



Development of the Rotterdam Renal Replacement Knowledge- Test (R3K-T)

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Disclaimer report

This report is the first document to describe our focus group investigation and in-depth interviews in order to gain insight in the attitudes, (non-)communication and knowledge of our non-European patients regarding living donor kidney transplantation. The report is a detailed description of our investigation and was made directly after the data collection, in order to allow fast communication between researchers and/or clinicians. As such, this report provides technical details about the methodology and extensive tables of the data.

Although the report will probably remain the most detailed description of our research effort, it must not be seen as the final interpretation of the results. The report will serve as an easy referable and accessible collection of the (almost) raw research data, on which basis we hope to write peer-reviewed articles. This original report will remain available on request, for those researchers who would like to have a detailed description of our first research steps and the accompanying data. Note that parts of the report still reveal our early thoughts and interpretations, which are characteristic for a first report written just after finishing the data collection.

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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Introduction: There is currently a lack of validated or standardized measures to test the level of knowledge among renal patients regarding kidney disease and available treatment options. We conducted a pilot study to develop a questionnaire measuring knowledge of kidney disease, dialysis and transplantation options. The main aim of this study was to develop such an instrument for further use in research and practice.

Method: An initial 61 item pool was generated by searching the literature and consulting experts in this area for additional items. This questionnaire was completed by 182 renal disease patients from 4 dialysis centers in the Rotterdam municipality. A factor analysis was conducted using the maximum likelihood factor method followed by direct oblimin rotation to obtain variance explained by each factor. Questions that loaded $\geq .30$ on a factor were included.

Results: Twenty-seven patients (24%) were in the pre-RRT phase, 60 (54%) were undergoing haemodialysis, 16 (14%) were undergoing peritoneal dialysis, and 9 (8%)

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had a graft failure. Forty (36%) were female and 72 (64%) were male. Age range 19-87 (median = 59). A factor analysis was conducted to reduce the number of items. This resulted in 30 items consisting of 5 subscales regarding knowledge on: kidney disease (5 items, $\alpha = .37$), peritoneal dialysis (4 items, $\alpha = .73$), haemodialysis (4 items, $\alpha = .41$), kidney transplantation (12 items, $\alpha = .86$), quality of life (5 items, $\alpha = .59$).

Discussion: This study aimed to develop an instrument with which knowledge of kidney disease and the related treatment options can be reliably measured. This study resulted in a short and easy to administer knowledge questionnaire. We intend to further explore the psychometric properties of this instrument and develop norm scores for the general public and patients at various stages of the disease and treatment. We have also considered translated versions of this questionnaire.

Key words: Knowledge, Health Education, End stage renal disease, Renal Transplantation, Psychometric.

Introduction

Knowledge can be seen as one of the strongest motivators for promoting adherence and for making well-informed decisions (Kumar, Shaikh, Khalid, & Masood, 2010). In order to support informed decision making we need to recognize possible gaps in their knowledge. If we look into decision making in other chronic diseases such as cancer one can see that knowledge can be considered as one of the strongest motivators for promoting adherence and for making well-informed decisions (Kumar, et al., 2010). Before we start developing interventions and other procedures to improve the level of knowledge in kidney patients, it is important to have an instrument to capture their current state of knowledge regarding their disease. This is necessary in order to identify gaps in knowledge and to test the efficacy of educational efforts. Consequently, this would provide clinicians and policy makers a reference point from which they could constitute a tailored program to educate their patients. There is currently a lack of validated and standardized measures to test the level of knowledge among renal patients regarding kidney disease and available treatment options. The main aim therefore of this study was to develop and validate such an instrument for further use in research and practice.

Method

We searched the literature for questionnaires measuring knowledge on renal replacement therapy (RRT). This resulted in 2 measures (Devins, et al., 1990; Rodrigue, Cornell, Lin, Kaplan, & Howard, 2007; Stothers, 2004). We expanded with consulting experts in this area for additional items (e.g. nephrologists, transplant coordinators, social workers). The result was a pool of 61 items of closed multiple-choice questions (see Appendix A). In order to avoid the possibility of patients

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responding without knowing the answer, the last response category for all questions was “I don’t know”. We conducted a pilot study to investigate the content validity of this questionnaire namely, measuring knowledge of kidney disease, dialysis and transplantation options. Content validity is a judgement whether an instrument captures the relevant or important content or domains (Steiner & Norman, 1995). To examine content validity, we performed an exploratory factor analysis (Thompson, 2004). This process was refined with reviews from experts. Following this dual selective process, some items regarded as inappropriate were removed from the questionnaire, other items were reformulated for enhanced clarity and precision. To ensure face validity pre-test patients (N=6) were asked to comment on the questionnaire regarding certain problems associated with the questionnaire such as, problems with the formulation of the questions, relevance and appropriateness of the responses. Based on this information, the questionnaire was adapted.

Patients

This pilot study was conducted among 182 patients of four different clinics in the Rotterdam municipality. Patients were either in the pre-RRT phase (24%), being treated with haemodialysis (54%), peritoneal dialysis (14%), had a graft failure (8%). 64% Male; 36% Female. Age range 19-87 (median = 59). Inclusion criterion was being able to understand the Dutch language sufficiently. When reading (Dutch) was compromised/limited, the questionnaire was conducted verbally. Another criterion was being cognitively and physically capable of filling out the questionnaire individually or with assistance from the researchers.

Data-analyses

After that, factor analysis was applied to the 61 items of the questionnaire. The maximum likelihood factor method was followed by direct oblimin rotation by which we allowed factors to be correlated or oblique to one another. Eigenvalues represent the variance explained by each factor, and the proportion of variance explained by each factor is the eigenvalue for this factor divided by the sum of all eigenvalues (Kaiser-Guttman criterion). The number of factors chosen for the direct oblimin rotation was based on the number of factors with an eigenvalue >1 , because factors with eigenvalues greater than 1 explain more variance than any single (scaled) question. Since the Kaiser criterion may retain too many factors when there are many variables we also looked at the scree test, which essentially looks for a marked break between the initial big factors that explain the largest proportion of the variance and the later smaller factors that explain very similar and small proportion of the variance (Cattell, 1966). Significant loading of questions on the factors was defined as >0.30 . Factor labels (i.e. content) were determined on the basis of the questions with the largest significant loadings on those factors. Finally we also explored the internal consistency reliability, which is the degree to which the items of the instrument are related to each other (Steiner & Norman, 1995). This was determined on the basis of the Cronbach α of the 61 items. A value >0.70 was considered to show adequate internal consistency reliability.

Results

The following factors were determined following this line of data-analysis: kidney disease (5 items, $\alpha = .56$), peritoneal dialysis (4 items, $\alpha = .73$), haemodialysis (4 items, $\alpha = .38$), kidney transplantation (12 items, $\alpha = .86$) and quality of life (5

items, $\alpha = .57$). Cronbach's α was .81 for all patients. Our results demonstrated good internal consistency reliability and content validity for the 30 item questionnaire which we named the Rotterdam Renal Replacement Knowledge-Test (R3K-T) (see Appendix B).

Discussion

Validation

Our next step is to further explore the psychometric properties of the R3K-T, including reliability, validity, sensitivity, and the minimally important difference (MID; i.e. clinically significant change) for evaluating disease-specific knowledge in renal end-stage patients during the different stages of their disease process.

Additionally we need to do some confirmative or unidimensionality tests to validate the factor-structure revealed in this exploratory phase. The long-term purpose of the R3K-T would preferably be to discriminate between well-informed and poorly informed patients regarding their disease and the concurrent treatment options.

We would like to assess and validate this questionnaire in different groups of respondents, to be able to create a continuous scale along which patients can have a score which would represent their level of knowledge. This would lead to a clinical interpretation of advocating patients to appropriate (tailored) education programs in concordance with their score on the R3K-T. In order to create such a continuous scale one would preferably validate the questionnaire in different groups which are in different stages of the disease-specific knowledge process. Appropriate groups for constituting such a scale would be the general population (naïve group), the pre-emptive patients, patients on dialysis, post-transplantation patients, potential donors and donors.

For international usage of the R3K-T we would also recommend to validate the questionnaire in the USA. The USA has the advantage of providing us with data from respondents from a wide range of cultural backgrounds. This adding would broaden the clinical applicability of the questionnaire enormously. Secondly, researchers would also benefit from being able to compare their work when this instrument is internationally used in different studies.

Translations

As in other Western countries, the number of immigrants in the Netherlands is growing rapidly. In 1980 non-western immigrants constituted about 3% of the population, in 1990 it was 6% and currently it is more than 10%. Nearly half of the migrant population lives in the four major cities. In the municipality of Rotterdam 38% of the inhabitants are migrants (Roodnat, et al., 2010). Health policy is based on the ideal that all inhabitants should have equal access to information with respect to their condition. Following this, information in our outpatient transplantation clinic regarding the transplantation procedures is provided in Dutch only. However we know from several reviews that linguistic barriers at patient level are one of the most prominent culture-related communication problems (Uiters, Deville, Foets, & Groenewegen, 2006). Since we have now developed a questionnaire measuring the gap in knowledge it would consequently follow to make this instrument also accessible for the ethnically diverse populations. Thus, we need to create translated versions of the R3K-T. We decided to investigate which languages were spoken by our patients and to what degree they needed a translated version of material related to patient-education. Therefore, we have conducted a study with an open cohort design. We registered the mother tongue, ethnicity, country of birth, the ability to understand

or speak Dutch, age and living area of all new patients that visited the transplantation outpatient clinic of the Erasmus Medical Centre in Rotterdam (Erasmus MC) for the last four years.

