

# MSDE (Motor Speech Disorders Examination) test

## - MDS-ES 2019\_EN version

### General instruction for examiner:

- For recording choose a quiet room. Avoid lecture halls or other large rooms where is the risk of echo or rooms with a large amount of medical devices.
- Try to reduce the level of draught as much as possible. Close windows and doors, move cooling fans to face the wall and reduce the level of cooling.
- Try to reduce the level of ambient noise as much as possible. Close windows and doors, switch off mobile phones etc.
- Offer patients a glass of water. Motivate them to drink.
- Be sure that the position of the microphone is correct. The head-mounted microphone is typically placed close to the cheek, outside the main exhalation stream, approximately 0.5-1 cm above the skin, not touching the skin or facial hair.
- It is possible to modify the instruction listed below, but the **bold parts** should remain well-kept and emphasised as they are important for a good understanding of the given task.
- It is absolutely necessary to perform the tasks 1, 2A and 3 by the examiner as examiner's performance is often more important than any instruction!

1. KEEPING OF STEADY PACE – /pa/-/pa/-/pa/-/pa/	Num. of repetit.	Perform by exam.	Fulfil Y/N
<ul style="list-style-type: none"> <li>• Explain the recording procedure to the patient ‘The speech examination consists of 5 speaking tasks. I will firstly explain and show you how to perform the task. Then it will be time for your performance. Most of the task will be repeated twice. The duration of tasks is variable. When the task ends, I will give you hand-sign to avoid overlap of our speech.</li> <li>• Ask the patient: The first task is to <b>regularly</b> repeat syllable /pa/ <b>in steady, rhythmical pace</b>, such as metronome. You can choose your own comfortable pace. <b>Draw a deep breath</b> at the beginning of the task and repeat the syllables until I stop you.’</li> <li>• Perform the task.</li> <li>• The task tests only the ability to keep a steady pace without accelerating or decelerating articulatory velocity. For this reason, the velocity of self-chosen pace is not important. However, if the chosen pace is too quick (gabble), it is almost impossible to keep steady pace. On the other hand, if the pace is too slow, patient may have a problem to reach the required number of syllable repetitions that should be <b>20 syllables per one breath</b>.</li> </ul>	2x	YES	<input type="checkbox"/>  <input type="checkbox"/>

2. SUSTAINED PHONATION – /a/, /i/	Num. of repetit.	Perform by exam.	Fulfil Y/N
<p>2A) Sustained phonation of vowel /a/</p> <ul style="list-style-type: none"> <li>• Ask subject: ‘Now, please <b>draw a deep breath</b> and try to perform a sustained phonation of vowel /a/ <b>as constant and long as possible</b> per one breath.’</li> <li>• Perform the task and continue with the next instruction: ‘You should keep this as long as possible, but <b>at least 10 seconds</b>. I will measure the time with a stopwatch.’</li> <li>• Do not interrupt the patient, let him phonate for <b>as long as possible</b>. The task is performed until the subject is out of breath. The total phonation time is also measured.</li> <li>• In case that subject’s time is shorter than 6 seconds try to motivate him/her to better performance. It could be helpful if subject lowers the loudness of voice and use their common pitch of voice.</li> </ul>	2x	YES	<input type="checkbox"/>  <input type="checkbox"/>
<p>2B) Sustained phonation of vowel /i/</p> <ul style="list-style-type: none"> <li>• Ask subject: ‘The next task is almost the same but at this time it will be long phonation of vowel /i/ instead of /a/’</li> </ul>	2x	NO	<input type="checkbox"/> <input type="checkbox"/>
3. DDK TASK – /pa-ta-ka/	Num. of repetit.	Perform by exam.	Fulfil Y/N
<ul style="list-style-type: none"> <li>• Ask subject: ‘Now, please repeat these syllables /pa/-/ta/-/ka/.’</li> <li>• Recite these syllables slowly, emphatically with a short pauses among them.</li> <li>• After the subject repeated these syllables correctly, continue with the next instruction: ‘Before this task <b>draw a deep breath</b> and then begin repeating these syllables /pa/-/ta/-/ka/ as <b>quick and accurate</b> as possible until I stop you. Now I will show you this task.’</li> <li>• Perform the task. Syllables are pronounced continuously and shortly!</li> <li>• The required number of repetition is <b>12 times</b> (12x /pa-ta-ka/ triples).</li> <li>• The accuracy of articulation is more important than the velocity. Each syllable should be intelligible.</li> <li>• In case that subject’s performance is not correct, the examiner should refer to mistakes and repeat the instruction.</li> <li>• The typical mistakes are: 1. Consonants are changed, for example: /pa-sa-ka-pa-sa-ka-pa-sa-ka/; 2. Vowels are omitted, for example: /pa-ta-ka-p-t-k-p-t-k/; 3. One syllable is doubled. /pa-ta-ka-pa-pa-ta-ka-pa-pa-ta-ka-pa/; 4. Syllables are not continuous, there are periodic pauses, for example: /pa-ta-ka-&lt;pause&gt;-pa-ta-ka-&lt;pause&gt;-pa-ta-ka/.</li> </ul>	2x	YES	<input type="checkbox"/> <input type="checkbox"/>

4. READING TEXT	Num. of repetit.	Perform by exam.	Fulfil Y/N
<ul style="list-style-type: none"> <li>• Ask subject: 'Please read this short paragraph of text. If you need glasses, please take them now.'</li> <li>• Use supplementary material - READING TEXT.</li> </ul>	2x	NO	<input type="checkbox"/>  <input type="checkbox"/>
5. MONOLOGUE - FAIRY TALE	Num. of repetit.	Perform by exam.	Fulfil Y/N
<ul style="list-style-type: none"> <li>• Ask subject: 'The aim of the last task is to talk for about one and half minute. The topic is to <b>narrate a fairy tale</b>. The particular choice is up to you. It should be a monologue, so I will not interrupt you. Think it over for a while and then you can start.'</li> <li>• More than one fairy tale might be narrated. The storyline does not have to be correct and complete.</li> <li>• The monologue should be composed mostly of <b>common speech</b>. No singing, rhymes, strong emotions or imitations of foreign accents should be included.</li> <li>• In case that subject does not have a quick idea what to talk about, offer him/her prepared supplementary materials with Cinderella fairy tale. The subject should read the text first and then narrate it by his/hers own words.</li> <li>• Use a stopwatch to measure the time of monologue. If the monologue is short or has poor content (the subject is still repeating 2-3 same sentences), try to switch to another fairy tale. The real time of monologue, without long pauses and examiner questions, should be <b>90 seconds</b>.</li> <li>• Use supplementary material - FAIRY TALE if necessary.</li> </ul>	1x	NO	<input type="checkbox"/>