Quality of life in patients with diabetic nephropathy[a]

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ABSTRACT

Chronic renal insufficiency (CRI) due to diabetic nephropathy (DN), represents in Mexico a matter of concern in public health. This illness has an impact so much physical as emotional along the process of the chronicity, this process deteriorates the quality of people's life that suffer it. For such reason, the purpose of the present investigation is to determine the impact of the deterioration of the quality of life in a sample of patients with diabetic nephropathy. It was carried out an expo-facto, of traverse type study, in this study we try to identify and typify their possible functional peculiarities. The fellows that participated in the study were 100 patients that attend to the continuos peritoneal dialysis program, in a hospital of the IMSS, of the capital of San Luis' State Potosí, diagnosed by their own doctors with DN. The deterioration of the quality of life was measured with the scale of quality of life related with the health (QOLRH), in its validated version and standardized to spanish. The dependent variable to consider was the evaluation of the index of deterioration of the quality of life estimated through the QOLRH scale. The independent variable understood the evolution time of the chronic-degenerative condition of the DN of the selected patients, as well as some socio-demographic aspects. The results revealed that 100% of the studied sample deals with some grade of deterioration in its quality of life in the valued areas that included the scale. The areas of interaction stand out with the team of health, the sexual dysfunction, the emotional and physical aspects, among others. Having more risk in the deterioration, those patients with more than ten years of evolution of the suffering with DM-2, the educational level, over 50 years age. We conclude that the grade of deterioration of the quality of life in this type of patient with DN is progressive and associated to the degenerative evolution of the illness.

Key words: Quality of life, type 2 diabetes mellitus, chronic disease, chronic renal insufficiency.

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Calidad de vida en pacientes con nefropatía diabética

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INTRODUCTION

The gradual change of the epidemic profile that has been given in Mexico starting from the decade of the fifty, in the sense of a slow decrease of the infectious sufferings but a quick growth of chronic-degenerative sufferings, it has come generating new investigation priorities and intervention the all professionals of health[1].

This type of sufferings requires special attention, since in its development and evolution, it stands out the contribution of psychological and biomedical factors, because the range of professional interventions oscillates from the primary prevention and the community promotion of the health until supporting the near terminal patient to have a death calm end in peace[2].

As much the chronicity as the wide character invasive, represented by many symptoms of these sufferings, they bear to a notorious deterioration and sometimes end of the well-being and the quality of life of who the suffering[3].

With a lot of frequency they commit aspects so key of the human operation as the labor capacity, the life in family or the adaptation to new demands imposed by the atmosphere and the society. Although the deterioration of the quality of life has increased in the case of some sufferings like the cancer, the leukemia, the syndromes degenerative dementias as the Alzheimer, the hepatic cirrhosis on one hand, for other, they are had evidences on its alterations in the quality of life patients, hat they suffer these diseases[4-9]. The studies demonstrated that many survivors continued under the negative effects of the suffering or of their treatments.

Regarding the patients with renal failure chronicle (RFC) diabetic nephropathy, classified inside the denominated chronic disease degenerative. It is observed in Mexico, a dear incidence of 4