We found that 39.8% of our patients without a potential living donor are non-Caucasian. Of this population 32.8% had a mother tongue different than the language of the country of residence, thereby composing 22 different languages of which 16 are non-European. We also looked at the percentage of the linguistically different patients who did neither understand nor spoke the Dutch language. This turned out to be 18.2%. These patients spoke Turkish (15.2%), Arabic (12.7%), Papiamentu (8.9%), Portuguese (6.2%), and Modern Hindi (5.7%). The other languages were represented at percentages which are economically less interesting to disseminate translations for (1.3% to 3.8%).

These findings demonstrate that there is a substantial linguistic diversity within our patients in the kidney transplantation clinic. These differences may decrease in the future when the proportion of first-generation immigrants decreases. For now, in the face of the equity principle, we have considered to provide the required questionnaires and information also in the major non-European languages in order to equalize the health care accessibility with regard to kidney transplantation. We present below the translated versions of the R3K-T in Appendix C (Turkish version), Appendix D (Arabic version), Appendix E (Papiamentu version), Appendix F (Portuguese version), and Appendix G (Modern Hindi version). Since French is a common spoken language in the world we have additionally translated the R3KT-T in this language (Appendix H). Lastly, considering the fact that the R3K-T is developed in the Netherlands we have also a Dutch version (Appendix I).

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Appendix A

Primary questionnaire used for the pilot study (the questions in italic/bleu are the items in the final version of the R3K-T)

| Kidney function / disease |
|--|
| 1. People usually have 2 kidneys. |
| (a) True (b) False (c) I don't know |
| 2. <i>Kidney disease is something you get when you get older. Young people do not get this disease.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| 3. Patients with a kidney disease are not allowed to eat too much salt, because salt contains a lot of: |
| (a) Potassium (b) Sodium (c) Calcium (d) I don't know |
| 4. <i>Patients with a kidney disease should not eat too much salty food.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| 5. <i>When someone has kidney disease, the kidneys have to be removed, before dialysis can start.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| 6. Kidneys have an important function in the body, but they only function at night when one is sleeping. |
| (a) True (b) False (c) I don't know |
| 7. <i>A patient with kidney disease can develop high blood pressure, swollen ankles and rapid weight gain when the body is burdened with too much:</i> |
| <i>(a) Protein (b) Waste (c) Water (d) I don't know</i> |
| 8. Which of these nutrients contain a lot of potassium? |

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| |
|---|
| (a) Rice (b) Ice-cream (c) Bananas (d) I don't know |
| 9. Patients with a chronic kidney disease are advised to eat less potassium rich food. Why is too much potassium in the blood dangerous? |
| (a) It can retain fluid. (b) It can cause the blood to clot. (c) It can decrease the production of white blood cells. (d) It causes an irregular heartbeat and even a cardiac arrest. (e) I don't know. |
| 10. Bone disease is a medical problem that could result from chronic kidney disease. |
| (a) True (b) False (c) I don't know |
| 11. Which of the following functions are not carried out by the kidney? |
| (a) Filtering the blood. (b) Regulation of calcium. (c) Removal of waste. (d) Regulation of the immune system. |
| 12. In kidney failure, waste accumulates in the blood. This phenomena is also called: |
| (a) Absorption (b) Uraemia (c) Libido (d) Adaptation (e) I don't know |
| 13. Most kidney diseases last 5 years. After this period the kidneys function again like before the disease. |
| (a) True (b) False (c) I don't know |
| 14. High blood pressure is one of the most common causes of kidney disease. |
| (a) True (b) False (c) I don't know |
| 15. Renal replacement therapy is necessary when the kidneys only function for 50%. |
| (a) True (b) False (c) I don't know |
| Peritoneal dialysis |

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| |
|---|
| <p>16. With peritoneal dialysis the blood is being cleaned by the in- and out flow of a fluid in the abdominal cavity. This process is called:</p> |
| <p>(a) Spreading (b) Transport (c) Excretion (d) Chemical breakdown (e) I don't know</p> |
| <p>17. <i>Peritonitis is an infection to the abdominal wall. This is one of the biggest problems with patients with peritoneal disease.</i></p> |
| <p>(a) True (b) False (c) I don't know</p> |
| <p>18. <i>Peritoneal dialysis is a form of renal replacement therapy that can be an alternative for hemodialysis. An advantage of peritoneal dialysis can be:</i></p> |
| <p>(a) <i>That you can walk freely during dialysis.</i> (b) <i>It only needs to be done once a week.</i> (c) <i>It doesn't have to be preceded by surgery.</i> (d) <i>I don't know.</i></p> |
| <p>19. <i>Peritoneal dialysis is a form of dialysis to treat patients with end-stage renal disease. Which part of the body makes this treatment possible?</i></p> |
| <p>(a) <i>The abdominal wall</i> (b) <i>The bladder</i> (c) <i>The renal pelvis</i> (d) <i>I don't know</i></p> |
| <p>20. <i>During peritoneal dialysis, fluid is brought into the abdominal cavity through a catheter. What happens with the fluid after that?</i></p> |
| <p>(a) <i>The fluid stays in the abdominal cavity, after a couple of hours one lets it flow out again.</i> (b) <i>The fluid stays in de abdominal cavity, until it is completely absorbed by the body.</i> (c) <i>The fluid flows into an artificial kidney through another catheter.</i> (d) <i>The fluid flows into an artificial kidney though the same catheter.</i> (e) <i>I don't know.</i></p> |
| <p>21. Peritoneal dialysis gives more freedom to continue working than hemodialysis.</p> |
| <p>(a) True (b) False (c) I don't know</p> |
| <p>Hemodialysis</p> |
| <p>22. <i>How many times a week does a hemodialysis patient undergo generally a session on the dialysis machine?</i></p> |

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|---|
| <p>(a) 2-3 (b) 5-6 (c) I don't know</p> |
| <p>23. To be connected to the hemodialysis machine, access to the bloodstream must be made.</p> |
| <p>(a) True (b) False (c) I don't know</p> |
| <p>24. What percentage of healthy functioning kidneys does one reach with hemodialysis?</p> |
| <p>(a) Less than 10% (b) 40% (c) 60% (d) More than 90%</p> |
| <p>25. How many liters a day is a dialysis patient allowed to drink?</p> |
| <p>(a) 0.5 liter (b) 1.5 liter (c) 2.5 liter (d) 3.5 liter</p> |
| <p>26. When you are on dialysis you cannot go on holiday.</p> |
| <p>(a) True (b) False (c) I don't know</p> |
| <p>27. How many hours a day is a hemodialysis patient connected to the machine?</p> |
| <p>(a) 4-8 (b) 12-16 (c) Continuous (d) I don't know</p> |
| <p>28. When you are temporarily on dialysis, your own kidneys are recovering.</p> |
| <p>(a) True (b) False (c) I don't know</p> |
| <p>29. When a patient is stable and meets some conditions, there is a possibility to do hemodialysis at home.</p> |
| <p>(a) True (b) False (c) I don't know</p> |
| <p>30. After hemodialysis therapy you are allowed to drive home.</p> |
| <p>(a) True (b) False (c) I don't know</p> |

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|--|
| 31. After a hemodialysis session you feel fit again. |
| (a) True (b) False (c) I don't know |
| 32. An advantage of night dialysis is that you have more time for work and social activities during the day. |
| (a) True (b) False (c) I don't know |
| 33. <i>Certain vitamins are lost during dialysis. Therefore, if you are on dialysis you are proscribed extra vitamins.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| Kidney transplantation |
| 34. <i>For the treatment of end-stage renal disease kidney transplantation is generally preferred over dialysis.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| 35. <i>Which treatment gives the best quality of life?</i> |
| <i>(a) Hemodialysis (b) Transplantation (c) Peritoneal dialysis (d) I don't know</i> |
| 36. <i>A person cannot miss a kidney, because kidneys are vital organs and are necessary for a healthy life.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| 37. Kidney transplantation is the best form of renal replacement therapy for patients with a kidney disease, because after the kidney transplantation the patients have a lower chance for getting infections caused by bacteria or a virus. |
| (a) True (b) False (c) I don't know |
| 38. <i>Immunosuppressive drugs are administered to transplant patients for:</i> |

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|---|
| <p><i>(a) Prevention and treatment of the rejection of the kidney transplant.</i></p> <p><i>(b) Treatment of blood clotting in the new kidney.</i></p> <p><i>(c) Protection of the kidney against infections caused by a virus or bacteria.</i></p> <p><i>(d) I don't know.</i></p> |
| <p>39. Which of the following statements about kidney transplantation is not true?</p> |
| <p>(a) Sometimes the transplanted kidney starts functioning right away at the moment that the blood vessels are connected at the operation table.</p> <p>(b) A kidney transplant is placed in the pelvis instead of at the normal location of the old kidneys.</p> <p>(c) A person who is recovered from a kidney transplantation and has a good functioning kidney, does not need dialysis anymore.</p> <p>(d) A patient can receive a kidney from a living person, the kidney is then removed 1 week before the transplantation for close observation.</p> <p>(e) I don't know.</p> |
| <p>40. A person who is recovered from a kidney transplantation operation and has a good functioning kidney, does not need dialysis anymore.</p> |
| <p>(a) True</p> <p>(b) False</p> <p>(c) I don't know</p> |
| <p>41. The success rates of a kidney transplantation with a kidney of a living donor and a kidney of a deceased donor are approximately the same.</p> |
| <p>(a) True</p> <p>(b) False</p> <p>(c) I don't know</p> |
| <p><i>42. Only direct family members (brothers, sisters, parents or children) can donate a living kidney.</i></p> |
| <p><i>(a) True</i></p> <p><i>(b) False</i></p> <p><i>(c) I don't know</i></p> |
| <p><i>43. For a living kidney donor long-term health problems after donation are not common.</i></p> |
| <p><i>(a) True</i></p> <p><i>(b) False</i></p> <p><i>(c) I don't know</i></p> |
| <p><i>44. Chirurgical complications after surgery for kidney donors are common.</i></p> |
| <p><i>(a) True</i></p> <p><i>(b) False</i></p> <p><i>(c) I don't know</i></p> |
| <p>45. A patient with chronic kidney disease can have someone in the environment which wants to donate a kidney. Which of the following statements is not true?</p> |

