

MTSOSD

MODIFIED TRANSPLANT SYMPTOM OCCURRENCE AND SYMPTOM DISTRESS SCALE

Instructions

Taking medication after transplantation is associated with certain side effects, which may or may not be distressing to you.

In this questionnaire, each question is divided into two columns, as shown in the example below.

Example:

1. I have had <u>itching</u>	My <u>itching</u> was	
☐ Never	<i>not distressing</i>	<i>terribly</i>
☐ Occasionally	<i>at all</i>	<i>distressing</i>
☒ Regularly		
☐ Almost always		
☐ Always		
	0 _____ 1 _____ (2) _____ 3 _____ 4	

The **left** column asks about the **occurrence** of the **side effects**. Please indicate how frequently or how severely you have experienced a given symptom **during the past 4 weeks** by checking off the appropriate answer.

In the **right** column you will find questions asking you whether these symptoms are **distressing** to you. Please circle the number that corresponds with how distressing this symptom is to you.

If a symptom **does not occur**, answer “**never**” or “**not**” in the left column and go directly to the **next question**.

At the end of the questionnaire, you can add additional side effects that you may have experienced during the **past 4 weeks**. Please check if you have completed all items and all pages. Please also be sure that you have completed both the right and left column of the questionnaire.

Contact information of the authors:

Philip Moons
Center for Health Services and Nursing Research
Katholieke Universiteit Leuven (Belgium)
Tel: +32 16 33 69 84
E-mail: Philip.Moons@med.kuleuven.ac.be

Fabienne Dobbels
Center for Health Services and Nursing Research
Katholieke Universiteit Leuven (Belgium)
Tel: +32 16 33 69 76
E-mail: Fabienne.Dobbels@med.kuleuven.ac.be

Sabina De Geest
Institute of Nursing Science
University of Basel (Switzerland)
Tel: +41 61 267 09 51
E-mail: Sabina.DeGeest@unibas.ch

Developed to assess occurrence and distress experienced by the side effects of Cyclosporine, Tacrolimus, Micophenolate Mofetil, Azathioprine, Prednisolone, Sirolimus, LEA29Y.

Partly based on the Transplant Symptom Frequency and Symptom Distress Scale: Lough ME, Lindsey AM, Shinn JA, Stotts NA. Life satisfaction following heart transplantation. J Heart Transplantation 1985; 4: 446-449 & Lough ME, Lindsey AM, Shinn JA, Stotts NA. Impact of symptom frequency and symptom distress on self-reported quality of life in heart transplant recipients. Heart Lung 1987; 16: 193-200.

During the past 4 weeks (including today):

1. I have had <u>itching</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>itching</u> was <i>not distressing</i> <i>at all</i> <i>terribly</i> <i>distressing</i> 0 ____ 1 ____ 2 ____ 3 ____ 4
2. I have had <u>chest pain</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>chest pain</u> was <i>not distressing</i> <i>at all</i> <i>terribly</i> <i>distressing</i> 0 ____ 1 ____ 2 ____ 3 ____ 4
3. I have had <u>wind</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>wind</u> was <i>not distressing</i> <i>at all</i> <i>terribly</i> <i>distressing</i> 0 ____ 1 ____ 2 ____ 3 ____ 4
4. I have had <u>increased thirst</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>increased thirst</u> was <i>not distressing</i> <i>at all</i> <i>terribly</i> <i>distressing</i> 0 ____ 1 ____ 2 ____ 3 ____ 4
5. I have felt <u>restless</u> or <u>nervous</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>restlessness</u> or <u>nervousness</u> was <i>not distressing</i> <i>at all</i> <i>terribly</i> <i>distressing</i> 0 ____ 1 ____ 2 ____ 3 ____ 4
6. I have had <u>hearing loss</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>hearing loss</u> was <i>not distressing</i> <i>at all</i> <i>terribly</i> <i>distressing</i> 0 ____ 1 ____ 2 ____ 3 ____ 4

During the past 4 weeks (including today):

7. I have had an <u>abnormal skin color</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>abnormal skin color</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
8. I have had <u>increased sweating</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>increased sweating</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
9. My <u>face and neck</u> have been <u>red</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	The <u>redness</u> in my face and neck was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
10. I have had <u>brittle fingernails</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>brittle fingernails</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
11. My <u>breasts</u> have been <u>larger</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>breast enlargement</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
12. I have had <u>sores on my lips and/or in my mouth</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>sores</u> on lips and/or in mouth were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

13. I have had <u>an altered voice</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>altered voice</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
14. I have had <u>oily skin</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>oily skin</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
15. I have felt <u>dizzy</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>dizziness</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
16. My <u>hands have trembled</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>trembling hands</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
17. I have had an <u>increased urge to urinate</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>increased urge to urinate</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
18. I have had a <u>feeling of warmth in my hands and feet</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	The <u>feeling of warmth</u> in my hands and feet was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