RESUMEN

La insuficiencia renal crónica (IRC) por nefropatía diabética (ND), representa en México un asunto de preocupación en salud pública. La enfermedad tiene un impacto tanto físico como emocional a lo largo del proceso de la cronicidad, que deteriora la calidad de vida de las personas que la padecen. Por tal motivo, el propósito de la presente investigación fue el de determinar el impacto del deterioro de la calidad de vida en una muestra de pacientes con nefropatía diabética. Se realizó un estudio expo-facto, de tipo transversal, en el cual se busca identificar y tipificar sus posibles peculiaridades funcionales. Los sujetos que participaron en el estudio fueron 100 pacientes que acuden al servicio de diálisis peritoneal de un Hospital General del IMSS, de la capital del Estado de San Luis Potosí, diagnosticados por sus médicos tratantes con ND. El deterioro de la calidad de vida se midió con la Escala de Calidad de Vida Relacionada con la Salud (ESCAVIRS), en su versión validada y estandarizada al español. La variable dependiente considerada fue la evaluación del índice de deterioro de la calidad de vida estimado a través de la escala ESCAVIRS. La variable independiente comprendió el tiempo de evolución de la condición crónico-degenerativa de la diabetes mellitus tipo 2 con secuela de nefropatía diabética de los pacientes seleccionados, así como algunos aspectos sociodemográficos. Los resultados revelaron que un 70% de la muestra estudiada cursa con algún grado de deterioro en su calidad de vida en las áreas evaluadas por la escala. Sobresalen las áreas de interacción con el equipo de salud, la disfunción sexual, los aspectos emocionales y físicos. Tienen más riesgo de deterioro aquellos pacientes con más de 10 años de evolución del padecimiento con DM-2, nivel educativo bajo y edad mayor de 50 años. Se concluye que el grado de deterioro de la calidad de vida en este tipo de pacientes con ND es progresivo y asociado a la evolución degenerativa de la enfermedad.

Palabras clave: Calidad de vida, diabetes mellitus tipo 2, enfermedad crónica, insuficiencia renal crónica, salud pública.

thousand to 5 thousand cases per year, highlighting as the main cause the one caused by diabetic nephropathy in the mature people[10]. Up to now, the efforts of the hospitals institutions of the sector health of our country, they have been directed toward the substitute therapy by means of peritoneal dialysis and hemodialysis. However, the therapeutic treatment in its different stages has a high cost, absorbing 40% of the total budget of a hospital unit of second level approximately. Increasing the necessities considerably budgets them, due to the progressive rate in their prevalence.

Diverse investigations[11-26], they have demonstrated that inside the adjustment to the treatment, the patients spend for diverse periods of emotional tension the same as the patients that undergo exclusively lingering treatments. Being forced to assume physical, emotional and social restrictions that have important psychological effects.

Additionally, this type of studies manifests that the patients with RFC and with sequel of diabetic nephropathy, not alone they are affected physically, but rather a great number of problems of emotional type exists as the illness advances to a chronicity state when requiring periodic dialysis.

This type of patient, they usually present light or sharp signs of physical and psychological importance, affecting their quality of life notably. Their confrontation form to the beginning of the illness and their ability to face tense situations, they are very important factors in the adjustment process to the beginning of the treatment, by means of ambulatory peritoneal dialysis, hemodialysis and renal transplant.

Depending on a machine or of the replacements from the liquid dialyze to which they are subjected during one day or one night two or three times a week, they can create fears and resentments that are translated by the anguish that generates them this situation, in the measure that interferes with their capacity to carry out their daily activities that before carried out without problem.

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From the social point of view, possibly the patient with diabetic nephropathy yield to dialysis and hemodialysis, they cannot conserve the rhythm of life that they had before their illness. Their relatives and friends probably begin to consider it a person unable to work to consider it weak and I make sick.

The loss of the self-esteem frequently is presented, when the patient begins to they turns likewise in the same way that he thinks that the other ones come it. It feels that people of her surroundings consider it useless and you/he/she is possible that she begins to feel as such.

It is so much the sadness and the misery that sink in the deepest in the depressions and they end up thinking that it is preferable the death to the life that they are condemned to take. The suicide risk in this type of patients is very big that goes from refusing to dialyze, to ignore the therapeutic régime, until ingesting high dose of barbiturates to take off the life[27]. The above-mentioned, rebounds undoubtedly in the quality of the patients' life with nephropathy diabetic.

The importance it is the generation of the investigation on the components of the impairment of the quality of these patients' life, to design viable and effective interventions for their incidence on the part of the team of health.

