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ORIGINAL ARTICLE

THE QUALITY OF LIFE OF THE PATIENT SUFFERING FROM CHRONIC RENAL INSUFFICIENCY UNDERGOING HEMODIALYSIS QUALIDADE DE VIDA DO PACIENTE COM INSUFICIÊNCIA RENAL CRÔNICA EM TRATAMENTO HEMODIALÍTICO

CALIDAD DE VIDA DE LOS PACIENTES CON INSUFICIENCIA RENAL CRÓNICA EN HEMODIÁLISIS

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ABSTRACT

Objectives: to evaluate the patient's life quality suffering from chronic renal insufficiency undergoing hemodialysis. **Method:** exploratory-descriptive study carried out in one hemodialysis clinic in the West of Santa Catarina State/SC/Brazil, in the first semester of 2010, with a study population of 28 patients. To collect the data, the Portuguese version of the *Medical outcomes study 36-Item Short Form Health survey (Questionnaire SF-36)*, was used. The research project was evaluated and approved by the *Ethics Committee on Human Research* from the University of Santa Catarina/UDESC/CEPSH/UDESC nº 274/2009. **Results:** the quality of life of the study population was affected by the daily activities of functional capacity, vigorous, moderate and other capacities. **Conclusion:** the quality of life of the chronic kidney disease patient on hemodialysis is compromise, either by functional capacity, by the family relationship or through changes in lifestyle due to the limitations of social work activities and leisure. **Descriptors:** Quality of Life; Chronic Kidney Insufficiency; Renal Replacement Therapy.

RESUMO

Objetivo: avaliar a qualidade de vida do renal crônico em tratamento hemodialítico. **Método:** estudo quantitativo, descritivo, realizado em uma clínica de hemodiálise no Oeste de Santa Catarina/SC/Brasil, no primeiro semestre de 2010, com população composta de 28 pacientes. Para a coleta de dados, foi utilizada como instrumento a versão em português do *Medical outcomes study 36-Item Short Form Health survey (Questionário SF-36)*. A pesquisa teve o projeto avaliado e aprovado pelo Comitê de Ética em Pesquisa com Seres Humanos da Universidade do Estado de Santa Catarina/UDESC/CEPSH/UDESC nº 274/2009. **Resultados:** a qualidade de vida da população em estudo está prejudicada pelas atividades diárias de capacidade funcional, atividades vigorosas, moderadas e outras. **Conclusão:** a qualidade de vida do paciente renal crônico em tratamento de hemodiálise está comprometida, seja pela capacidade funcional, pela relação familiar ou através das mudanças de hábitos de vida social decorrente das limitações de atividades laborais e de lazer. **Descritores:** Qualidade de Vida; Insuficiência Renal Crônica; Terapia de Substituição Renal.

RESUMEN

Objetivos: evaluar la calidad de vida del renal crónica en hemodiálisis. **Método:** estudio cuantitativo, descriptivo, realizado en una clínica de hemodiálisis en el oeste de Santa Catarina/SC/Brasil, en el primer semestre de 2010, con una población compuesta por 28 pacientes. Para recopilar los datos, se utilizó como instrumento la versión portuguesa del *Medical outcomes study 36-Item Short Form Health survey (Cuestionario SF-36)*. La encuesta haber proyecto evaluado y aprobado por el Comité de Ética en Investigación Humana de la Universidad del Estado de Santa Catarina/UDESC/CEPSH/UDESC nº 274/2009. **Resultados:** la calidad de vida de la población en estudio está perjudicada por las actividades de la capacidad funcional diaria, actividades vigorosas, moderadas y otras. **Conclusión:** La calidad de vida de los pacientes con enfermedad renal crónica en hemodiálisis está comprometida, ya sea por la capacidad funcional, por relación familiar o mediante cambios en el estilo de vida, debido a las limitaciones de las actividades de servicios sociales y de ocio. **Descriptores:** Calidad de Vida; Insuficiencia Renal Crónica; La Terapia de Reemplazo Renal.

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INTRODUCTION

Quality of life (QOL) refers to the perception of the individuals about themselves and how they rate their relationships in the cultural and values context of their environment, as well as their own goals, expectations, standards and concepts. The assessment of QL has been a parameter used worldwide, because it is the perception of the individual in relation to his own life. It is a highly subjectivity assessment, but it is not only an impression about their actual health conditions, studies have shown that self-reported health status as poor or scarce have higher mortality risk than those who reported having better health.

