PSYCHOSOCIAL ASPECTS OF DIETARY NON – ADHERANCE IN DIABETES

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ABSTRACT

In this paper we report a scale of dietary regimen adherence in diabetes mellitus (DRADMS). The DRADMS was developed as an outcome of our experience in prescribing dietary programme for the diabetic patients. It was aimed at obtaining a measure of the patient's problems preventing adherence to the regimen. It was intended to be an assessment of psychosocial issues in diabetes dietary regimen adherence. The questionnaire highlights psychosocial situations which present difficulties in adhering to the dietary regimen. The questionnaire consists of 16 items. Split-half reliability coefficient was computed and corrected by Spearman – Brown prophecy formula which was 0.84. The questionnaire could be useful in psychosocial counseling and diabetes education for enhancing dietary regimen adherence.

INTRODUCTION

Conformity, compliance, and adherence have different meanings. Conformity follows group dynamics, compliance is giving in to a request or demand, and adherence means to stick to what ought to be done. Diabetes is a chronic metabolic disorder. We have to take note of the reaction of the individual at the time diagnosis is revealed to him. He has to cope with a sudden transformation in his life style. This includes the inevitable dietary modification. Dietary regimen adherence brings immense good to the patient and non-adherence causes inevitable damage by way of complications. The focus of this study is on non-adherence.

METHOD

Detailed discussions with patients with/without complications led us to relate non-adherence and deficiency of resources, faulty social adaptations, weak ego, weak super ego. It is a product of self-damaging action and a symptom of maladjustment. For this reason non-adherence requires a closer scrutiny and non-directive phychosocial counseling.

A 16 item questionnaire was developed with Yes/No response format for each question. It yields a minimum score of 0, and a maximum score of 16. Higher score indicates difficulty or inability in dietary regimen adherence.

A sample of 41 NIDDM patients volunteered to complete the questionnaire These Patients had diabetes for one year or more. They were met individually in the out-patient department of Diabetes Research Center and M.V. Hospital for Diabetes, Chennai, South India.

The Questionnaire data yielded a mean of 3.49 and SD 2.95, SE 0.46 and the confidence interval of the means was 2.60 to 4.40.

Split-half reliability was computed (0.84, $\underline{P}< 0.01$) and it was found that the questionnaire has high internal consistency [1]. Face validity and expert opinion was accepted as indicating high validity.

Each item of the questionnaire was considered to know the number of subjects who experience difficulty in dietary regimen adherence. Each item relates to a situation to which the subject has to adjust as the diabetic person. Data are presented in Table 1.

RESULTS

Our study revealed that there are certain specific situations where the patients find it particularly difficult to adhere to the regimen. They experience frustration due to the restriction (17.07%), prolonged treatment as not worth the trouble (21.95%), a feeling of helplessness in adhering to the regimen (14.63%), feeling of inconvenience (17.07), a feeling that one can stray away from the regimen (82.93%), a belief that this can be corrected by extra dose of medicine (17.07), feeling that it is difficult to avoid temptation (48.78%), feeling that no damage is done if they once in a way stray away from the regimen (31.71%) difficulty in assessing alternatives open to the patient (26.83%), difficulty to adhere to the regimen in social gatherings (65.85%), difficulty in revealing to the host that one is a diabetic (36.59%). These values are revealing and deserve our attention in shaping our diet counseling methods.

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TABLE 1
Data are percentages of persons expressing difficulty in dietary regimen adherence.

S. No.	ITEM	Percent Saying YES
1.	Do you feel that dietary regimen is frustrating?	17.07
2.	Do you consider it worthless to follow the regimen?	12.20
3.	Do you feel that prolonged adherence is not worth the trouble?	21.95
4.	Do you feel that the regimen cannot be managed, helpless?	14.63
5.	Does the regimen cause you so much inconvenience that you cannot manage?	17.07
6.	Do you appreahend physical weakness because of dietary restrictions?	31.70
7.	Do you believe that you can once in a way stray away from the regimen?	82.93
8.	Do you believe straying away from the regimen can be corrected by extra does of medicine taken by yourself?	17.07
9.	Do you find it find difficult to avoid the temptation of the forbidden food items?	48.78
10.	Do you think no damage is done if you once in a way take sweets without others knowing it?	31.71
11.	Do you feel like dissociating yourself from the dietitian because of her insistence on dietary regimen?	4.88
12.	Do you have the difficulty in assessing the alternatives open to you as suggested by the dietitian?	26.83
13.	Are you aware that non-adherence to dietary regimen involves very high risk to your well-being?	9.76
14.	Do you find it difficult to adhere to dietary regimen during social gatherings, such as lunch or dinner parties?	65.85
15.	When you are a guest of someone do you find it difficult to reveal that you are a diabetic and decline part-taking what is offered to you by the host?	36.59
16.	Do you find it difficult to adhere to dietary regimen because your family members' food habits are different from yours?	9.76

Correlation analysis revealed that lower the income poorer the adherence ($r = -0.3867$, $p < 0.008$).

DISCUSSION

The present paper is on adherence to dietary regimen in diabetes mellitus. The focus is on non-adherence. Diabetes mellitus is a chronic life-long metabolic disorder we have to take a conscious note of the reaction of the individual at the time diagnosis is revealed to him. He has to cope with a sudden transformation. This transformation includes among other things the inevitable dietary modification which brings about restrictions. Medication compliance is more readily attainable than either dietary or exercise compliance [2]. The families of patients with good metabolic control were more flexibly organized and achievement oriented [3]. Patients with diabetes visit their friends and participate in social activities less than those with hypertension and those without chronic diseases [4].

Dietary regimen adherence brings immense good to the patients, while non-adherence can cause irreversible damage by way of complications. The authors have come across cases of non-adherence. The question is why this non-adherence? Is it because the person does not want to accept that he has diabetes? That he has to cope with and change his life style? Is the psychosocial climate not

conducive to adherence? Are there economic disabilities? A host of such question may be raised.

Adherence follows a "press system" where dietitian is a strong advisor and the patient is a meek follower of advice given to him regarding his dietary regimen. This can be classified as directive counseling. The patient on the order hand has his own "need system" which implies that the patient has his own need patterns. In the present context need pattern refers to his established food habits. Could we integrate the two systems where the dietitian is a facilitator rather than a strong advisor? This leads to the adoption of psychosocial counseling following the principles of non-directive counseling [5]. In this a psychosocial climate is established where the patient can feel unconditionally accepted, understood and valued as a person.

Although efforts are made to maintain good dietary regimen adherence there exists the problem of non-adherence. The diagnosis of diabetes is highly traumatic and stressful. It may be shrouded with fear and anxiety.

We recommend that the dietary adherence scale be used as an additional data support to know the specific areas of difficulty encountered by the patients and render suitable phychosocial counseling. Non-directive method could work better than directive counseling in this area also.

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