The quality of life related with the health, is a measure made up of physical, mental and social well-being, just as it perceives it each patient and each group on diverse components of the health[28]. It has been also conceptualized as a construction subjective multidimensional, according to the valuation that the patient emits in relation to different aspects of her life[29-32]. Additionally, the quality of life related with the health (QOLRH), it has a growing importance like valuation of the result of the programs and interventions in the sanitary environment. Their use has been denominated as a measure centered in the patient, which measures the opinion of these, with regard to its own health in the dimensions physical, psychological and social on one hand, for other, it has taken as one of the final variables to analyze the effectiveness of the personnel's of health medical performances and therefore of the programs of the sanitarium-assistance institutions. Therefore, its measuring incorporates factors like the values, beliefs, previous vital experiences, etc., until the presence of limitations for the development of the activities of their daily life. It is, therefore, of a complex variable with a great weight in the state of the patients' health. With base to the above-mentioned, the quality of life centered in the health, it has allowed to develop two fundamental investigation lines: The first one, centered in the evaluation of the impact of the programs of health; the second, on the impact of the therapeutic interventions and their relationship cost-benefit. With that which, data are obtained from a wide perspective when measuring physical, psychological and social dimensions, and not from perspectives dichotomy, as traditionally it is observed in the research literature[33].

For the previously exposed thing, the chronic-degenerative dysfunctions and in specific the diabetic nephropathy, they reveal the high economic and social cost their treatment and control, mainly the one caused by their complications, what implies a loss of the health. For such a reason, presently study, the operational definition of quality of life related with the health was Valuation that the patient carries out with DN, in accordance with her own approaches, of the physical, emotional and social state in the one that is in a given moment." Like it can be observed, when knowing the level of deterioration of the quality of the patients' life with DN, it will allow us the power to plan the necessary interventions in the face of the necessities detected on one hand, for other, to be under conditions of evaluating the impact of the taken actions.

In Mexico, few instruments exist to measure the quality of life related with the health, and inside those that exist, it is ignored their reliable and validity, main properties that characterize an appropriate instrument. These instruments when they complete the previous characteristics, they are used in epidemic studies to determine the impairment of the quality of life in different sufferings (patient with cancer, diabetes mellitus, high blood pressure, etc.), in connection with the carried out doctor-assistance interventions. Therefore, the present study supposes an important contribution to this field.

Of mentioned the above-mentioned, taking into account that in our country they have not been carried out studies on this problem, it thinks about the necessity to have worth instruments and reliable that can measure the deterioration of the quality of life in the patients with diabetic nephropathy, using for such an effect the scale of quality of life related with the health (QOLRH), in their validated version, reliable and standardized to the spanish[34].

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Next, a study is described whose fundamental purpose was the one of determining the impact of the impairment of the quality of life patients with diabetic nephropathy that go to the program of peritoneal dialysis of the General Hospital of the IMSS of the capital of San Luis Potosí State.

The knowledge of the degree of deterioration of the quality of life in this type of patients, will allow us the generation and evaluation of applicable recommendations to preventive and therapeutic interventions on the part of the professionals of the area of the health, inside the attention and care that provide.

METHOD

It was a study expo-facto of traverse type, in which a condition was present ahead of time. Presently study is looked for to identify and typing its possible functional peculiarities regarding the values corresponding scales.

Participants

The subjects that participated in the study were 100 patients with suffering of diabetic nephropathy. The sample was obtained statistically through the following formula $N = n/1+ n/N$, where $n=S2/V2$, $N = 348$, $n = 102.83$ and adjusted $n = 100$, taking in consideration to the population that goes to the program of peritoneal dialysis and under the following inclusion-exclusion criteria:

Inclusion Criteria:

- Patient with confirmed diagnosis of diabetic nephropathy, for the medical dealer.
- Patient with a time of evolution of but of six months with DN.
- Patient that resides in the area of the capital of San Luis Potosi' State.
- Patients between 18 and 80 years of age, and that they have signed the letter of spoilt participation.

Exclusion criteria:

- Patient with CRI for other causes unaware to the DN.
- Patient that doesn't live in the area of the capital of San Luis Potosi' State.
- That they are not claimants of the Clinic-hospital.
- Patient with diagnosis of psychosis or mental delay.
- Patient that don't want to participate and that they have not signed the letter of spoilt participation.
- Patient in terminal phase.

