially independent for 5 years before onset (except two who were under working age for part or all of 5 years before onset)	Most wholly or partly financially dependent
	Living Arrangements	Maintaining home independently or with spouse (two were 20 years or younger at onset and were in parental home)	Half failed to establish independence
	Patient's Evaluation of Health before Onset (covering previous 10-15 yrs)	Good physical condition and functioning well	Most considered themselves "poor" or only "fair"

The disability of the successful rehabilitee was generally less severe. His attitude towards his illness was one of acceptance of life within limitations but with maximum function and without undue conflict. His goal in rehabilitation, in contrast to the vague, confused, unrealistic aims of the unsuccessful candidate, was usually specific and realistic. His use of the psycho-social department in the hospital tended to be more for control of environment and development of insight. His hypochondria was of only moderate degree, and his passivity and acceptance was associated with fear

TABLE II

PSYCHOLOGICAL CHARACTERISTICS

Psychology		Successful	Unsuccessful
Verbal Intelligence		Low-average (or better)	Borderline
Ego Strength		More adequate	Less adequate
Control	Emotions	Control and/or repression of emotional reactions	Uncontrolled emotional reactions; impulsivity and egocentricity
	Fantasies	Control and/or repression of fantasies	Fearful, uncontrolled fantasies
	Depression	Desire and capacity for pleasurable experiences far outweighing depressive mood	Depressed mood tends to obscure and displace pleasurable experiences, resulting in chronic depressive mood
	Orality	Little evidence of oral concern	Strong oral needs concerned with food and drink; chronic feelings of failure to achieve oral gratification
	Body image	Relatively adequate body image; adequate differentiation of parts, presence of all extremities, adequate size	Inadequate, distorted, bizarre body image; frequent lack of differentiation, missing parts of body, poor line

TABLE III

PROGRESS IN REHABILITATION

	Patient's Reactions	Successful	Unsuccessful
Attitude to Rehabilitation (Aims)	Non-specific, vague, confused or inconsistent aims	2	4
	Specific, but not realistic	—	2
	Specific and realistic	4	—
	Nil	—	—
Attitude to Illness (including disfigurement)	Acceptance by adapting to life within limitations, but with maximum function and without undue conflict	4	—
	Acceptance of chronic invalidism as a way of life providing some satisfactions, no apparent conflict or need for change	—	3
	Resignation with little or no hope of improvement but some conflict over adopting chronic invalidism as a way of life	1	1
	Non-acceptance, marked depression, embarrassment by helplessness or disfigurement	1	—
	Non-acceptance, denial of reality, waiting on miracle, and determined to achieve complete recovery	—	2
Attitude to Dependency	Aggressive and demanding, with no manifest conflicts	—	1
	Aggressive and demanding or assertive, with conscious conflict as indicated by alternating periods of aggression, denial of needs for help, etc.	—	3
	Passive acceptance with no manifest conflict	1	1
	Passive acceptance, with some apparent conflict, fears, asking for help, etc.	5	1
Attitude to Use of Psycho-Social Service	Resentment of interest and/or denial of any problems and/or fear of attempts at understanding	1	1
	No interest or passive acceptance	—	1
	Acceptance of control of environment (including help with environmental problems)	4	5
	Acceptance of emotional support	1	2
	Acceptance of help in development of insight	3	1
Degree of Hypochondria	Extensive emphasis on complaints	—	2
	Moderate	2	2
	Limited	4	1
	Undetermined	—	1
Degree of Responsibility and Participation in Treatment	Little or none	—	4
	Limited to fair	3	2
	Moderate to good	1	—
	Excellent	2	—

and reluctance to ask help from others, whereas the unsuccessful rehabilitee was full of hypochondriacal complaints and was aggressive and demanding in his reaction to dependency. Psychologically, the successful patient was of low-average (or better) verbal intelligence with adequate "ego strength"; he showed control and/or repression of his emotional and imaginative experience, and his desire and capacity for pleasurable experiences outweighed his depressive moods. There was relatively little oral need, and an adequate body image, without distortion or bizarre interpretation.

The unsuccessful candidate showed the opposite of these psycho-social features to such an extent that we now feel the above to be possible criteria for assessing which chronic arthritics may be good risks for acceptance into the rehabilitation groups, and we have now decided to select on this basis.

