QUALITY OF LIFE, PSYCHOSOCIAL ADJUSTMENT, AND DEPRESSION IN DIALYSIS PATIENTS AND THEIR SPOUSES

A. Biris, G. Kyriakopoulos, and E. Mavropoulou

General Hospital of Larissa, Greece

We investigated parameters of the quality of life in chronic dialysis patients and relations with their spouses, children, and friends. We used a specialised inventory including questions on family relationships, work, sexual relationships, use of free time, use of psychotropic medication, and various changes in the way of life in general, as well as demographical data. A short form of the same inventory was completed by spouses. Participants and their spouses completed Beck's Depression Inventory (BDI). Our sample consisted of 37 patients and 20 spouses, 57 adult individuals in total. Where possible we employed personality tests, such as the Minnesota Multiphasic Personality Inventory (MMPI), and semistructured interviews. The results indicated high depression rates and positive correlation in BDI scores between subjects and their spouses. An increased amount of free time was observed in the patient being spent doing hobbies, travelling, and with friends. It was further observed that the time spent with family members as well as watching television was significantly decreased. Emphasis was also provided by subjects regarding the quality of medical equipment, medical expertise, and the need for improved human contact.

Sample

The sample was composed of 57 adult individuals in total of which 37 End Stage Renal Dialysis (ESRD) patients (23 males and 14 females) and 20 spouses (9 males and 11 females). The mean age of our patients was 51,81 years (sd=14,64) and the spouses' 55,85 years (sd=17,32).

Method

Correlational design was utilised. Statistical analysis was provided using parametric (students' t-test) and non-parametric (Pearson's-r) tests to compare group means, and intercorrelation matrices were constructed in order to establish relationships between the variables. A self-report questionnaire was developed specifically for the purposes of this study. This questionnaire was composed of items regarding family relationships, work, sexual relationships, use of free time, use of psychotropic medication, and various changes in the way of life in general, as well as demographical data. A second questionnaire was developed containing specific items, which assessed the psychosocial and interpersonal behavioural effects that the renal dialysis had on the spouses. Subjects completed Beck's Depression Inventory (BDI). Where possible, personality assessments devises, such as the Minnesota Multiphasic Personality Inventory (MMPI), and semistructured interviews were used. The above results are discussed in an effort to better understand the life style and

personality characteristics of dialysis patients and in order to provide more appropriate aid from the dialysis unit and the counselling services in a general hospital.

Results

Both the semistructured interviews and the questionnaires were quite revealing about many different aspects of the everyday life of dialysis patients. Most patients quit their job. Mean working time for patients before dialysis was 8,19 hours per day (sd=2,89) while after the initiation of the dialysis treatment working time has dropped to a mere 0,79 hours daily (sd=1,70). The vast majority depend on state-run pension plans. Many spouses quit their jobs, since then adopting a new supporting role in the family. 55% reported as the main precipitating factor increased responsibilities.

35% of the patients were informed in a doctor's office in the hospital. 24% in the dialysis unit, 27% in hospital's emergency unit for, 8%, in a physician's office, 3% at a private clinic, and 3% of our sample were informed by relatives. In the vast majority it was the doctor who informed the patients about the dialysis procedure. The elapsed time between the initial health related problem and the period they were specifically informed that they should be introduced to renal dialysis was 2,8 years (sd=4). This procedure should follow a protocol[1], and while it would appear that there is plenty of time for the patient to be informed, bad news are communicated in Emergency Unit for a large proportion of patients.

The use of free time, which was plenty for these patients, had an uneven distribution. They devoted most of their time doing hobbies, travelling (which is however restricted, due to their dependence on the dialysis device), visiting friends (however many reported that problems arose in their interpersonal relations since they started dialysis), and other activities. They spent less free time than before watching television and less time with the family[2]. This finding however, will normally depend on the stage of the adaptive process that ESRD patients experience. It should also be kept in mind that adaptive process stages, discussed later on this paper, do not necessarily follow the same sequence in all patients.