Scenario

The present study, was carried in the Clinic-hospital of Mexican Institute of Social Security "Dr. Francisco Padron Puyou", of the Capital of San Luis Potosi' State, in the service of peritoneal dialysis.

Variables

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it understands the scale QOLRH, in their validated version, reliable and standardized to spanish. The independent variable understood the time of evolution of the chronic-degenerative condition of the type 2 diabetes mellitus with sequel of the selected patients' diabetic nephropathy, as well as some aspects socio-demographics like the age, sex, education degree, occupation and civil state.

Instruments

The impairment of the quality of life was evaluated by means of the scale of quality of life related with the health "QOLRH", in its validated version, reliable and standardized to spanish. The validity of the construction of the instrument, was obtained through the statistical test student t, with rotation varimax, staying a power significant discriminatory at the .05 in 140 reagents that group in 31 factors and they evaluate the quality of life in the following areas: Physics, Medical Interaction, Psycho-social, Sexual, of Relationships Couple/ Significant. With relationship to the dependability, the internal consistency of the instrument was obtained through the Alpha of Cronbach, as much for the total scale as for each one of its dimensions. The opposing values were: Climbs total: .9592; Physical Area: 9149; Area of Medical Interaction: .7713; Area Psycho-social: .9470; Sexual Area: .8248: Area of Significant Relationships: .9608.

This instrument, allowed us to know the index of deterioration of the quality of the patients' life with ND in each one of these areas. The profile of the quality of life, shows the aspects that are being affected in each area of the suffering. The index of deterioration is estimated in four upward levels from the 1 to the 4, being the four the point of more deterioration in the quality of life (1 = Normal, 2 = Light, 3 = Moderate, 4 = Severe). On the other hand, for the variable time of evolution of the chronic-degenerative condition of the DM-2 with sequel of DN, as well as some variable socio-demographics, an instrument type questionnaire was used for such an effect.

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Alberto Durero
La madre de Durero, Barbara Holper, sin fecha. Carboncillo sobre papél, 42,1 x 30,3 cm. Berlín, Staatliche Museen zu Berlín - Preußischer Kulturbesitz, Kupferstichkabinett.

Statistical treatment

Descriptive statistic was used according to the level of measure of the variables. The results of this application were determined through a variance analysis (ANOVA) to evaluate the possible differences in the index of deterioration of the quality of the patients' life with ND in connection with the progressive advance of the illness. Additionally, the association of variables was evaluated by means of the test of chi-square and the exact test of Fisher. The level of statistical significance for both tests noticed in 0.05.

Procedure

In this study, the scale of quality of life related with the health was applied "QOLRH" in its version validated to spanish, to a sample of 100 patients diagnosed with ND in the service of peritoneal dialysis. Once located and recruited, to each patient of the sample in question, it was mentioned to a first informative interview. In this they were informed the general purposes of the study and their signature of informed consent was gathered, with the guarantee of two witness. Inside the lapse of the interview, respecting the readiness and the patients' well-being, they were applied the scale QOLRH. The indications given to the patient were:

"Dear patient:

Next you will be presented a list of having enunciated that they describe situations and people's experiences that have a very similar illness to his.

Read each enunciated and mark the number that better it describes their situation, having in all from last month until today's day.

Some sections won't apply in their case. Please jump those sections and continue with the following one."

RESULTS

In relation to the independent variable that they understand some indicative socio-demographics, as well as the time of evolution of the chronicity of the patients with the suffering of DM-2. In the Table 1, it is observed that 50% of the fellows was women, with the same percentage it was for that of men. Of which 30% had age between 56 and 60 years, other 19% between 51 and 55 years, among others.

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The civil state of the patients was the one of married with 88%. The occupation of those subject of the studied sample, the biggest percentage (44%) they are devoted to the works of the home, 26% is pensioned, among other, like it is shown in the Table 1.