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Les facteurs psycho-sociaux dans la réhabilitation du rhumatisant arthritique chronique

RÉSUMÉ ET CONCLUSIONS

En se basant sur les données psycho-sociales accumulées jusqu'à présent, on peut dire tentativement que le meilleur candidat à la réhabilitation parmi les rhumatisants arthritiques chroniques est un Américain de deuxième génération, d'un milieu social et économique pauvre qui pratique sa réligion avec modération. Il est capable de manier les conflits hétérosexuels et de prendre des mesures décisives dans les situations de désaccord matrimonial en terminant le rapport. Il a commencé à travailler de bonheur et son passé de travail est bon. Economiquement, il a atteint un niveau de vie bon ou raisonnable, supérieur à celui qu'il avait connu dans sa famille et il a maintenu son foyer indépendamment avec son épouse. Matériellement il était indépendant pendant 5 ans au moins avant le début de sa maladie. La durée moyenne de la maladie et l'âge moyen de son début sont similaires pour le candidat échoué, mais parmi les réussis la variabilité est plus grande aussi bien en ce qui concerne la durée que l'âge de début de la maladie.

L'infirmité du candidat réussi était généralement moins sévère. Son attitude à l'égard de sa maladie était celle d'acceptation de la vie avec ses limitations mais avec un maximum de fonction et un minimum de conflit peu justifié. L'objet de sa réhabilitation, contrairement aux buts vagues, confus et irréels du candidat échoué, était généralement spécifique et réaliste. Il tendait à se servir du department psycho-social de l'hôpital plutôt pour contrôler le milieu ambiant et développer sa perspicacité. Son hypochondrie n'était que modérée et sa passivité et acceptation était associée à la peur et répugnance de demander sécours aux autres, tandis que le candidat échoué ne cessait pas de se plaindre et était agressif et exigeant dans sa réaction à la dépendance. Du point de vue psychologique, le malade réussi avait une intelligence verbale basse-moyenne (ou mieux) avec la "force de l'ego" suffisante; il contrôlait et/ou reprimait son expérience émotive et imaginative et son désir et sa capacité d'éprouver des expériences agréables l'emportaient sur les tendences dépressives. Ses besoins buccaux étaient relativement petits, et son image corporel adéquat, sans distorsion ni interprétation bizarre.

Le candidat échoué montrait des traits psycho-sociaux contraires à tel point que maintenant nous croyons que les critères ci-dessus peuvent servir pour déterminer lequel des arthritiques chroniques est un bon risque pour l'admettre au groupe de réhabilitation et nous venons de décider de nous baser la-dessus pour la sélection.

Los factores sico-sociales en la rehabilitación del enfermo con artritis reumatoide crónica

SUMARIO Y CONCLUSIONES

Basándose en los datos sico-sociales acumulados hasta ahora, se puede decir tentativamente que el mejor candidato a la rehabilitación entre los enfermos con artritis reumatoide crónica es un americano de segunda generación, de un medio social y económico pobre y moderadamente religioso. Sabe manejar los conflictos heterosexuales y en situaciones de desacuerdo matrimonial tomar acción decisiva rompiendo las relaciones. Empezó a trabajar temprano y tiene un buen pasado de trabajo. Económicamente alcanzó un nivel de vida buen o razonable, superior al nivel temprano de su familia y mantuvo su hogar independientemente con su esposa. Materialmente, fué independiente durante cinco años al menos antes del comienzo de su enfermedad. La duración media de la enfermedad y la edad media de su comienzo aseméjanse a las del candidato fracasado, pero entre los venturosos hay mayor variabilidad tanto respecto a la duración como a la edad de comienzo de la enfermedad.

La incapacidad del candidato venturoso fué generalmente menos grave. Su actitud hacia su enfermedad fué la de acepción de la vida con sus limitaciones pero con un máximo de función y un mínimo de conflicto indebido. El objeto de su rehabilitación, contrariamente a los propósitos vagos, confusos y poco reales del candidato fracasado, fué generalmente específico y realista. Tendió a servirse del departamento sico-social del hospital más bien para controlar el medio ambiente y para desarrollar su percepción. Su hipocondria fué moderada y su pasividad y acepción fueron asociadas con un temor y una repugnancia de pedir ayuda de los demás, mientras que el candidato fracasado no acabó de quejarse y fué agresivo y exigente en su reacción a la dependencia. Sicológicamente, el venturoso tuvo una inteligencia verbal baja-media (o mejor) con la "fuerza del ego" suficiente; supo controlar y/o reprimir su experiencia emotiva e imaginativa y su deseo y su capacidad de experiencias agradables preponderó sobre sus tendencias depresivas. Su necesidad oral fué relativamente poca, su imagen del cuerpo adecuado, sin perversión o interpretación grotesca.

El candidato fracasado mostraba rasgos sico-sociales opuestos a tal punto que ahora pensamos que los criterios enumerados pueden servir para determinar cual de los artríticos crónicos presenta un buen riesgo para su admisión al grupo de rehabilitación y ahora hemos decidido de basarnos en ello para la selección.