19. I have had <u>bruises</u> more easily ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>bruises</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
20. I have had <u>sores or warts around my genitals</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>sores or warts around genitals</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
21. I have had <u>spots on my face and/or my back</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>spots</u> on my face and/or back were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
22. I have had an <u>excessive appetite</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>excessive appetite</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
23. I have felt <u>depressed</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>feelings of depression</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
24. <u>My gums have swollen</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>swollen gums</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

25. I have had <u>swollen glands</u> in my neck, armpit or groin ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>swollen glands</u> were <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
26. I have had <u>thinning of hair</u> or <u>hair loss</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>hair thinning or hair loss</u> was <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
27 A. I have had <u>menstrual problems</u> (for females only) ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>menstrual problems</u> were <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
27 B. I have had <u>erectile problems</u> (for males only) ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>erectile problems</u> were <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
28. I have had a <u>puffy face</u> (moon face) ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>puffy face</u> was <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
29. I have had <u>swollen ankles or feet</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>swollen ankles or feet</u> were <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

30. I have had <u>diarrhea</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>diarrhea</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
31. I have had <u>tingling or numbness</u> in my hands or feet ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>tingling or numbness</u> in my hands or feet was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
32. I have had <u>back pain</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>back pain</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
33. I have had a <u>brittle skin</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>brittle skin</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
34. I have felt <u>anxious</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My feelings of <u>anxiety</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
35. I have been experiencing <u>mood swings</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>mood swings</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

36. I have had <u>headaches</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>headaches</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
37. My <u>facial features have changed</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>changed facial features</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
38. I have had <u>fat deposits</u> on my neck and back ("buffalo hump") ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>fat deposits</u> on neck and back were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
39. I have had difficulty <u>concentrating</u> and/or <u>memory problems</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>concentration difficulties and/or memory problems</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
40. I have had <u>warts on hands and feet</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>warts on hands and feet</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
41. I have had <u>increased hair growth</u> on face and body ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>increased hair growth</u> on face and body were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

42. I have had <u>sleep difficulties</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>sleep difficulties</u> were <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
43. I have had <u>muscle weakness</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>muscle weakness</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
44. My <u>sense of taste</u> has changed ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	The <u>change in my sense of taste</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
45. I have had a <u>poor appetite</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>poor appetite</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
46. I have felt <u>tired</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>tiredness</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
47. I have had <u>lack of energy</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>lack of energy</u> was <i>not distressing</i> <i>terribly distressing</i> <i>at all</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

48. I have had <u>stomach complaints</u>, I have felt <u>nauseous</u> and/or I had to <u>vomit</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>stomach complaints</u>, <u>nausea</u> or <u>vomiting</u> were <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
49. I have had <u>pain in my joints</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>joint pain</u> was <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
50. I have had a <u>rash on my skin</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>skin rash</u> was <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
51. I have had <u>muscle cramps</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>muscle cramps</u> were <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
52. I have had <u>nightmares</u> ☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	My <u>nightmares</u> were <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4
53. I have been <u>short of breath</u> ☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	My <u>shortness of breath</u> was <i>not distressing at all</i> <i>terribly distressing</i> 0 _____ 1 _____ 2 _____ 3 _____ 4

During the past 4 weeks (including today):

During the past 4 weeks (including today)

54. I have had a <u>dry skin</u>	My <u>dry skin</u> was
☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	not distressing at all terribly distressing 0 _____ 1 _____ 2 _____ 3 _____ 4
55. I have had <u>palpitations</u>	My <u>palpitations</u> were
☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	not distressing at all terribly distressing 0 _____ 1 _____ 2 _____ 3 _____ 4
56. I have had <u>constipation</u>	My <u>constipation</u> was
☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	not distressing at all terribly distressing 0 _____ 1 _____ 2 _____ 3 _____ 4
57. I have had <u>difficulty seeing well</u>	My <u>seeing difficulties</u> were
☐ Not ☐ A little ☐ Moderately ☐ Greatly ☐ Very greatly	not distressing at all terribly distressing 0 _____ 1 _____ 2 _____ 3 _____ 4
58. I have had a <u>reduced interest in sex</u>	My <u>reduced interest in sex</u> was
☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	not distressing at all terribly distressing 0 _____ 1 _____ 2 _____ 3 _____ 4
59. My eyes have been <u>sensitive to light</u>	My <u>sensitivity to light</u> was
☐ Never ☐ Occasionally ☐ Regularly ☐ Almost always ☐ Always	not distressing at all terribly distressing 0 _____ 1 _____ 2 _____ 3 _____ 4

Please check if you have completed all items and all pages.

Please also be sure that you have completed both the right and left column of the questionnaire.

THANK YOU VERY MUCH FOR YOUR COOPERATION