Additionally, it is shown that most of the patients have primary incomplete with 47%, other 21% with primary complete, among others.

As for the time of evolution of the illness of the patients with type 2 diabetes mellitus, it is observed in the square 1 that the biggest percentage (35%) it was for the 11-15 year-old range with the diabetes mellitus, following 19% with a 16-20 year-old range, 15 21-25 %, among the most excellent.

As for the data obtained in the variable dependent estimate of the index of deterioration of the quality of life in the patients with DM-2, they were carried out the profiles of each one of the areas that conform the scale QOLRH (physics, medical interaction, psycho-social, sexual and of relationships of couple).

VARIABLES	F	%	Standard deviation	mean
1. Time of evolution with the illness of DM-2:			7.85	16.99
0 - 5 years	6	6%		
6–10 years	13	13%		
11–15 years	35	35%		
16–20 years	19	19%		
21 - 25 years	15	15%		
26 - 30 years	7	7%		
> 31 years	5	5%		
2. Age:			10.09	56.19
28 - 40 years	8	8%		
41 - 45 years	6	6%		
46 - 50 years	9	9%		
51 - 55 years	19	19%		
56 - 60 years	30	30%		
61 - 65 years	12	12%		
66 - 70 years	9	9%		
> 71 years	7	7%		
3. Civil state:				
Single	2	2%		
Married	88	88%		
Widower	7	7%		
Divorced	1	1%		
Separate	2	2%		
4. Educational level:				
Illiterate	11	11%		
Primary Incomplete	47	47%		
Primary Complete	21	21%		
Secondary Incomplete	2	2%		
Complete secondary	4	4%		
Preparatory	5	5%		
Technical career	6	6%		
Professional career	4	4%		
5. Sex:				
Female	50	50%		
Male	50	50%		
6. Occupation:				
Employees	16	16%		
Work of the Home	44	44%		
Workers	14	14%		
Pensioners	26	26%		

Table 1. Socio-demographics variables and time of evolution of the DM-2 in the patients with DN.

In what concerns to the physical area that they understand indicative reagents of the state of the patients' health, the presence of certain symptoms, the secondary reactions before the medications used for the clinical square of the DN and the degree of inability to carry out daily, labor activities and of enjoying recreational activities. The data show that the patients maintain a continuous advance of the physical deterioration in relation to the chronicity of the illness that you/they go from light (12%), moderate (11%) and severe with 40%, in connection with 37% in normal, like it can be observed in the Figure 1. Affecting a considerable percentage (63%), some of their capacities and physical functions in the deterioration of the quality of life of those subject of the studied sample. When comparing the differences by means of ANOVA, it was statistical significance of $p < 0.000$.

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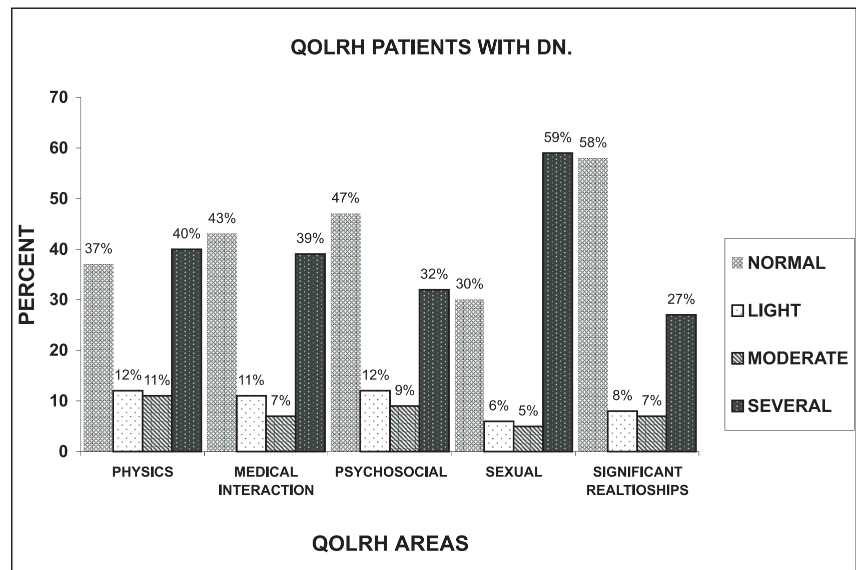

Figure 1. Level of impairment of the quality of life patients with DN, in the areas Physics, Medical Interaction, Psychosocial, Sexual and of Significant Relationships.