Quality of life is defined by the World Health Organization as "an individual's perception about their position in life in the cultural context and value system where they live and in relation to their goals, expectations, standards and concerns." In a broad feeling, covers the social and economic well-being and/or vocational and religious conditions and/or spirituals¹. Outlines the perception of the individual in the physical and psycho-social functions.²

In patients with chronic renal insufficiency, in relation to quality of life, this may be influenced by the disease itself and or the method of renal replacement therapy. Although some factors such as age, presence of anemia, comorbidities, and depressive feelings can negatively influence the quality of life. Such problems when detected at the beginning of the treatment can be handled adequately to enable therapeutic interventions in the positive evolution of the disease.

There are numerous difficulties faced by the patient with chronic kidney disease (CKD), which affect their day-to-day and the way they relate, is the dependence of the dialysis machine or by frequent trips to the doctor, hindering thus the performance their activities ocupacionais³ what, therefore, can add many difficulties and restrictions in their quality of life.

Chronic Kidney Disease (CKD) and its complications arising from treatment affect the patient's functional abilities, limiting their daily activities.⁴ It's a public health problem worldwide - its incidence and prevalence increases progressively with unfavorable and costly.

Those patients who rely on advanced technology such as the dialysis machine that replaces kidney function to survive, have

limitations in their daily lives and experience numerous losses and bio psychosocial changes that interfere with their quality of life such as job loss, changes in body image, dietary restrictions.⁶

Thus aroused the interest is to investigate how the quality of life of patients with chronic renal failure undergoing hemodialysis.

OBJECTIVE

- To evaluate the quality of life of the CKD patient undergoing hemodialysis.
- To identify the daily activities that are compromised and the social and family interactions of the patients.

METHOD

Descriptive study with a quantitative approach, performed in a hemodialysis clinic in western Santa Catarina in the first half of 2010. There were treated 138 patients with CKD on hemodialysis, among which 28 comprised the sample (20% - N28).

For the inclusion in the sample, the criteria were: being patient with CKD, being on hemodialysis, age over 18 years, with up to 3 years of hemodialysis treatment and ability to listen and speak. Patients with problems of hearing and / or verbalization were excluded from the sample and those that were institutionalized at the time of the survey.

As an instrument of data collection was used the SF-36 Health Survey, which is widely applicable in relation to chronic diseases, and well accepted among researchers because of its ease of implementation and reliability of the results,⁷ with this questionnaire the following domains were evaluated: Physical Functioning, Role Physical, Pain, General Health, Vitality, Mental Health and Emotional Aspects.

Considering the Brazilian version of the SF-36 the eight scaled scores were analyzed separately and the first four scales were respectively to the physical evaluation and the last four scales corresponding to the mental health evaluation. To evaluate the results a score is given to each question that, later, will be transformed in a 0 to 100 scale where 0 (zero) corresponds to the worst health status and 100 to the best health status.¹⁻³

After the application of the instrument, we analyzed the significance of the data, the average data were calculated and tabulated and the results analyzed by Microsoft Excel.

The research was conducted according to the ethical issues involving human beings

recommended by Resolution 196/96 of the National Research Ethics. The research project was submitted to the Ethics Committee on Human Research at the University of the State of Santa Catarina (UDESC), and was approved as embodied opinion CEPSH / UDESC No 274/2009.

RESULTS AND DISCUSSION

Participants were 28 patients on hemodialysis in Hemodialysis Clinic in western Santa Catarina, totaling 20% of the population during the study period. The mean age of subjects was 48.9 years (range 20-76), as seen in the figure below 50% of the sample population was between 40 to 59 years.