54% of the patients had a BDI score $\geq$ 15, which in accordance to other studies has a high diagnostic sensitivity and specificity in making the diagnosis of depressive disorder in patients with ESRD [1, 3]. Using a cutoff score of 8, which is clinically acceptable for subjects without chronic illness [1], such as the spouses in our sample, the prevalence of mild to major depression rate still reaches 50%. These findings were further confirmed by using the outlined criteria in the Diagnostic and Statistical Manual IV for depressive disorder. The mean score for both groups (patients' mean BDI score=18,53; spouses mean BDI=14,50) was significantly higher than the average for the general population (patients' p<0,001 and spouses' p<0,05) and comes in accordance with findings from similar studies [4].

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[1] For a discussion on this subject see [1]
[2] Please refer to [2]

A significant correlation was found between depression and educational level, indicating that the higher the educational level, the lower the BDI score obtained (r=-0,345, p<0,05). The higher education subgroup possesses richer information about their medical condition and consequently better control, which might explain this finding. Another significant factor was the current financial status of the patient. Specifically, it would appear that the lower the income, the higher the scores on BDI (r=-0,326, p<0,05), which is in keeping with other studies relating socio-economic status with depression [5]. This finding would further indicate the need for provision of support to these patients, not only through a pension funds plan, but by also providing them with the opportunity to be both productive again and, for the lower income groups, increasing their income. In addition, depressive mood between patients and spouses was positively correlated (r=0,749, p<0,01). This indicates an increased need for the provision of psychological support to spouses along with the patients.

The BDI scores obtained seem to generally agree with the coping models proposed by other studies [6], i.e. a brief honeymoon phase followed by a period of disenchantment and discouragement followed by, finally, a period of long-term adaptation. It appears that depression reaches high levels during the first two years after the initiation of dialysis, and then it decreases, reaching the lowest point for patients following approximately ten years of treatment. However, an increase in BDI scores was re-observed for patients being in the unit for 14, 15 or even 16 years. Similar variation was observed for the spouses, but for them, while the initial elevation follows a similar pattern as for the patients', the lowest scores are observed much earlier, during the 5th year of dialysis, and they increase again at an earlier period.

On interfamilial relationships, our observations were as follows: Patients reported that relations with the spouse, after they started dialysis, had become worse, as opposed to the expected improvement in interrelational behavior due to the expected increase in spouse support. Both groups agreed on the way they viewed their relationships with their children (mode was that they "remained the same"), the frequency of sexual intercourse, and the sexual desire after they started dialysis (both were generally reduced).

The MMPI did not show clinically significant elevation in any of the basic scales higher than the average of the general population, except for the first three, i.e., (1) hypochondriasis, (2) depression, and (3) hysteria, which consist the so called neurotic triad. This finding was associated according to an early study [7] with somatization, apathy, dependency, irritability, and self-centeredness. While the elevation in depression scale agrees with the BDI measurement, a closer investigation on the other scales (1 and 3) shows that many of the patients' answers (such as the ones to the inventory item "I'm not getting tired easily") were affected by their medical condition and could not be attributed solely to psychological characteristics. Therefore, certain considerations should be taken into account for the use of this instrument with this specific group of patients.

No statistically significant psychiatric comorbidity was observed. The use of psychotropic medication was high in our sample. Antidepressants were used to treat 8% of the patients, 16% were treated with sedatives,

and 8% with anxiolytics without veiling between the medications. While these proportions appear to be relatively high compared to the general population, any true estimation of the significance of this finding is difficult, since many prescription drugs in Greece are purchased over the counter. (This is especially true for the anxiolytic group and less for the antidepressants.)

Other observations indicate that patients and spouses emphasized the importance of their daily contact with the medical and nursing personnel[3]; hence, staff in dialysis units should be specially trained not just in terms of medical expertise but also in basic human communication skills. Finally, it would be useful in future studies to investigate the possible interaction between psychosocial parameters, such as the ones examined in the present study, and biological indices.

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[3] See also [1, 6]