In the Area Psycho-social, where they are integrated reagents that they evaluate emotional aspects, such as anxiety, depression, fears, concerns, self-concept and some aspects of social interaction

In relation to the measures obtained in the Area of Medical Interaction, where relating aspects are explored to the doctor-patient, nurse-patient relationship, and, as this relationship contributes or it blocks the effectiveness of the treatment as well as to the satisfaction of the patients in relation to the treatment and attention that are offered on the part of these professionals of the health. As it is shown in the Figure 1, 43% with appropriate interaction, other 11% with light deterioration in the interaction, 7% with moderate and the rest 39% with severe deterioration in the medical interaction ($p < 0.000$).

In the Area Psycho-social, where they are integrated reagents that they evaluate emotional aspects, such as anxiety, depression, fears, concerns, self-concept and some aspects of social interaction. As it is observed in the Figure 1, 47% of the fellows in study without any degree of deterioration, 12% with light deterioration, 9% with moderate and the rest 32% with severe deterioration in the aspects before mentioned ($p < 0.000$).

Inside the Sexual Area, where relating aspects are evaluated to the sexual interest of the patients in study, the presence or absence of sexual malfunction, as well as the abilities to establish new couple relationships. The data show that 30% didn't present some level of deterioration, 6% with light deterioration, other 5% with moderate and 59% with severe deterioration ($p < 0.004$), standing out in this last item the sexual malfunction (Figure 1).

As for the area significant relationships that evaluates relating aspects to the communication with the couple of the patients, affective expressions and couple interaction. As it is observed in the Figure 1, a 58% of those subject of the sample in study, it didn't present some degree of deterioration in this area, other 8% for light deterioration, 7% for light and lastly 27% for severe deterioration ($p < 0.000$).

Lastly, regarding the application of the statistical analysis, where the differences were analyzed in the index of deterioration of the quality of the patients' life with DN through a variance analysis (ANOVA), the data showed

that differences exist statistically significant in the areas that it evaluates the deterioration of the quality of the patients' life in connection with the progressive advance of the illness, like one observes in the Table 2. Additionally, in the association of variables independent-clerk, like it is shown in the Table 3, it was found that this differences went statistically significant at the 0.000, when relating the index of deterioration of the quality of life with the time of evolution of the degenerative chronic condition of the DM-2 of more than ten years, the educational level under, the age bigger than 50 years, among others.

AREA	LEVEL OF IMPAIRMENT	N	HALF TOTAL	STANDARD DEVIATION	F	STATISTICAL SIGNIFICANCE P < 0.05
PHYSICS	NORMAL	33	0.330	0.470	7.229	0.000
	LIGHT	10	0.100	0.300		
	MODERATE	12	0.120	0.330		
	SEVERE	45	0.450	0.500		
INTERACTION WITH THE TEAM OF HEALTH	NORMAL	39	0.390	0.490	8.618	0.000
	LIGHT	10	0.100	0.300		
	MODERATE	8	0.080	0.270		
	SEVERE	43	0.430	0.500		
PSYCHO-SOCIAL	NORMAL	46	0.460	0.500	15.051	0.000
	LIGHT	12	0.120	0.330		
	MODERATE	10	0.100	0.300		
	SEVERE	32	0.320	0.470		
SEXUAL	NORMAL	32	0.320	0.470	4.717	0.004
	LIGHT	6	0.060	0.240		
	MODERATE	5	0.050	0.220		
	SEVERE	57	0.570	0.500		
SIGNIFICANT RELATION SHIPS	NORMAL	55	0.550	0.500	20.712	0.000
	LIGHT	8	0.080	0.270		
	MODERATE	9	0.090	0.290		
	SEVERE	28	0.280	0.450		