As to the profile of the patients who took part in the survey, these are presented in table 1:

Table 1. Profile of the patients undergoing hemodialysis

Characteristics	N	%
Sex		
Masculine	10	35,71
Feminine	18	64,28
Age Interval (in years)		
20 to 39	08	28,57
40 to 59	14	50,00
60 and up	06	21,42
Education		
Doesn't read/write	03	10,71
elementary school incomplete	12	42,85
elementary school completed	02	07,14
Secondary education incomplete	02	07,14
Secondary education completed	07	25,00
Higher education	02	07,14

Researchers have noticed the predominance of elderly people being treated for hemodiálise.⁹ In Latin America¹⁰, 40% of incident patients on dialysis program have more than 65 years. This finding can be attributed to the increased life expectancy of the population and an increase in admissions of elderly patients to dialysis treatment and also the natural history of diseases such as diabetes mellitus and hypertension which can lead to loss of kidney function over the years.

In this study there was a predominance of people between 40 and 59 years, which can be explained by the selection criteria were interviewed who had the ability to audition and verbalization. Of dialysis patients, 26% are over 60 years old, and this ratio tends to rise with the increase in life expectancy in this age etária.¹⁰ The predominance of persons 60 years and older in this study was 21% (n = 6). As to gender, more than 64% of the samples were women.

In Brazil, a prospective study that evaluated the impact of the socioeconomic profile of the quality of life, noted the predominance of males undergoing hemodialysis. According to the Brazilian Nefrologia¹¹, the prevalence of men on dialysis was 57% and women 43%. The result of this study differs from previous studies. However, it can take into account the fact that the sample is relatively small to assume a possible reversal of gender on disease prevalence.

As for education, it was observed that corresponded to the categories: Illiterate 10.7%, 10.1% complete primary education and

incomplete secondary education 10.1%. Already with uncompleted primary education the prevalence was 42.8%, High school graduate 25% and with higher education, 10.1% of the sample.

The level of education has been pointed as a predictor of good living conditions, since it is associated with socioeconomic conditions. People with more education have a greater chance of early diagnosis of chronic kidney disease and / or treatment to slow the progression of the disease. It is believed that patients with more education may possess intellectual resources capable of generating better emotional adaptation to the consequences of chronic kidney disease and treatment.¹²

When traced the profile of patients on hemodialysis, there was a predominance of males, less educated, lower income, lower level of economic classification.⁹

There are studies that show a significant association between increased mortality and markers of lower socioeconomic status and lower educational and socioeconomic class C, D or E, i.e., more disadvantaged socioeconomic classes.⁹

In a study to ascertain the knowledge of chronic renal patients on hemodialysis, we found a positive correlation in the degree of knowledge and understanding of the disease, but this aspect is negative when the level of knowledge appears smaller in relation to the care and prevention of chronic diseases.¹³

Regarding the time of Hemodialysis, 71.4% of the sample had between 0 (zero) and one year of treatment and the others, between 2

and 3 years (28.6%), as can be seen in Figure 1.