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|---|
| (a) The donor must undergo a series of medical tests before transplantation. (b) The donor is at low risk for his own health, when he/she donates a kidney. (c) The donor has to use immunosuppressant drugs for the rest of his/her life. (d) After the kidney donation the remaining kidney will enlarge. (e) I don't know. |
| 46. Only a blood relative of a patient is able to be a living kidney donor. (a) True (b) False (c) I don't know |
| 47. A kidney of a blood relative matches better than a kidney of a deceased donor. (a) True (b) False (c) I don't know |
| <i>48. A full match between the tissue of the donor and the patient provides the best survival.</i> (a) <i>True</i> (b) <i>False</i> (c) <i>I don't know</i> |
| <i>49. Kidneys from living donors have a longer graft survival rate than kidneys from deceased donors.</i> (a) <i>True</i> (b) <i>False</i> (c) <i>I don't know</i> |
| <i>50. A living kidney donor has to be younger than 50 years old.</i> (a) <i>True</i> (b) <i>False</i> (c) <i>I don't know</i> |
| <i>51. All the hospital costs of a living kidney donation are paid for by the health insurance of the recipient and not by the donor's insurance.</i> (a) <i>True</i> (b) <i>False</i> (c) <i>I don't know</i> |
| 52. When a person is evaluated and approved for living kidney donation he is not allowed to withdraw anymore. (a) True (b) False (c) I don't know |
| 53. A person with high blood pressure or hypertension cannot be a living kidney donor. |

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|--|
| (a) True (b) False (c) I don't know |
| 54. The operation risk of a kidney donation has the same risk level or sometimes even lower than other big surgery's. |
| (a) True (b) False (c) I don't know |
| <i>55. Most living kidney donors remain in the hospital for 2 weeks after surgery.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| <i>56. Most living kidney donors can participate in sports and work within 4-6 weeks.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| <i>57. Kidney donation may affect the chances of a woman to become pregnant.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| <i>58. Donating a kidney increases the risk of developing a kidney disease.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| <i>59. Most of the insurance companies pay the travel expenses and the costs paid for by the employer for the living kidney donor.</i> |
| <i>(a) True (b) False (c) I don't know</i> |
| 60. Most of the living kidney donors have trouble getting or keeping their insurance after surgery. |
| (a) True (b) False (c) I don't know |
| <i>61. When a kidney of a living donor does not match the recipient, the option for living kidney donation expires.</i> |
| <i>(a) True (b) False (c) I don't know</i> |

Appendix B

The R3K-T after data-reduction and random sorting

Rotterdam Renal Replacement Knowledge-Test (R3K-T)

This questionnaire is about kidney diseases and the different kinds of renal replacement therapies. With these questions we would like to get an impression of the degree to which you are familiar with kidney disease and the treatments.

It will take no more than 10 minutes to fill in this questionnaire. To get a good impression of what you know, we would like to ask you **not to guess**. If you are not sure of the answer, please choose “I don’t know”.

It is very important that you do not look up the answers, but fill in what you really know. In this way we know which knowledge is missing and what information we can provide you with.

Sample question:

People usually have 2 kidneys.

- (a) True
- (b) False
- (c) I don’t know

U can now choose between either “True” or “False” regarding this statement. If u do not know whether it is true or false u can choose for the “I don’t know” option. In this case the correct answer is (a).

| | |
|----|--|
| 1. | Kidney disease is something you get when you are older. Young people do not get this disease. |
| | (a) True (b) False (c) I don’t know. |
| 2. | Only direct family members (brothers, sisters, parents or children) can donate a living kidney. |
| | (a) True (b) False (c) I don’t know. |
| 3. | A patient with kidney disease can develop high blood pressure, swollen ankles and rapid weight gain when the body is burdened with too much: |
| | (a) Protein (b) Waste (c) Water (d) I don’t know |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 4. | <p>Peritoneal dialysis is a form of dialysis to treat patients with end-stage renal disease. Which part of the body makes this treatment possible?</p> <p>(a) The peritoneum (b) The bladder (c) The renal pelvis (d) I don't know</p> |
| 5. | <p>All the hospital costs of a living kidney donation are paid for by the health insurance of the recipient and not by the donor's insurance.</p> <p>(a) True (b) False (c) I don't know</p> |
| 6. | <p>How many times a week does a hemodialysis patient generally undergo dialysis?</p> <p>(a) 2-3 (b) 5-6 (c) I don't know</p> |
| 7. | <p>For a living kidney donor long-term health problems after donation are not common.</p> <p>(a) True (b) False (c) I don't know</p> |
| 8. | <p>A full match between the tissue of the donor and the patient provides the best survival.</p> <p>(a) True (b) False (c) I don't know</p> |
| 9. | <p>A living kidney donor has to be younger than 50 years old.</p> <p>(a) True (b) False (c) I don't know</p> |
| 10. | <p>Renal replacement therapy is necessary when the kidneys function for only 50%.</p> <p>(a) True (b) False (c) I don't know</p> |
| 11. | <p>Donating a kidney increases the risk of developing a kidney disease.</p> |

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| | <ul style="list-style-type: none"> (a) True (b) False (c) I don't know. |
| 12. | <p>Peritoneal dialysis is a form of renal replacement therapy that can be an alternative for hemodialysis. An advantage of peritoneal dialysis can be:</p> |
| | <ul style="list-style-type: none"> (a) That you have more freedom of movement in between the in and out flow of the dialysis fluid. (b) It only needs to be done once a week. (c) It doesn't have to be preceded by surgery. (d) I don't know. |
| 13. | <p>Most living kidney donors remain in the hospital for 2 weeks after surgery.</p> |
| | <ul style="list-style-type: none"> (a) True (b) False (c) I don't know |
| 14. | <p>To be connected to the hemodialysis machine, there must be permanent access to the bloodstream.</p> |
| | <ul style="list-style-type: none"> (a) True (b) False (c) I don't know |
| 15. | <p>Surgical complications after donation are common for living kidney donors.</p> |
| | <ul style="list-style-type: none"> (a) True (b) False (c) I don't know |
| 16. | <p>When someone has a kidney disease, the kidneys have to be removed before dialysis can start.</p> |
| | <ul style="list-style-type: none"> (a) True (b) False (c) I don't know |
| 17. | <p>For the treatment of end-stage renal disease kidney transplantation is generally preferred over dialysis.</p> |
| | <ul style="list-style-type: none"> (a) True (b) False (c) I don't know |
| 18. | <p>During peritoneal dialysis, fluid is brought into the abdominal cavity through a</p> |

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| | <p>catheter. What happens with the fluid after that?</p> <p>(a) The fluid stays in the abdominal cavity, after a couple of hours it is removed.</p> <p>(b) The fluid stays in de abdominal cavity, until it is completely absorbed by the body.</p> <p>(c) The fluid flows into an artificial kidney through another catheter.</p> <p>(d) The fluid flows into an artificial kidney though the same catheter.</p> |
| 19. | <p>Most living kidney donors can participate in sports and work within 4-6 weeks after donation.</p> <p>(a) True</p> <p>(b) False</p> <p>(c) I don't know</p> |
| 20. | <p>How many hours a day is a hemodialysis patient connected to the machine?</p> <p>(a) 4-8</p> <p>(b) 12-16</p> <p>(c) Continuous</p> <p>(d) I don't know</p> |
| 21. | <p>A full match between the tissue of the donor and the patient provides the best survival.</p> <p>(a) True</p> <p>(b) False</p> <p>(c) I don't know</p> |
| 22. | <p>Immunosuppressive drugs are administered to transplant patients for:</p> <p>(a) Prevention and treatment of rejection of the kidney.</p> <p>(b) Treatment of blood clotting in the new kidney.</p> <p>(c) Protection against infections caused by a virus or bacteria.</p> <p>(d) I don't know.</p> |
| 23. | <p>Which treatment gives the best quality of life?</p> <p>(a) Hemodialysis</p> <p>(b) Transplantation</p> <p>(c) Peritoneal dialysis</p> <p>(d) I don't know</p> |
| 24. | <p>Peritonitis is an infection of the peritoneum. This is one of the biggest problems with patients with peritoneal disease.</p> <p>(a) True</p> <p>(b) False</p> <p>(c) I don't know</p> |

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| 25. | Kidney donation may affect a woman's chance of getting pregnant. |
| | (a) True (b) False (c) I don't know |
| 26. | Certain vitamins are lost during dialysis. Therefore, if you are on dialysis you are proscribed extra vitamins. |
| | (a) True (b) False (c) I don't know |
| 27. | Kidneys from living donors have a longer graft survival rate than kidneys from deceased donors. |
| | (a) True (b) False (c) I don't know |
| 28. | A person can not miss a kidney because they are vital organs and both are necessary for a healthy life. |
| | (a) True (b) False (c) I don't know |
| 29. | Most insurance companies pay travel expenses and costs paid for by the employer for a living kidney donor. |
| | (a) True (b) False (c) I don't know. |
| 30. | When the kidney of a living donor does not match the recipient, living donation is no longer an option with this donor. |
| | (a) True (b) False (c) I don't know |
| Answers | 1: B, 2: B, 3:C, 4:A, 5:A, 6:A, 7:A, 8:A, 9:B, 10:B, 11:B, 12:A, 13:B, 14:A, 15:B, 16:B, 17:A, 18:A, 19:A, 20:A, 21:A, 22:A, 23:B, 24:A, 25:B, 26:A, 27:A, 28:B, 29:A, 30:B. |

Appendix C

The R3K-T after data-reduction and random sorting and translating into Turkish

Nefritoloji, Diyaliz ve Böbrek Nakli Transplantasyon (R3K-T)

Size aşağıdaki soruları sorarak, sizin böbrek hastalığı ve uygulanmakta olan tedaviler hakkında ne kadar bilgi sahibi olduğunuzu öğrenmeye çalışacağız. Sorulan soruya cevabınız yoksa “bilmiyorum” seçeneğini işaretleyiniz.