Table 2. ANOVA. Patients with DN

VARIABLE	CHI-SQUARE	lg	*SIGNIFICANCE
1. Evolution of the Illness: > 15 years	82.000	25	0.000
2. Age: > 50 years	71.600	20	0.001
3. Civil state: Married	290.100	4	0.000
4. Educational level level: < 5 years	129.440	7	0.000
5. Occupation: Pensioners	63.578	11	0.002

* p<0.05

Table 3. Association among the index of impairment of the quality of life patients' with DN, in connection with the time of evolution of the illness and some variable socio-demographics

DISCUSSION

The purpose of this study was to measure the level of deterioration of the quality of the patients' life with diabetic nephropathy by means of the scale QOLRH. The data presented previously show in the participant fellows of the investigation, a considered percentage (70%) with deterioration in their quality of life in the evaluated areas that they understand the scale (physics, medical interaction, psycho-social, sexual and of relationships of couple).

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The profiles of the quality of life in the different areas, show a gradual and progressive process in connection with the gradual advance of the chronicity of the illness. Inside the affected areas, they stand out the Sexual area where the malfunction as well as the sexual interest rebounds in its normal operation. Mentioned the above-mentioned, one of the complications of the autonomic neuropathy evidences as consequence from the metabolic no-control to which the patients are studying mainly those of the masculine sex. Concomitantly, this sequel impacts in the deterioration of couple's relationship on one hand, for other, in the emotional state, when not having knowledge of what is passing him in its sexual operation. Factors that contribute to diminish the self-esteem and to increase the depression risk. These discoveries, agree with some studies like those of: De los Ríos[35]; Macdougall I.C.[36]; Baum N.[37]; Dunning P.[38]; Guirguis W.[39]; Morrison H.[40]; Lawrence I.G.[41]. An aspect that supports mentioned the above-mentioned, is the comments of the patients that you/they went in relation to:

"For years I don't have erection and I sit down not well emotionally; I cannot have relationships for the erection lack; I have not had relationships with my wife as For five years and this affected our relationship; we no longer sleep together since I don't have erection; I give me pain to comment it with the doctor; one doesn't eat to tell to the doctor on the erection problem; since I am in dialysis, I cannot have intimacy with my husband", among others.

"For years I don't have erection and I sit down not well emotionally; I cannot have relationships for the erection lack; I have not had relationships with my wife as For five years and this affected our relationship; we no longer sleep together since I don't have erection; I give me pain to comment it with the doctor; one doesn't eat to tell to the doctor on the erection problem; since I am in dialysis, I cannot have intimacy with my husband", among others

Regarding the area of medical interaction, where the deterioration of the doctor-patient, nurse-patient relationship, continues being an obstacle for the effectiveness of the treatment, joined to the faulty attention and treatment that are offered to the patients on the part of the team of health. With repercussions in the failure in the adherence to the treatment on one hand, for other, in the satisfaction of the patients.

Additionally to the gathering of the data in this area, the comments of the patients went in relation to: "The doctor has list the recipe before to wonder and to revise me; When I go entering to the clinic he already has list the recipe; they don't revise us appropriately; they don't turn us to see; they don't care; in less than five minutes they take out us; they don't have time neither interest for us; That treat us with kindness and that they explain to us the medicine; they are not lent to make them you ask; The attitude of the doctors toward us is of desperation and lack of interest", among others.

In what concerns to the physical area, where the deterioration is translated in the presence of certain symptoms like cramps, numbness of the feet, pain, nausea, vomit, increase of weight mainly for the retention of liquid for the dialyses, edema in the face and inferior members, loss of dental pieces, diarrheas, among others. These particularities seem to indicate that, the physical deterioration maintains a continuous and progressive advance that one manifests in the decrease of the functional capacity to carry out their labor, recreational, family activities or its adaptation to the imposed demands of its immediate environment.