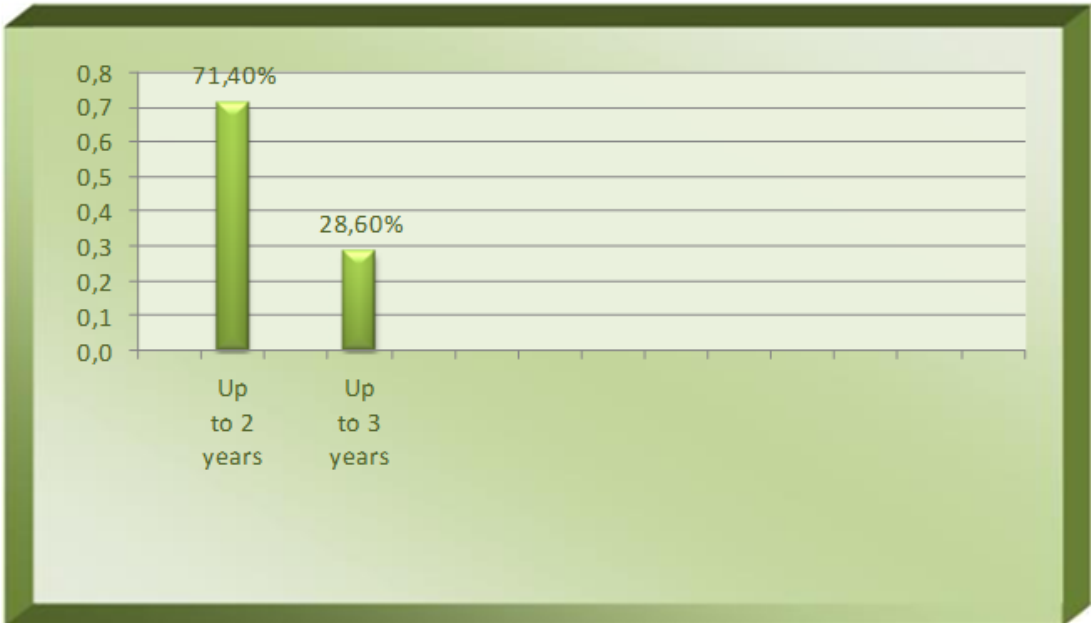


Figure 1. Distribution according hemodialysis. Source: The authors (2010)

Some authors suggest that the greater the time spent on hemodialysis, the greater the strategies developed by individuals to cope with both the disease and treatment.¹²⁻⁴

According to study conducted, it was observed significant impairment of physical and emotional conditions of patients at baseline (time of dialysis <3 months). It was also observed that there is little information on the quality of life of patients with CRF on dialysis for longer periods in our midst.¹²

Time on hemodialysis correlated negatively with emotional aspects¹², suggesting that patients with longer dialysis CRI and present progressive impairment of family and social relationships, either by conditioning treatment, economic disruption or even the fact of making It is dependent on a machine.

As the analysis of the 8 domains, interpretation of data is considered a scale of 0 to 100 (where 0 corresponds to the worst health and 100 to a better state of health). Whereas the first four dimensions are related to physical health and the last 4 are related to mental health.

According to these parameters we note that the physical functioning domain scored a mean of 47.67%; Limitation by physical aspects showed an average of 12.5%; Pain had an average of 44.5%; General health had an average of 52.82%; Vitality showed an average of 60.53%; Social Aspects showed an average of 66.51%; Limitations due to emotional aspects showed an average of 40.47%; Mental Health showed an average of 58, as can be seen in Figure 02.

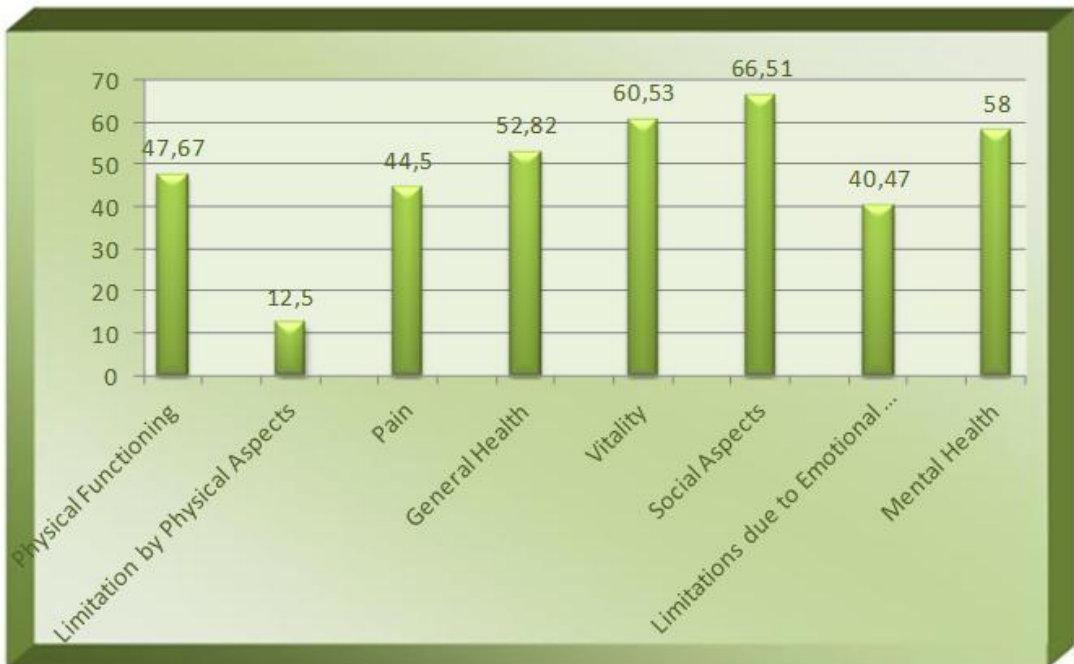


Figure 2. Average of the Fields Source: The authors (2010)

The physical health dimension, which corresponds to the first four fields had an average of 39.37 and the last four linked to

mental health had mean 56, 37, i.e., the physical aspects were found to be more

committed to the issues related to mental health.