Soruları cevaplandırma yöntemiyle ilgili iki örnek:

İnsanların normal olarak 2 böbrekleri vardır.

- (a) Doğru
- (b) Yanlış
- (c) Bilmiyorum

Doğru cevap A.

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| 1. | Böbrek hastalığı riski yaş ilerledikçe büyür. Bu hastalık genç insanlarda görülmez. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 2. | Böbrek nakli yapılacak kişiye sadece yakınları yani kardeş, anne, baba veya çocuğu böbrek bağışında bulunabilir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 3. | Böbrek hastalarında meydana gelen yüksek tansiyonun, bileklerdeki şişiklerin ve hızlı kilo almanın en büyük sorumlusu: |
| | (a) Proteindir (b) Vücuttan dışarı atılan atıklar (c) Sudur (d) Bilmiyorum |
| 4. | Periton diyaliz (torba diyalizi) böbrek yetersizliği yaşayanların son dönemlerinde uygulanan bir tedavi yöntemidir. Vücudun hangi bölgesi bu tedaviyi mümkün kılar? |
| | (a) Karın iç zarı (b) İdrar torbası (c) Böbrek pelvisi (d) Bilmiyorum |

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| 5. | Yaşayan bir donörden yapılan böbrek nakli masrafı bu donörün sağlık sigortasına faturalandırılır. (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 6. | Hemodiyaliz hastalarına genel olarak haftada kaç kez diyaliz yapılır? (a) 2-3 kez (b) 5-6 kez (c) Bilmiyorum |
| 7. | Böbrek bağışladıktan sonra, bağışlayan kişide uzunca bir zaman herhangi bir sağlık problemi görülmez. (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 8. | Böbrek hastası olan kişilerin çok fazla tuz içeren yiyecek yememeleri gerekir. (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 9. | Yaşayan bir donör 50 yaşından daha genç olmalı. (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 10. | Böbreğin fonksiyon görevlerini devralan terapi, böbreklerin fonksiyonları 50 % azalırsa gereklidir. (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 11. | Yapılan böbrek bağış böbrek hastalığına yakalanma riskini artırır. (a) Doğru (b) Yanlış (c) Bilmiyorum |

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| 12. | Böbrek yetersizliği durumunda, Periton diyaliz yöntemi, hemodiyaliz yönteminin yanısıra uygulanan alternatif bir tedavi bir yöntemidir. Periton diyalizin avantajı: |
| | (a) Hasta olarak, temizleme amacıyla kullanılan solüsyonun (sıvının) vücuda girişi ve çıkışı arasında daha çok hareket kabiliyetine sahip olmanız (b) Sadece haftada bir kez yapılmaktadır (c) Öncesinde herhangi bir ameliyat gerekmiyor (d) Bilmiyorum |
| 13. | Yaşayan bir donör, yapılan böbrek nakli sonrası 2 hafta kadar hastanede yatmaktadır. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 14. | Hemodiyaliz makinesine bağlanmak için, kan dolaşım sistemine bir bağlantı yolu olması gerekir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 15. | Böbrek bağışlayan kişide, ameliyat sonrasında cerrahi komplikasyonlar sıklıkla görülür. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 16. | Böbrek hastası olan kişinin diyaliz tedavisine başlamadan önce böbreklerinin çıkartılması gerekir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 17. | Böbrek yetersizliği tedavisinin yetersiz kaldığı son dönemlerde böbrek nakli yöntemi diyalizle karşılaştırıldığında daha çok tercih edilir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |

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| 18. | Periton diyalizde sırasında, bir sonda aracılığıyla karın boşluğuna bir solüsyon (sıvı) gönderilir. Sonrasında bu solüsyona (sıvıya) ne oluyor? |
| | (a) Solüsyon (sıvı) karın boşluğunda bir kaç saat kaldıktan sonra çıkartılıyor. (b) Solüsyon (sıvı) vücut tarafından tamamen emilene kadar karın boşluğunda kalıyor (c) Solüsyon (sıvı) başka bir sonda aracılığıyla yapay böbreğe geçiyor. (d) Solüsyon (sıvı) aynı sonda aracılığıyla yapay böbreğe geçiyor. (e) Bilmiyorum. |
| 19. | Yaşayan bir donörden yapılan böbrek nakli sonrası donör, 4 ila 6 hafta sonrasında spor yapmaya veya işe gitmeye başlar. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 20. | Bir böbrek hastası günde kaç saat hemodiyaliz makinesine bağlanır? |
| | (a) 4-8 saat (b) 12-16 saat (c) Sürekli (d) Bilmiyorum |
| 21. | Böbrek bağışlayan ile böbrek hastasının yüzdeyüz doku uyumu hastaya en iyi yaşama kalitesini sağlar. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 22. | Böbrek nakli yapılacak kişiye bağışıklığı kontrol altına alıcı ilaçlar verilir. Bunun nedeni: |
| | (a) Nakil edilecek olan böbreğin vücut tarafından dışarıya atılmasını önlemek ve tedaviyi gerçekleştirmek içindir. (b) Nakledilen yeni böbrekteki kan pıhtılaşmasını tedavi için. (c) Böbreği bir virüs ya da bakteri tarafından sebep olacak herhangi bir enfeksiyona karşı korumak için. (d) Bilmiyorum. |
| 23. | Hangi tedavi yöntemi yaşam kalitesini daha çok artırır? |
| | (a) Hemodiyaliz (b) Böbrek nakli (transplantasyon) (c) Periton diyaliz (torba diyalizi) (d) Bilmiyorum |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 24. | Peritonitis karın zarında oluşan bir enfeksiyonudur. Bu, periton diyaliz yöntemiyle tedavi gören böbrek hastalarında karşılaşılan en büyük sorundur. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 25. | Yapılan böbrek bağıışı, kadınlarda hamilelik şansını etkiler. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 26. | Diyaliz esnasında vücuttan bazı vitaminler kaybolmaktadır. Ondan dolayı ekstra vitamin almak gerekmektedir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 27. | Yaşayan bir donörün böbreği, ölü bir donörden alınan böbrekten daha uzun bir yaşam süresine sahiptir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 28. | Vücutta iki böbreğin olması, sağlıklı bir yaşam için gereklidir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 29. | Sağlık sigorta şirketlerinin çoğu donörün yol masrafları ile hastanede kalma masraflarını ödemektedir. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |
| 30. | Yaşayan bir donörden yapılan böbrek nakli başarılı olmazsa, o zaman donörlük durumu yaşam boyunca ortadan kalkar. |
| | (a) Doğru (b) Yanlış (c) Bilmiyorum |

Appendix D

The R3K-T after data-reduction and random sorting and translating into Arabic

لائحة الأسئلة على معرفة الكلى بروتردام (R3K-T)

هذا البحث يتحدث على مرض الكلى و علي اشكال مختلفة اديال العلاج لتبديل وظيفه الكلى. بهاذ الأسئلة ابغنا نعرف شحال كتعرف على مرض الكلى والعلاج.

التعمار اديال هذ لائحة الاسئلة ما يتعداش 10 دقيقة. نطلبو منك ما اتقمرش على الاجوبه باش اتكون عندنا نظرة باين.

الى ما راكش متأكد على الجواب, اختار منعرف. هذ لائحة الاسئلة معقدة و فيها اسئلة سهلة و اسئلة صعبة.

مهم هو اتعمر اشنو عارف وما اتقلبش على الاجوبه. بهاذه الطريقة نعرفو اشنى باقى ما تعرفش عليه باش نعطبو لك عليه المعلومات.

مثال:

الانسان عند جوج كليات

(d) صحيح

(e) خطأ

(f) منعرف

الان عمر واش هذ المثل صحيح او خطأ. الى ما عرفتش واش صحيح او خطأ عمار منعرف. الجواب الصحيح هو a.