With regard to the area psycho-social, the deterioration in the quality of the patients' life is translated in the emotional aspects, such as anxiety, depression, fears and concerns, when presenting light or sharp signs of physical or psychological importance. It is important to highlight that, most of the patients manifest a great anxiety and stress before the advance of the illness, caused by the presence of physical nuisances, loss of weight,

secondary reactions for the medications, infections, recurrent hospitalizations. Concomitantly, the situations that refer him adverse information, for example knowing the high figures of sugar in the blood y/o the presence of new signs and symptoms make him think that their treatment is not working appropriately, being a source of constant concern for the patients. Joined to depend on the members of the family (wife, bigger children) and of the members of the team of health. The weight that represents their personal care, transporting it, the periodic dialyses, the dietary handling, joined to the physical restrictions, they rebound in their social operation.

Finally, in the area of significant relationships, the deterioration of the quality of the patients' life, it is translated in the you lack of communication with their couple. Being known in the condition of "diabetic and nephropathy", without a doubt it bears to an emotional impact in their relationship. Concomitantly, the due physical, emotional and sexual changes to the malfunction and loss of the sexual interest. They become factors of risk that influence in the state of the quality of life.

Of mentioned the above-mentioned, these particularities seem to indicate on one hand that the patients with diabetic nephropathy present signs light sharp or in the deterioration of their quality of life, for other, the characteristic socio-demographics like the educational level under, the age bigger than 50 years and the time of evolution of the illness of but of ten years, they are factors of risk associated to the deterioration of the quality of these patients' life. The data demonstrate systematically in the diverse evaluated areas that the degree of deterioration of the quality of life this related with the evolution of the chronicity of the diabetes, mainly the one referred by disease, product of the metabolic no-control and the lack of therapeutic adherence.

The results of this study, agree with those of De los Rios & Guerrero[42]; Goldstein & Reznikoff[43]; Szabo[44]; Kimell[45-48]; Singer[49]; Merkus[50]; Korevar[51]; Mingardi[52]; Gokal[53]; Kennedy[54]; Kutner[55]; Lavenson[56]; Shidler[57]; Lawrence[58]; Macdougall[59]; Phillips[60]; Theodora[61], in the sense that the patients with inadequacy renal chronicle for diabetic nephropathy, show a gradual process in the deterioration of their quality of life with relatively uniform tendencies as the illness advances in connection with the chronicity of the suffering.

On the other hand, the results of this study, had procedures of dependability and validity in the handling of the instruments that they allow to confirm that the measures of the impairment of the quality of life in this type of patients can serve as base for future investigations.

Additionally, to the gathering of data, a considerable number of patient in the phase of the application of the instrument QOLRH, was a means to manifest its feelings repressed in relation to the perceived treatment and received by the team of health, its fears and concerns and the problems with its couple related with the deterioration of the sexual functionality, among others.

We concludes that this study has allowed to show a bigger understanding of the elements that they underlie in the impairment of the quality of life the patients with Diabetic Nephropathy, recognizing that the results of this type of investigations reveal the importance of the factors psycho-social in the handling and control of the illness. Considering the convenience of integrating the attention in an interdisciplinary way on the part of the nurses, doctors and psychologists of the health. To orchestrate

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preventive programs that impact in the deterioration of the quality of life in this type of patient. Additionally, the instrument QOLRH-DN, allows an integral approach to the patients with DN from a holistic perspective in relation to its symptomatology and complications. It is a questionnaire designed explicitly in the consultation, their time of application is short, easy to manage and to interpret, and its development process and validation has been rigorous and I complete. With that which can help the personnel of health in the taking of decisions about possible changes in the treatment; passing to prioritize and to value in more measure the well-being and the patient's perception on their state of health. E

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