The health assessment done by this instrument¹⁵ considers physical health as not just a physical condition free of disease, but also the possibility of performing physical activities (activities of daily living, work, leisure or social) without limitations due to pain or complications. Similarly, mental health is assessed as being not merely the absence of disease or symptoms of mental order, but also a condition in which individuals enjoy feeling of psychological well-being and are able to perform their activities of daily living, social and work without interference from the health problem.

One key indicator of health is vitality, which may present itself through action and behavior adopted before daily circumstances and experience of the individual criticisms, as well as their relationships. The vitality can be expressed in physical, psychological, level of independence, social relationships, environment and spirituality / personal beliefs.¹⁶

In the present study showed the vitality average 60.53%, higher than those presented in other studies.^{12,14} The majority of patients reported a feeling of tiredness and exhaustion just after hemodialysis, not considering this condition being tired most of the time, this aspect was evident in people of younger age, because individuals above 60 years reported higher fatigue present, since they have co-morbidities associated with chronic kidney disease.

No record of a negative correlation between age and size, physical functioning, role physical, bodily pain and vitalidade¹², i.e., with advancing age, there is greater impairment in physical activity and functional patient, a fact that may be related the biological cycle of human aging.

Regarding the daily activities impaired due to disease and treatment, it was observed that there was a greater commitment when carried out vigorous activities that require a lot of effort, such as running, lifting heavy objects, participating in strenuous sports. There was variation between the answers when asked about the difficulty experienced. There was greater limitations in vigorous activities, climbing several flights of stairs and walking several blocks; moderate limitation for lifting or carrying groceries, moderate activities such as moving a table, vacuuming, playing ball and sweep the house. Activities such as bathing or dressing few people reported having difficulties, showing that the

greater the degree of effort and complexity, the greater the difficulties presented.

When asked about the changes faced in the family, illness and treatment motivated by a majority of respondents reported changes in eating habits, restriction of tasks inside and outside the home, job abandonment, the largest family approach, mandating dislocation from home three times a week and still limit the travel.

In a case study conducted in 2010¹⁷ with patients with hemodialysis, it was noted that among the changes that occur in the daily life of a patient with CRI during the disease process and treatment of hemodialysis, the predominant factor of the restriction was perceived changes in family life and away from work.

Because the condition of chronic kidney disease and hemodialysis treatment is a potential generator of stress, causing conditions of disadvantage by causing isolation from society, unemployment, Social Security dependency, loss of autonomy by machine dependence, restrictions on physical activity, need to adapt to the new lifestyle, body image changes, still generates a feeling of fear of the unknown disease.¹⁸

The patient with CRI undergoes a series of physical limitations, social and emotional, including difficulties in occupational performance, water restrictions, special diets, medical and dialysis sessions, making the person weak and disrupting their daily lives. In this regard, discuss the emotional of the renal patients is, first of all, path loss that goes beyond the loss of kidney function. From the moment of diagnosis to the possible realization of transplantation (single real expectation of "cure"), the path of chronic renal impairment is traversed by a range of other issues which show his troubled personal and family dynamics.³

Regarding the question social and family interaction most of the sample reported attending the church or to elderly groups, Center of Gaucho Tradition - CTG, groups of mothers and family reunions.

The reactions of the person affected by the disease stem from their social circumstances, culture, beliefs and personal values, support individual and group psychotherapy and informal support (focused on social relationships, work and family) and can be used as useful strategies for that the patient can adapt to the adverse circumstances, the disease originated and treatment.¹⁸ Support networks can present themselves accordingly as support mechanisms in fighting the disease

and adherence to treatment, softening amendments submitted by disease patients chronic kidney, thus supporting a better quality of life for this population.¹⁹

CONCLUSION

In general, the fields of Social Aspects, Vitality, General health and Mental Health had the highest scores, indicating better health status. Furthermore, limitations due to Physical Conditions, Limitations due Emotional Aspects and Pain were the dimensions considered among the most compromised among individuals who participated in the study.