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| 1. | المرض اديال الكلى كيغطي بالكبر. الناس الشباب ميقسهومش |
| | (a) صحيح (b) خطأ (c) منعرف |
| 2. | فقط العايلة (الاخوة, الأخوات, الوالدين او الاولاد) يمكن ليهم يتبرعو بكلى فالحياة |
| | (a) صحيح (b) خطأ (c) منعرف |
| 3. | المريض بالكلى يقدر يطلعو الدم, يغضلو الكاحلين(enkels) و يثقال عندما الجسم اكون فيه كثير من: |
| | (a) البروتين (b) النفايات (c) الماء (d) منعرف |

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| 4. | غسل البطن هو شكل ديال غسل الكليات و علاج لي المرض الكلي في المرحلة النهائية اديال المرض الكليات. واش من جهة في الجسم كتجعل هذا العلاج ممكن؟ |
| | (a) غشاء البطن (buikvlies) (b) النبول (c) الحوض الكلوي (nierbekken) (d) منعرف |
| 5. | جميع مصاريف التبرع بالكلىة فالحياة اخلصها التامين الصحي اديال المريض وليس من عند التامين الصحي اديال المتبرع |
| | (a) صحيح (b) خطأ (c) منعرف |
| 6. | شحال من مرة يخضع المريض لجهالز غسل الكليليات؟ |
| | (a) 2-3 (b) 4-6 (c) منعرف |
| 7. | المشاكل الصحية بالمدى البعيد بعد التبرع بالكلىة تكون قليلة |
| | (a) صحيح (b) خطأ (c) منعرف |
| 8. | الناس اللي امراض بالكلي ميخصهوش يكلو كثير من الاكل المالح |
| | (a) صحيح (b) خطأ (c) منعرف |
| 9. | المتبرع بالكلىة العايش يلزم ايكن قل من 50 سنة |
| | (a) صحيح (b) خطأ (c) منعرف |
| 10. | اخص وظيفة الكليات تتبدل بالعلاج الي كانو الكليات يخدمو غير 50 في الماية |
| | (a) صحيح (b) خطأ (c) منعرف |
| 11. | التبرع بالكلىة كيزيد الخطر في حصول مرض الكلىة |
| | (a) صحيح (b) خطأ (c) منعرف |

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| 12. | غسل البطن (Peritoneal dialyse) هو شكل ديال العلاج لي يقدر اكون تبديل لي غسل الكليات (Hemodialyse). الميزة تقدر اتكون: |
| | (a) المريض يقدر يتمشى في الوقت لي اكون يتغسل فيه البطن (b) اخصها تندر غير مرة واحدة في الاسبوع (c) ما اخصش تندر العملي من قبل (d) منعرف |
| 13. | اغلبية المتبرعين العائشين ببقاوا اسبوعين في المستشفى بعد العملية |
| | (a) صحيح (b) خطأ (c) منعرف |
| 14. | الي بغيت تخضع لجهاز غسل الكليات اخص اكون الوصول الي مجرى الدم |
| | (a) صحيح (b) خطأ (c) منعرف |
| 15. | التعقدات بعد العملية عند المتبرعين كيقوعو بزاف |
| | (a) صحيح (b) خطأ (c) منعرف |
| 16. | الي كان الانسان مريض بالكليات , اخصهوم يتزولو, قبل ما يبدأ العلاج (dialyse) |
| | (a) صحيح (b) خطأ (c) منعرف |
| 17. | في علاج المرحلة النهائية الزرع هو افضل من غسيل الكلي |
| | (a) صحيح (b) خطأ (c) منعرف |
| 18. | من اكون البطن يتغسل, كيدخل سائل بالقسطرة (katheter) في البطن. وشنو كيقوع بالسائل من بعد؟ |
| | (a) السائل كيبق في البطن, من بعد ساعات من الوقت كيتطلق (b) السائل كيبق في البطن حتى يتسرب من قبل الجسم (c) السائل كيدخل في الكلي المصطنعة عبر قسطرة اخرى (d) السائل كيدخل في الكلي المصطنعة عبر نفس القسطرة (e) منعرف |

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| 19. | اغلبية المتبرعين العائشين بقدر و العبو الرياضة و يخدمو في ظرف 4-6 اسابيع (a) صحيح (b) خطأ (c) منعرف |
| 20. | شحال من ساعة في النهار يخضع المريض للجهاز؟ (a) 4-8 (b) 12-16 (c) مستمر (d) منعرف |
| 21. | لاتفاقية الكاملة بين الأنسجة اديال المتبرع و المريض كتعطي احسن عيشة (a) صحيح (b) خطأ (c) منعرف |
| 6. | ادوا اديال المناعة كيتعطي لي المرضى اللي تزرعت لهم الكلي على احسب: (a) الوقاية و العلاج اديال المناعة اديال الكلي الجديدة (b) العلاج اديال تجلط الدم اديال الكلي الجديد. (c) حماية الكلي ضد العدوى من قبل فيروس او بكتيريا (d) منعرف |
| 7. | اش من علاج يعطي افضل جودة للحياة؟ (a) غسل الكلي (Hemodialyse) (b) زرع (c) غسل البطن (Peritoneal dialyse) (d) منعرف |
| 8. | التهاب الصفاق (Peritonitis) هو عدوى اديال غشاء البطن. هذا واحد من المشاكل الكبيرة عند المرض لي علاجهم غسل البطن (peritoneal dialyse) (a) صحيح (b) خطأ (c) منعرف |
| 9. | التبرع بالكلي اكون عند تاثير لفرصة الحمل (a) صحيح (b) خطأ (c) منعرف |
| 10. | بسبب غسل الكليات كتفقد بعض الفتا مينات. دكش علاش كيتعطي لك فتا مينات (a) صحيح (b) خطأ (c) منعرف |

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| 27. | الكليات اديال المتبرعين العائيشن كبقاو مدة اكثر من الكليات اديال المتبرعين الميتين |
| | (a) صحيح (b) خطأ (c) منعرف |
| 28. | الانسان ما يقدرش يفقد الكلي لأن الكليات هيئات مهمين و ضرورين لحياة جيدة |
| | (a) صحيح (b) خطأ (c) منعرف |
| 29. | اغلبية شركات التامين ايلخو مصروفات السفر و مصروفات رب العمل للمتبرع الحي |
| | (a) صحيح (b) خطأ (c) منعرف |
| 30. | الى الكلي اديال المتبرع الحي ما وفتتش المريض يسقط خيار التبرع في الحياة |
| | (a) صحيح (b) خطأ (c) منعرف |

Appendix E

The R3K-T after data-reduction and random sorting and translating into Papiaments

Kwestionario di konosementu tokante donashon di riñon (R3K-T)

E kwestionario aki ta tokante e malesa di riñon y e diferente formanan di tratamiento pa ku supstitushon di e functionnan di riñon. Cu e preguntanan aki nos kier haña un impreshon di bo persons su konosementu di e malesa di riñon y e tratamientu di esaki.

Pa yena e formulario aki ta tuma aproksimadamente 10 minuut. Nos ta pidi bo persona pa **no guèmbel**, asina nos por hanja e mihor resultadonan possibel. Si bo no sa e kontestanan di e kwestionario, kies e opshon ‘mi no sa’. E kwestionario ta complica ku algun pregunta fasil y algun ku ta mas dificil.

Importante ta pa bo no buska e contestanan sino yena kiko bo sa. Asina nos por wak na unda nos falta duna informashon.

Ehempel:

Hende tin normalmente dos riñon.

- (g) Correcto
- (h) Incorrecto
- (i) Mi no sa

Awo bo por yena si e decir aki ta ‘correcto’ of ‘incorrecto’. Si bo no sa si e ta berdad of no, djies yena ‘mi no sa’ e ora. Den e situashon aki e kontesta correcto ta a.

| | |
|----|--|
| 1. | Malesa di riñon bo ta haña na un edad haltu. Hende hoben no ta hanja e malesa aki. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 2. | Solamente familiaresnan directo (rumannan, mayornan of juinan) por doneer un riñon mientras nan ta na bida. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 3. | Un pashènt ku malesa di riñon por cuminsa hanja preshòn haltu, pianan hincha y subi di peso liher ora e curpa ta hanjando muchu: |
| | (a) Proteina (b) Sushedad den sanger (c) Awa (d) Mi no sa |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

| | |
|-----|--|
| 4. | Dialyse peritoneal ta un forma di dialyse pa trata pashènt ku ta den e fase final di fayó di riñon. Kua parti di e curpa ta hasi e tratamientu aki possibel? |
| | (a) E buikvlies (b) E blaas (c) E nierbekken (d) Mi no sa |
| 5. | Tur e gastonan di e 'donashon bibo' lo wordo declara na e seguro di e pashènt ku lo ricibi e riñon y no di esun ku ta hasiendo e donashon di riñon. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 6. | Kuantu biaha pa siman mester un pashènt di hemodialyse bai generalmente pa un session na e mashin di dialyse? |
| | (a) 2-3 (b) 5-6 (c) Mi no sa |
| 7. | Un persona ku hasi un donashon di riñon no sa hanja problemanan di salud di periodonan largo normalmente. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 8. | Pashèntnan ku malesa di riñon no mag di come hopi cumindanan salu. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 9. | Un persona ku kier hasi un donashon di riñon mester ta mas hoben ku 50 aña. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 10. | Terápianan pa remplasá funcionnan di riñon ta necesario ora e riñonnan ta funcionando ainda ku solamente 50 %. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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|-----|--|
| 11. | Door di doneer un riñon bo ta hisa bo chèns pa hana e malesa di riñon. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 12. | E dialyse peritoneal ta un forma di theràpia pa remplasá e funcionnan di riñon ku por ta un alternativo pa hemodialyse. Un possibel bentaha di e dialisis peritoneal ta: |
| | (a) Mientras ku e liquido ta yena y sali bo tin mas libertat pa move rond (b) Cu esaki ta un bes pa siman so tin di hasié (c) No tin mester di hasi un operashon di antemano (d) Mi no sa |
| 13. | Mas tanto di e donor nan di riñon bibo ta keda 2 siman den hospital despues di e operashon. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 14. | Pa wordu pegá ku e mashin di hemodialyse mester tin un entrada pa un ader di sanger. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 15. | Sa pasa hopi biaha ku e donornan sa hanja komplikashon despues di e operashon. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 16. | Ora un hende tin malesa di riñon, mester saka e riñonnan prome ku kuminsa ku e dialyse. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 17. | Pa trata e fayó di riñon den ultimo fase normalmente ta transplantashon tin e preferensha ariba dialyse normalmente ora ta trata di fayó di riñon den e ultimo fasé. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 18. | Den e dialyse peritoneal tin un liquido ta wordo pasa den e parti entre e kueru di bariga y e tripanan door di un katheter. Kiko ta pasa siguiientemente ku e liquido aki? |
| | (a) E liquido ta keda ey memei hinka, despues di un paar di ora ta lague sali bek (b) E liquido ta keda ey nan te ora ku e wordo absorbé kompletamente door de e curpa (c) E liquido ta bai di un riñon falso pa un otro katheter (d) E liquido ta pasa den un riñon falso via e mesun katheter (e) Mi no sa |
| 19. | Mas tanto di e donornan di riñon por bai traha y hasi deporte den 4-6 siman. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 20. | Pa kwantu ora tin e pashènt mester di keda pegá ne mashin di hemodialyse pa dia? |
| | (a) 4-8 (b) 12-16 (c) Constant (d) Mi no sa |
| 11. | Ora tin un semehansa kompletu entre e weefsel di e donor y di e pashènt ta duna e mihor sobrevivensha. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 12. | Remedinan pa sorpresa e systema immunologico ta wordo duna na pashèntnan di transplantashon pa: |
| | (a) Prevení y trata e repulshón di e riñon transplantá (b) Pa trata e coagulashon di sanger den e riñon nobo (c) Pa protehé e riñon contra infecshon di bacteria of virus (d) Mi no sa |
| 13. | Kua tratamentu ta duna e mihor kalidat di bida? |
| | (a) Hemodialyse (b) Transplantashon (c) Dialyse peritoneal (d) Mi no sa |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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|-----|--|
| 14. | Peritonitis ta un infecshon di e vliés di bariga. Esaki ta un di e problemanan mas grandi cu pashentnan ta hanja ora nan ta hasi e dialyse peritoneal. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 15. | Donashon di riñon por influensha e chens di sali na estado di un muher. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 16. | Door di hasi dialyse bo ta perde siertu vitaminanan. P'ese y bo ta hanja vitamina pa bebe. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 27. | Riñonnan di un donator bibe tin un ekspektashon di bida mas largu ku un riñon di un fallecido. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 22. | Un persona no por bibe sin un di su dos riñonnan. Esaki ta paso ku e riñonnan ta órganonan essensial y ta necesario pa un bida saludabel. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 23. | Mas tanto di e seguronan di salud ta paga pa e kostonan di viahe, estadia na hospital y e werkgeverskosten di e donator bibe. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |
| 24. | E opshon pa transplantashon ta wordo annula ora e riñon di un donator bibe no ta pas ku esun ku tin di ricibiele. |
| | (a) Correcto (b) Incorrecto (c) Mi no sa |

