

**Additional file 1.** Measurement Health Literacy Among Adolescents Questionnaire (MOHLAA-Q)

**Scale A. Dealing with health-related information**

<i>How easy/difficult is it for you to . . . ?</i>	very easy (4)	easy (3)	difficult (2)	very difficult (1)
1. <b>...find information about what to do when you feel ill to make yourself get better?</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. <b>...understand a medication leaflet?</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. <b>...judge whether information about medication in the media is credible?</b> media: internet, TV, radio, press	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. <b>...follow the instructions of your doctor or pharmacist?</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. <b>...find information about how you can deal with mental problems?</b> e.g., permanent stress, depression, being bullied, an eating disorder	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. <b>...understand how you can protect yourself from sexually transmitted diseases?</b> By sexually transmitted diseases we mean diseases such as HIV/AIDS, chlamydia infection, or herpes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. <b>...judge whether you can trust media when they warn you of risks to your health?</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. <b>...implement recommendations that protect you during sport, in your leisure time and in traffic?</b> (e.g., wearing a helmet or knee or arm protectors, observing road traffic regulations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. <b>...find information about healthy behavior such as exercise and nutrition?</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. <b>...understand information on food packaging?</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. <b>...judge how what you do daily affects your health?</b> e.g., eating, drinking, exercise, relaxation, body care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

...get involved in promoting a healthy environment?

12. e.g., less noise and less traffic, better air quality, more parks and sports grounds

**Scale B. Communication and interaction skills**

<i>To what extent do you agree with the following sentences?</i>		strongly agree	somewh at agree	somewh at disagree	strongly disagree
		(4)	(3)	(2)	(1)
13.	<b>During my last visit to the doctor, I asked all the questions that interested me.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	<b>I chat with my friends about how one can avoid unhealthy behavior e.g., smoking, drinking alcohol over the limit</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15.	<b>If my friends or siblings have questions about health, I can help them.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16.	<b>It is easy for me to talk with my parents about health topics.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Scale C. Attitudes toward one's own health and health information**

		not at all	little	moderate	strong	very strong
		(1)	(2)	(3)	(4)	(5)
17.	How much in general do you pay attention to your health?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>To what extent do you agree to the following sentences?</i>		strongly agree	some what agree	neither agree or disagree	some what disagree	strongly disagree
		(5)	(4)	(3)	(2)	(1)
18.	<b>I seek advice from others when I am ill.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<b>It is up to me to protect myself from diseases.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	<b>I know what I have to do to make myself feel comfortable.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<b>It is important to me to inform myself about health-related topics.</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Scale D. Health-related knowledge

1. **How often should a young person at your age be physically active?** *Only one answer is correct.*

- Up to two hours of sport per week is sufficient (0)
- Physical education lessons at school are sufficient (0)
- About an hour every day while one's works up a sweat, is sufficient (1)
- Three times a week exercise is sufficient (0)
- Do not know (0)

2. **How does it affect the body if you regularly drink a lot of alcohol?** *Only one answer is correct.*

- Almost all organs are damaged (1)
- Only the liver and brain are damaged (0)
- It depends on how much the body can tolerate (0)
- The lung volume decreases (0)
- Do not know (0)

3. **What are the health effects for young people of consuming cannabis (marijuana, hashish) often?** *Only one answer is correct.*

- Poorer learning and memory skills (1)
- Permanent brain damage (0)
- Hair loss (0)
- Only physical dependence (0)
- Do not know (0)

4. **What is NOT one of the possible effects of smoking?** *Only one answer is correct.*

- Tooth loss (0)
- Skin aging (0)
- Nearsightedness (1)
- Decreased muscular strength (0)
- Do not know (0)

5. **How can small burns be treated?** *Only one answer is correct.*
- Sprinkle flour on the wound (0)
  - Cool for 10 minutes under lukewarm water (1)
  - Always pierce blisters from burns (0)
  - Cool only with sterile saline solution (0)
  - Do not know (0)
6. **Which ingredient is contained in the highest amount in a cocoa drink powder with the ingredients listed on the package as follows: sugar, dextrose, low-fat cocoa powder, emulsifier agent (lecithin), salt?** *Only one answer is correct.*
- Salt (0)
  - Dextrose (0)
  - Sugar (1)
  - Cocoa powder (0)
  - Do not know (0)
7. **We want to know if you know what your rights are. One of the following sentences is WRONG. Which sentence is that?** *Only one answer is correct.*
- I can disagree to a major medical surgery, even if my parents have agreed. (0)
  - I have to agree before my doctor will inform my parents about my treatment. (0)
  - I have the right for the doctor to inform me about the advantages and disadvantages of my treatment. (0)
  - I have no rights. (1)
  - Do not know (0)
8. **How can HIV/AIDS be transmitted?** *Only one answer is correct*
- Kissing (0)
  - Skin contact such as shaking hands (0)
  - Insect bites (0)
  - None of the given answers is correct (1)
  - Do not know (0)