The field Limitation due Physical Aspects revealed the negative impact of CKD on the ability to work and daily activities, with certainly results in health. However, it should be noted that this limitation is not only for health problems arising from kidney disease and the treatment; it may also be associated with age and preexisting conditions and or complications.

The study also indicated for the repercussions of the disease and treatment on the social activities of the patients and implications on their vitality, which rescues the need to invest in the quality of life of these individuals. Adaptation strategies should value their independence, promote their social relationships, promote self-care and their physical and mental health.

The loss of quality of life of patients with chronic kidney disease on hemodialysis is indeed becoming evident in aspects related to impairments of everyday life such as climbing stairs, or family relationship as in changing food habits and social life due to the limitations of activities leisure and work activities.

Research and technological innovation can lead to new approaches to help patients better living with the disease and limitations brought about by it. Other investments, such as strategies for health education and greater opportunity of schooling can also promote the quality of life of these individuals, bringing more knowledge about the disease and especially favoring self-care, reducing the propensity to other health complications common among the group investigated.

Thus, it is necessary and urgent the commitment of support networks for this population marked by limitations, rules and daily deprivations. Support both psychological and clinical becomes fundamental in the different stages of the disease. Guidelines measures that could improve life conditions or

REFERENCES

1. Ravagnani LMB, Domingos NAM, Miyazaki MCOS. Qualidade de vida e estratégias de enfrentamento em pacientes submetidos a transplante renal. Estudos de Psicologia [Internet]. 2007 [cited 2010 Apr 20];12(2):177-84. Available from: <http://www.scielo.br/pdf/epsic/v12n2/a10v12n2>
2. Melo TR, Jansen AK, Pinto RMC, Morales RR, Morales NM, Prado MM et al. Qualidade de vida de cuidadores de crianças e adolescentes com sobrepeso ou obesidade. Rev Esc Enferm USP [Internet]. 2011 [cited 2011 Aug 24];45(2):319-26. Available from: <http://www.scielo.br/pdf/reeusp/v45n2/v45n2a02>
3. Bezerra KV, Santos JLF. O cotidiano e pessoas com insuficiência renal crônica em tratamento hemodialítico. Rev Latino-am Enferm [Internet]. 2008 July/Aug [cited 2009 Oct 06] 16(4). [aproximadamente 6 p.]. Available from: http://www.scielo.br/pdf/rlae/v16n4/pt_06
4. Higa K, Kost MT, Soares DM, Moraes MC, Plins BRG. Qualidade de vida de pacientes portadores de insuficiência renal crônica em tratamento de hemodiálise. Acta Paul Enferm [Internet]. 2008 [cited 2010 Apr 13]; 21(spe):203-6. Available from: <http://www.scielo.br/pdf/apv/v21nspe/a12v21ns>
5. Moura L, Schmidt MI, Duncan BB, Rosa RS, Malta DC, Stevens A et al. Monitoramento da doença renal crônica terminal pelo subsistema de autorização de procedimentos de alta complexidade - APAC- Brasil, 2000 a 2006. Epidemiol Serv Saúde [Internet]. 2009 [cited 2009 Sept 12] Brasília;18(2):121-1. Available from: <http://scielolab.iec.pa.gov.br/pdf/ess/v18n2/v18n2a03>
6. Martins MRI, Cesarino CB. Qualidade de vida de pessoas com doença renal crônica em tratamento hemodialítico. Rev Latino-am Enferm [Internet]. 2005 Sept/Oct [cited 2009 Sept 13];13(5):670-5. Available from: <http://www.scielo.br/pdf/rlae/v13n5/v13n5a10>
7. Costa IFC, Melo GSM, Nobrega WG, Dantas DV, Macêdo EAB, Medeiros RKS et al. Utilização do SF 36 na avaliação da qualidade de vida relacionada a doenças crônicas: revisão de literatura. Rev enferm UFPE on line

[Internet]. 2010 Dec [cited 2011 Apr 26];4(spe):1929-34. Available from: http://www.ufpe.br/revistaenfermagem/index.php/revista/article/view/1472/pdf_248