Appendix F

The R3K-T after data-reduction and random sorting and translating into Portuguese

Conhecimento de Nefrologia Diálise e Transplante

Esse questionário fala sobre a doença renal e as várias formas de tratamento para substituir a função renal. Com as seguintes perguntas queremos ter uma idéia de até que ponto você está familiarizado com doença renal e os tratamentos.

Preencher esse questionário não vai demorar mais que dez minutos. Para ter uma visão clara, te pedimos para **não especular**. Se não tiver certeza de sua resposta, por favor, marque 'Não sei'. É um questionário complicado com perguntas fáceis mas também perguntas difíceis.

É importante que você não procura as respostas, mas que preenche o que você realmente sabe. Desta forma, nós saberemos exatamente em que ponto está faltando conhecimento e precisa ser fornecido mais conhecimento.

Dois exemplos:

As pessoas têm normalmente dois rins.

- (a) Correcto
- (b) Incorrecto
- (c) Não sei

Você pode preencher se é 'correcto' ou 'incorrecto'. Se não souber marque 'Não sei. Neste caso, a resposta correta é a.

| | |
|----|---|
| 1. | A doença renal começa com a idade avançada. Os jovens não têm essa doença. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 2. | Somente os familiares directos(irmãos, irmãs, pais ou filhos) podem ser doadores vivo. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 3. | Um paciente com doença renal pode desenvolver tensão alta, inchaço nos tornozelos e uma subida acelerada de peso quando o corpo for sobrecarregado com: |
| | (a) Proteínas (b) Tóxicas (c) Água (d) Não sei |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

| | |
|-----|--|
| 4. | Diálise peritoneal é uma forma de tratamento diálise para a doença renal. Qual é parte do corpo que faz com que este tipo de tratamento seja possível? |
| | (a) O peritônio (b) A bexiga (c) A pelve renal (d) Não sei |
| 5. | Todo custo hospitalar da doação renal será declarado no seguro do receptor e não do doador. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 6. | Quantas vezes por semana terá um hemodiálise paciente que ir a unidade de Dialyse para tratamento? |
| | (a) 2-3 (b) 5-6 (c) Não sei |
| 7. | Após doação viva do rim não surgirão problemas de saúde a longo prazo. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 8. | Pacientes que sofrem de doença renal não podem consumir muito sal. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 9. | Um doador deve ter menos de 50 anos de idade. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 10. | Terapia de substituição renal é necessária quando os rins funcionam a 50%. |
| | (a) Correcto (b) Incorrecto (c) Não sei |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

| | |
|-----|---|
| 11. | A doação renal aumenta o risco de desenvolver doença renal. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 12. | Diálise peritoneal é uma forma de terapia de substituição renal que pode ser uma alternativa para a hemodiálise. Uma das vantagens da diálise peritoneal pode ser: |
| | (a) A dieta e o controle de consumo de líquidos é menos rigoroso (b) Que você como paciente terá mais liberdade de movimento durante durante a “lavagem abdominal”. (c) É feito apenas uma vez por semana. (d) Não é necessário ser primeiro operado . (e) Não sei. |
| 13. | A maioria dos doadores de rins permanecem duas semanas no hospital, após a cirurgia/operação. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 14. | Para ser ligado à máquina de hemodiálise devem ter um acesso à circulação sanguínea. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 15. | É comum acontecer complicações cirúrgicas aos doadores após a operação cirúrgica. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 16. | Quando uma pessoa sofre de doença renal, os rins devem ser removidos antes do início do tratamento de diálise. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 17. | Para o tratamento de diálise renal em estágio final é preferível o transplante renal à terapia dialyse. |
| | (a) Correcto (b) Incorrecto (c) Não sei |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

| | |
|-----|---|
| 18. | Durante a lavagem abdominal um líquido é transportado através de um cateter na cavidade abdominal. O que acontece então com o líquido? |
| | <p>(a) O líquido permanece na cavidade abdominal, após várias horas, segue-se a drenagem do mesmo.</p> <p>(b) O líquido permanece na cavidade abdominal até que seja completamente absorvido pelo corpo.</p> <p>(c) A solução passa para um rim artificial através de um outro cateter.</p> <p>(d) A solução passa para um rim artificial através do cateter.</p> <p>(e) Não sei.</p> |
| 19. | A maioria dos doadores poderão semanas reiniciar as actividades de trabalho e a prática desportiva dentro de um período de 4-6 . |
| | <p>(a) Correcto</p> <p>(b) Incorrecto</p> <p>(c) Não sei</p> |
| 20. | Quantas horas estará um paciente ligado a máquina de hemodiálise? |
| | <p>(a) 4-8</p> <p>(b) 12-16</p> <p>(c) Contínua</p> <p>(d) Não sei</p> |
| 21. | Uma compatibilidade total entre os tecidos do doador e do paciente fornece a melhor oportunidade de sobrevivência do rim. |
| | <p>(a) Correcto</p> <p>(b) Incorrecto</p> <p>(c) Não sei</p> |
| 22. | Os imunossupressores são administradas a pacientes transplantados para: |
| | <p>(a) Prevenção e tratamento da rejeição do rim transplantado.</p> <p>(b) Tratamento da coagulação do novo rim.</p> <p>(c) Para proteger o rim contra a infeção de um vírus ou bactéria.</p> <p>(d) Não sei.</p> |
| 23. | Qual é o tratamento que oferece uma melhor qualidade de vida? |
| | <p>(a) Hemodiálise</p> <p>(b) Transplante renal</p> <p>(c) A diálise peritoneal</p> <p>(d) Não sei</p> |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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|-----|--|
| 24. | A peritonite é uma infecção do peritônio. Este é um problemas graves que podem decorrer à pacientes durante a diálise peritoneal. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 25. | A doação renal pode afectar as possibilidades de engravidar. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 26. | Atráves da terapia hemodiálise o paciente perde determinadas vitaminas. Nesse caso você receberá doses extras de vitaminas prescritas. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 27. | Rim de doadores vivos têm um periodo de vida superior ao rim de um doador cadaver. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 28. | Um individuo não pode viver sem rim, porque este é um órgão vital e necessário para uma vida saudável. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 29. | A maioria dos seguros cobrem as despesas de viagem e os custos do patrão do doador. |
| | (a) Correcto (b) Incorrecto (c) Não sei |
| 30. | Quando um rim de proviniente de um doador vivo não for compatível com o paciente, expiram as possibilidades de doação. |
| | (a) Correcto (b) Incorrecto (c) Não sei |

Appendix G

The R3K-T after data-reduction and random sorting and translating into Modern

Hindi

Kidney disease, Dialysis en Transplantation ke baray meiN jaankaari

Yeh question list kidney disease aur allagh kissam ki kidney function replacement treatments (ilaaj) ke baaray meiN hai. In sawaalun ke zariye hum dekhna chahte haiN ke aapko kidney disease aur ilaaj ke baray meiN kitni jaankari hai.

Question list pour karne meiN aapko ziadah se ziadah 10 minutes lagaiNge. Hum aapse darkhwast karte haiN ke aap **andaza laga kar jawaab na deiN**. Agar aap ko jawaab nahiN maloom tau 'I don't know' pe kaatha daalaiN. Iss questionnaire ke kuch sawaal asaan haiN aur kuch mushkil.

Zaroori hai ke aap khud soch kar in sawaalun par jawaab deiN, aur kaheeN se dhoondh kar nahiN. Aise hum ko theek se patta hoga ke kahaN aapki jaankaari kam hai, aur hum aap ko uske baray meiN behtar information de sakaiN ge.

Example:

Insaanun ke paas aam tor pe 2 kidneys hoti haiN.