8. Ciconelli RM, Ferraz MB, Santos W, Meinão I, Quaresma MR. Tradução para língua portuguesa e validação do questionário genérico de avaliação de qualidade de vida SF36 (Brasil SF-36). Rev Bras Reumatol [Internet]. 1999 May/June [cited 2009 Dec 20]; 39(3):143-50. Available from: http://www.nutrociencia.com.br/upload_files/artigos_download/qulalidade

9. Zambonato TK, Thomé FS, Gonçalves LFS. Perfil socioeconômico dos pacientes com doença renal crônica em diálise na Região Noroeste do Rio Grande do Sul. J Bras Nefrol [Internet]. 2008 July/Aug [cited 2010 May 06];30(3):192-200. Available from: http://www.jbn.org.br/detalhe_artigo.asp?id=57

10. São Paulo. Secretaria da Saúde. Perfil da doença renal crônica: o desafio brasileiro [Internet]. 2007 [cited 2010 Feb 26]. Available from: http://www.prefeitura.sp.gov.br/cidade/secretarias/upload/saude/arquivos/programas/Doenca_Renal_Cronica

11. Sesso R, Lopes AA, Thomé FS, Bevilacqua JL, Romão Junior JE, Lugon J. Relatório do censo brasileiro de diálise. J Bras Nefrol [Internet]. 2008 [cited 2010 Feb 26];30(4):233-8. Available from: www.jbn.org.br/audiencia_pdf.asp?aid2=26&nomeArquivo=30

12. Castro M, Caiuby AVS, Draibe SA, Canziani MEF. Qualidade de vida de pacientes com insuficiência renal crônica em hemodiálise avaliada através do instrumento genérico SF-36. Rev Assoc Méd Bras [Internet]. 2003 July/Sept [cited 2012 May 05];49(3):245-9. Available from: <http://www.scielo.br/pdf/ramb/v49n3/a25v49n3>

13. Roberto ES, Santos ED, Ferreira LB, Silva ER. Conhecimento de pacientes com insuficiência renal crônica sobre o tratamento dialítico. Ciências da Saúde [Internet]. 2008 July/Dec [cited 2009 Sept 12] Brasília; 6(2):131-9. Available from: <http://www.publicacoesacademicas.uniceub.br/index.php/cienciasaude>

14. Cattai GBPI, Rocha FA, Nardo Junior N, Pimentel GG. Qualidade de vida em pacientes com insuficiência renal crônica - SF-36. Cienc Cuid Saúde [Internet]. 2007 [cite 2009 Sept 13];6:460-7. Available from: <http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/5357/3394>

15. Martinez MC, Paraguay AIB, Latorre MRDO. As relações entre a satisfação com aspectos psicossociais no trabalho e a saúde do trabalhador. Rev Saúde Pública [Internet]. 2004 [cited 2012 May 11];38(1):55-61. Available from: <http://www.scielo.br/pdf/rsp/v38n1/18452>

16. Martins MRI, Cesarino CB. Qualidade de vida de pessoa renal crônica em tratamento hemodialítico. Rev latino-am enferm [Internet]. 2005 [cited 2005 Sept/Oct];13(5):670-6. Available from: <http://www.scielo.br/pdf/rlae/v13n5/v13n5a10.pdf>

17. Mattos M, Maruyama SAT. A experiência de uma pessoa com doença renal crônica em hemodiálise. Rev Gaúcha Enferm [Internet]. 2010 Sept [cited 2012 May 11];31(3):428-34. Available from: <http://www.scielo.br/pdf/rgenf/v31n3/v31n3a04>

18. Machado LR, Car MR. A dialética da vida cotidiana de doentes com insuficiência renal crônica: entre o inevitável e o casual. Rev Esc Enferm USP [Internet]. 2003 [cited 2010 May 13];37(3):27-35. Available from: <http://www.scielo.br/pdf/reeusp/v37n3/04>

19. Maldaner CR, Beuter M, Brondani CM, Budó MLD, Pauletto MR. Fatores que influenciam a adesão ao tratamento na doença crônica: o doente em terapia hemodialítica. Rev Gaúcha Enferm [Internet]. 2008 Dec [cited 2010 Feb 26];29(4):647-53. Available from: <http://seer.ufrgs.br/RevistaGauchadeEnfermagem/article/view/7638>

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