- (j) True
- (k) False
- (l) I don't know

Ab aap pour kar sakte haiN ke iss sawaal ka jawaab aap ke hisaab se 'True' hai ya 'False'. Agar aap ko nahiN patta ke yeh true ya false hai tau 'I don't know' pe kaatha daalaiN. Iss sawaal par sahi jawaab hai A.

| | |
|----|--|
| 1. | Kidney disease bhurhapay meiN hoti hai. Jawaan logun ko yeh baimaari nahiN lagti. |
| | (a) True (b) False (c) I don't know |
| 2. | Sirf qareeb ke rishtedaar (bhai, behn, maa baap ya bachay) living kidney donate kar saktay haiN. |
| | (a) True (b) False (c) I don't know |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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|----|---|
| 3. | Kidney disease ke patient ko high blood pressure, soojay huwe gittay (ankles) aur motapa ho sakta hai agar jism meiN yeh cheez ziyadah ho: |
| | (a) Protein (b) Gand (Waste) (c) Paani (Water) (d) I don't know |
| 4. | Peritoneal dialysis ek dialysis type hai jisse kidney patients ka ilaaj kiya jaa sakta hai. Jism ke kaunse hissay se Peritoneal dialysis ka ilaaj mumkin hai? |
| | (a) Peritoneum / Buikvlies (b) Bladder / De blaas (c) Renal pelvis / Het nierbekken (d) I don't know |
| 5. | Living kidney donation ke saaray hospital ke kharchay receiver (jis ko kidney milti hai) ki health insurance se maangay jatay haiN, donor (jo donate karta hai) ki health insurance se nahiN. |
| | (a) True (b) False (c) I don't know |
| 6. | Ek hafte meiN hemodialysis patient ko kitni daffa dialysis machine ka istemaal karna parhta hai? |
| | (a) 2-3 (b) 5-6 (c) I don't know |
| 7. | Living kidney donor ko long term meiN (donation se ziyadah waqt badh), sehat ki problems nahiN hoti. |
| | (a) True (b) False (c) I don't know |
| 8. | Kidney disease ke mareez ziyadah namkeen khana nahiN kha saktay. |
| | (a) True (b) False (c) I don't know |
| 9. | Living donor ki ummar 50 se kam honi chahiye. |
| | (a) True (b) False (c) I don't know |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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|-----|---|
| 10. | Kidney function replacement therapy ki tab zaroorat parhti hai jab kidneys ka kaam karna sirf 50% reh jaye. |
| | (a) True (b) False (c) I don't know |
| 11. | Kidney donate karne se kidney disease ka risc bharh jata hai. |
| | (a) True (b) False (c) I don't know |
| 12. | Peritoneal dialysis kidney function replacement therapy ka ek type hai jo hemodialysis ki jagah meiN diya ja sakta hai. Peritoneal dialysis ka ek faida yeh hai ke: |
| | (a) Buikspoelen/ abdominal lavage (paith saaf karwanay) ke dauraan patient ko chalne phirnay ki poori azadi hoti hai. (b) Yeh haftay meiN sirf ek martaba karna parhta hai. (c) Yeh karne se pehle operation ki zaroorat nai parhti. (d) I don't know. |
| 13. | Ziadah tar living kidney donors ko operation ke badh 2 haftay hospital meiN guzaarne parthay haiN. |
| | (a) True (b) False (c) I don't know |
| 14. | Hemodialysis machine se connect hone ke liye bloodstream tak access (pahonch) hona zaroori hai. |
| | (a) True (b) False (c) I don't know |
| 15. | Kidney donors ko operation ke badh aksar surgical complications ka saamna karna parhta hai. |
| | (a) True (b) False (c) I don't know |
| 16. | Agar kisi ko kidney disease ho, tau dialysis ilaaj shuruh karne se pehle gurduN (kidneys) ko nikaal dene chahiye. |
| | (a) True (b) False (c) I don't know |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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|-----|---|
| 17. | Kidney failure ke aakhri stage ke ilaaj ke liye, dialysis se ziyadah kidney transplantation ko passand kiya jata hai. |
| | (a) True (b) False (c) I don't know |
| 18. | Abdominal lavage ke waqt ek catheter ke zariye ek fluid daala jata hai abdomen mein. Uske badh iss fluid ke saath kya hota hai? |
| | (a) Fluid abdomen mein rehta hai. Kuch ghantay badh fluid ko nikaal diya jata hai. (b) Fluid abdomen mein rehta hai, jab tak jism mein poori tarha sa mil na jaye. (c) Fluid doosre catheter mein se artificial kidney mein challa jata hai. (d) Fluid ussi catheter mein se artificial kidney mein jata hai. (e) I don't know. |
| 19. | Ziyadah tar living kidney donors 4-6 haftuN ke andar sports mein ya kaam mein hissa le sakte haiN. |
| | (a) True (b) False (c) I don't know |
| 20. | Hemodialysis patient ko har din kitnay ghantay machine pe lagaya jata hai? |
| | (a) 4-8 (b) 12-16 (c) Lagataar (continuu) (d) I don't know |
| 21. | Agar donor aur patient ke tissue ek doosre se poori tarha se milte hoN tau zindah rehne ke sab se ziyadah chances hotay haiN. |
| | (a) True (b) False (c) I don't know |
| 22. | Immunosuppressive medicins transplantation patients ko isliye di jaati haiN: |
| | (a) Takkay transplanted kidney reject na ho (thukrayee na jaye). (b) Takkay new kidney mein khoon na jamm jaye. (c) Kidney ko infection ya virus/bacteria se bachanay ke liye. (d) I don't know. |
| 23. | Sab se ziyadah quality of life kiss ilaaj se milti hai? |
| | (a) Hemodialysis (b) Transplantation (c) Peritoneal dialysis (abdominal lavage / paith andar se saaf karwana) (d) I don't know |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| | |
| 24. | Peritonitis ek infection hai peritoneum (buikvlies) ka. Peritoneal patients ke liye yeh sab se barha masla/problem hota hai. |
| | (a) True (b) False (c) I don't know |
| 25. | Kidney donation se ek aurat ke pregnant hone ke chances par assar (influence) parh sakta hai. |
| | (a) True (b) False (c) I don't know |
| 26. | Dialysis ki wajjah se aap ko vitamins ki kammi hojati hai. Isliye aap ko extra vitamins diye jatay haiN. |
| | (a) True (b) False (c) I don't know |
| 27. | Living kidney donors ke gurday deceased donors ke gurduN se ziyadah dair kaam kar saktay haiN. |
| | (a) True (b) False (c) I don't know |
| 28. | Ek insaan dono gurduN (kidneys) mein se ek ko bhi nahiN miss kar saktay, kyunke sehatmand rehne ke liye dono gurduN ki zaroorat hoti hai. |
| | (a) True (b) False (c) I don't know |
| 29. | Ziyadah insurance companies ek living donor ke kharchay (traveling ka kharcha aur employer ka kharcha) apne zimmay leti haiN. |
| | (a) True (b) False (c) I don't know |
| 30. | Agar living kidney donor ki kidney patient se na milay, tau living kidney donation ka option nahiN rehta. |
| | (a) True (b) False (c) I don't know |

Appendix H

The R3K-T after data-reduction and random sorting and translating into French

Connaissance a propos des maladies rénales, dialyse et transplantation

Avec les questions suivantes nous voulons savoir votre degré de connaissance des maladies rénales et leur traitements. Si vous connaissez pas la réponse cochez "je sais pas".

| | |
|----|--|
| 1. | La maladie rénale apparait chez les personnes âgées. Elle apparait pas chez les personnes jeunes. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 2. | Seul les membre direct de la famille (frères, sœurs, parents ou enfants) peuvent donner un rein en étant vivant. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 3. | Un patient ayant une maladie rénale peut avoir une tension artérielle élevé, chevilles gonfles et une prise de poids rapide quand le corps reçoit beaucoup: |
| | (a) protéines (b) déchets (c) Eau (d) Je sais pas |
| 4. | La dialyse péritonéal est un type de dialyse qui a pour objectif de traiter les patients en cas d'insuffisance rénale chronique terminal. Quelle est la partie du corps nécessaire dans ce traitement? |
| | (a) Le péritoine (b) La vessie (c) Le bassinet du rein (d) Je sais pas |
| 5. | Tout les frais médicaux d'une donation rénale en cas de vie seront déclarés chez l'assurance médicales de la personne recevant la donation et pas chez le donateur . |
| | (a) Vrai (b) Faut (c) Je sais pas |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 6. | Combien de fois par semaine reçoit un patient hémodialysé une session de dialyse en général? |
| | (a) 2-3 (b) 5-6 (c) Je sais pas |
| 7. | Pour un donneur vivant de rein il y aura pas souvent de problèmes de santé a long terme. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 8. | Les patients avec une maladie rénale peuvent pas avoir beaucoup des aliment salés. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 9. | Un donneur vivant de rein doit être moins de 50 ans . |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 10. | Une thérapie remplaçant la fonction des reins et nécessaires en cas de 50% de fonctionnement des reins. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 11. | Une don de rein augmente le risque d'avoir une maladie rénale . |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 12. | La dialyse péritonéal est un type de thérapie remplaçant le fonctionnement des reins qui peut être un alternatif de l'hémodialyse. Un avantage de dialyse péritonéal peut être : |
| | (a) Entre l'infusion et le drainage du liquide dialysat, vous avez plus de liberete de mouvement (b) Le traitement n'est qu'une fois par semaine (c) Que ca nécessite pas une opération auparavant (d) Je sais pas |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 13. | La plupart des donneurs vivant restent 2 semaines a l'hôpital après l'opération. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 14. | Pour être introduit a la machine d'hémodialyse, un accès au vaisseau sanguin est nécessaire. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 15. | Il y a souvent de complications chirurgicales chez le donneur vivant de reins après une opération. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 16. | Quand une personne a une maladie rénale, les reins doivent être enlevés avant le commencement du thérapie rénale. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 17. | Avant le traitement d'insuffisance rénale aigue terminal, la transplantation rénale est le traitement préfère au dialyse. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 18. | Pendant le dialyse péritonéal est liquide est introduit dans la cavité prétoriale via un cathéter. Que-ce passe t'il avec le liquide apres ? |
| | (a) Le liquide reste dans la cavité prétoriale, et après quelques heures le liquide sera évacué (b) Le liquide reste dans la cavité péritonéal, jusqu'a ce que le liquide soit totalement admit dans le corps (c) Le liquide est passé dans un rein artificiel via un autre cathéter. (d) Le liquide passe dans un rein artificiel via le même cathéter. (e) Je sais pas |
| 19. | La plupart des donateurs vivant de reins peuvent dans 4-6 semaines faire du sport et travailler. |
| | (a) Vrai (b) Faut (c) Je sais pas |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 20. | Combien d'heure par jour est le patient d'hémodialyse banche a l'appareil par? |
| | (a) 3-8 (b) 12-16 (c) Tout le temps (d) Je sais pas |
| 21 | Une correspondance totale entre l'organe du donneur et du patient, donne la plus grande chance de survie. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 22 | Les immunosuppresseur sont donnees au patient qui ont subi une transplantation pour: |
| | (a) Empêcher et traiter le rejet d'une greffe de rein. (b) Pour traiter la stagnation du sang du nouveau rein. (c) Pour protéger le rein contre les infections cause par un virus ou une bacterie. (d) Je sais pas. |
| 23 | Quel est le traitement qui la meilleur qualité de vie |
| | (a) Hémodialyse (b) Transplantation (c) Dialyse péritonéal (d) Je sais |
| 24 | La péritonite est une infection du cavité péritonéal. C'est l'un des grand problèmes chez les patients du dialyse péritonéale. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 25 | Le don des reins peut influencer la chance de grossesse chez une femme. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 26 | En faisant du dialyse vous perdez quelques vitamines. C'est pour cette raison que d'extra vitamines vous sont prescrit. |
| | (a) Vrai (b) Faut (c) Je sais pas |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 27. | Les reins des donneurs vivant ont une plus longue durée de survie que ceux d' un donneur décédés. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 28 | Une personne ne peut pas s'en passer d'un rein, vue que les reins sont des organes vitaux nécessaires pour mener une vie saine. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 29 | La plupart des assurances médicaux payent les frais de transports et les frais de l'employeur du donneur vivant du rein. |
| | (a) Vrai (b) Faut (c) Je sais pas |
| 30 | Quand le rein d'un donneur vivant ne convient pas au personne qui va le recevoir, l'option de don de rein d'un donneur vivant n'est plus valable. |
| | (a) Vrai (b) Faut (c) Je sais pas |

Appendix I

The R3K-T after data-reduction and random sorting and translating into Dutch

Rotterdam Renal Replacement Knowledge-Test (R3K-T)

Deze vragenlijst gaat over nierziekten en de verschillende vormen van nierfunctievervangende behandelingen. Met deze vragen willen wij een indruk krijgen van de mate waarin u bekend bent met nierziekte en de behandelingen.

Het invullen zal niet meer dan 10 minuten in beslag nemen. Om een goed beeld te krijgen, willen we u vragen om **niet te gokken**. Als u niet zeker van uw antwoord bent, kruis dan 'weet ik niet' aan.

Belangrijk is dat u de antwoorden niet op zoekt, maar echt invult wat u weet. Op deze manier weten wij juist waar de kennis ontbreekt en dus waar we u nog van kennis kunnen voorzien.

Voorbeeld vraag:

Mensen hebben normaal gesproken twee 2 nieren.

- (m) Waar
- (n) Niet waar
- (o) Weet ik niet

U kunt nu invullen of dit volgens u 'waar' of 'niet waar' is. Weet u niet of het waar of niet waar is, vul dan in 'weet ik niet'. In dit geval is het juiste antwoord (a).

| | |
|----|---|
| 1. | Nierziekte krijg je bij het ouder worden. Jonge mensen krijgen deze ziekte niet. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 2. | Alleen directe familieleden (broers, zussen, ouders of kinderen) kunnen bij leven een nier doneren. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 3. | Een patiënt met een nierziekte kan hoge bloeddruk, dikke enkels en een snelle gewichtstoename ontwikkelen wanneer het lichaam te veel wordt belast met: |
| | (a) Eiwit (b) Afvalstoffen (c) Water (d) Weet ik niet |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 4. | Peritoneaal dialyse is een vorm van dialyse om patiënten met eindstadium nierfalen te behandelen. Welk gedeelte van het lichaam maakt deze behandeling mogelijk? |
| | (a) Het buikvlies (b) De blaas (c) Het nierbekken (d) Weet ik niet |
| 5. | Alle ziekenhuiskosten van een nierdonatie bij leven worden bij de ziektekostenverzekering van de ontvanger gedeclareerd en niet bij die van de donor. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 6. | Hoe vaak per week ondergaat een hemodialysepatiënt in het algemeen een sessie aan het dialyse apparaat? |
| | (a) 2-3 (b) 5-6 (c) Weet ik niet |
| 7. | Voor iemand die een nier bij leven doneert komen lange termijn gezondheidsproblemen na donatie niet vaak voor. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 8. | Patiënten met een nierziekte mogen niet al te veel zoute voeding binnen krijgen. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 9. | Een donor die bij leven een nier doneert moet jonger zijn dan 50 jaar. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 10. | Nierfunctievervangende therapie is noodzakelijk wanneer de nieren nog maar voor 50% functioneren. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 11. | Doneren van een nier verhoogt het risico op het ontwikkelen van een nierziekte. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 12. | Peritoneaal dialyse is een vorm van nierfunctievervangende therapie dat een alternatief kan zijn voor hemodialyse. Een voordeel van peritoneaal dialyse kan zijn: |
| | (a) Men heeft tussen het in en uit laten lopen van de spoelvloeistof meer bewegingsvrijheid (b) De behandeling maar 1 x per week plaatsvindt (c) Er hoeft geen operatie aan vooraf te gaan (d) Weet ik niet |
| 13. | De meeste donoren die bij leven een nier gedoneerd hebben blijven 2 weken in het ziekenhuis na operatie. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 14. | Om te worden aangesloten op de hemodialyse machine, is er een toegang tot de bloedbaan nodig. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 15. | Chirurgische complicaties na de operatie komen vaak voor bij donoren die bij leven een nier gedoneerd hebben. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 16. | Wanneer iemand een nierziekte heeft, dan moeten de nieren worden verwijderd, voordat de dialysebehandeling kan starten. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 17. | Voor de behandeling van eindstadium nierfalen heeft niertransplantatie in het algemeen de voorkeur boven dialyse. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 18. | Tijdens peritoneaal dialyse wordt een vloeistof door een katheter in de buikholte gebracht. Wat gebeurt er daarna met de vloeistof? |
| | <ul style="list-style-type: none"> (a) De vloeistof blijft in de buikholte. Na een aantal uur laat men het er weer uitlopen (b) De vloeistof blijft in de buikholte, totdat het compleet is opgenomen door het lichaam (c) De vloeistof loopt in een kunstmatige nier via een andere katheter (d) De vloeistof loopt in een kunstmatige nier via dezelfde katheter (e) Weet ik niet |
| 19. | De meeste mensen die bij leven een nier doneren, kunnen binnen 4-6 weken weer sporten en aan het werk. |
| | <ul style="list-style-type: none"> (a) Waar (b) Niet waar (c) Weet ik niet |
| 20. | Hoeveel uur per dag is een hemodialyse patiënt aan het apparaat aangesloten? |
| | <ul style="list-style-type: none"> (a) 4-8 (b) 12-16 (c) Continu (d) Weet ik niet |
| 21. | Een volledige overeenkomst tussen het weefsel van de donor en de patiënt geeft de beste overleving. |
| | <ul style="list-style-type: none"> (a) Waar (b) Niet waar (c) Weet ik niet |
| 22. | Afweeronderdrukkende geneesmiddelen worden toegediend aan transplantatiepatiënten ter: |
| | <ul style="list-style-type: none"> (a) Voorkoming en behandeling van afstoting van de transplantaatnier. (b) Ter behandeling van de bloedstolling van de nieuwe nier. (c) Ter bescherming van de nier tegen infecties door een virus of bacterie. (d) Weet ik niet. |
| 23. | Welke behandeling geeft de beste kwaliteit van leven? |
| | <ul style="list-style-type: none"> (a) Hemodialyse (b) Transplantatie (c) Peritoneaal dialyse (d) Weet ik niet |

Development of the Rotterdam Renal Replacement Knowledge-Test (R3K-T)

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| 24. | Peritonitis is een infectie van het buikvlies. Dit is één van de grootste problemen bij patiënten met peritoneaal dialyse. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 25. | Nierdonatie bij leven kan van invloed zijn op de kansen van een vrouw om zwanger te worden. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 26. | Door te dialyseren raakt u bepaalde vitamines kwijt. Daarom krijgt u extra vitamines voorgeschreven. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 27. | Nieren van mensen die bij leven doneren hebben een langere overlevingsduur dan nieren van een donor die overleden is. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 28. | Een persoon kan geen nier missen, aangezien nieren vitale organen zijn en nodig zijn voor een gezond leven. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 29. | De meeste verzekeringsmaatschappijen betalen de reiskosten en de werkgeverskosten die bij nierdonatie bij leven komen kijken. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |
| 30. | Wanneer een nier van iemand die bij leven doneert niet bij de ontvanger past, vervalt de optie nierdonatie bij leven. |
| | (a) Waar (b) Niet waar (c) Weet ik niet |