Module 2.5

Promotion of physical activity in primary health care
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INTRODUCTION

Physical activity is defined as any bodily movement produced by skeletal muscles that requires energy expenditure. Globally, one in four adults and 80% of adolescents have insufficient physical activity. Insufficient physical activity is one the leading risk factors for noncommunicable diseases (NCDs) worldwide. Therefore, physical activity has significant health benefits and contributes to preventing NCDs. Primary health care workers can play an effective role in providing personalized, clear and practical advice about physical activity. This module covers practical training on providing brief interventions among physically inactive individuals at the primary health care level using the 5A’s and 5R’s.

LEARNING OUTCOMES

At the end of the session, participants will be able to do the following:

- Explain to patients the recommended levels of physical activity that are beneficial to health.
- Employ the 5A’s and 5R’s brief interventions to promote health-beneficial physical activity appropriate to the individual’s age, lifestyle and health conditions, and cultural background.

TOPICS COVERED

- Definition of physical activity and exercise.
- Benefits of physical activity.
- Age-specific physical activity recommendations.
- 5A’s and 5R’s brief interventions to promote physical activity.

COMPETENCY

To deliver brief interventions using the 5A’s and 5R’s to patients/clients to promote physical activity based on standard recommendations.
TEACHING AND LEARNING ACTIVITIES

Total session time: 90 minutes

Activity 1. Basics of physical activity: 20 minutes

Step 1. Ask the participants to form a circle.

Step 2. Invite participants to demonstrate a physical activity of their choice.

Step 3. Ask participants to briefly answer the following questions. Write the responses on a flipchart/whiteboard:

- What happened to the breathing and heart rates?
- Which groups of muscles or parts of the body were used?
- What is your understanding of some of the common terminologies used:
  - physical activity
  - physical inactivity
  - exercise.

Step 4. Ask participants to briefly respond to the following questions:

- What are the global recommendations for physical activity?
- Are there any national recommendations for physical activity in your country? If so, are they similar to or different from the global recommendations?

Step 5. Present the powerpoint slides with the following contents:

- definition of physical activity and exercise
- benefits of physical activity
- recommendations of physical activity for various age groups
- types of activities for various levels of physical activity
- role of primary health care providers in promoting physical activity.
Activity 2. Challenging myths about physical activity: 20 minutes

Picture of red and blue chair

Game

Step 1. Place two chairs in front of the group, a red and a blue chair.

Step 2. Invite two participants to take the seats.

- The red chair is the “hot seat”.
- The participant in the red hot seat will pose resistance or express unsupportive views on physical activity by reading the following challenge statements.
- The person in the blue chair will provide a counter-response to clarify and address the challenge.

Challenge statements

(1) A little bit of exercise is not enough.
(2) Exercise makes you tired.
(3) I don’t need to lose weight so I don’t need to be physically active.
(4) Being physically active is too expensive. It takes equipment, special shoes and clothes... and sometimes you even have to pay to use sports facilities.
(5) I’m very busy. Physical activity takes too much time.
(6) Children by nature have so much energy. They hardly sit still. There’s no need to spend time or energy teaching them about physical activity. They are already so active.
(7) Physical activity is for people in the “prime of life”. At my age, I don’t need to be concerned with it.
(8) Physical activity is needed only in industrialized countries. Developing countries have other problems.

Answers to the challenge statements

(1) **A little bit of exercise is not enough.** As little as 30 minutes a day on most days of the week is good for your health. Any exercise is better than none. For example, regular walking has been shown to reduce the risk of heart disease.

(2) **Exercise makes you tired.** Although you may feel somewhat tired during an exercise session, when you’re done you usually feel more invigorated. Doing any regular physical activity is guaranteed to raise your overall energy levels and make you better able to handle everything you have to undertake during the day. If you’re having trouble concentrating at work or getting too stressed, the best remedy is a short walk or any
other physical activity to clear your mind, bump up your energy levels, and decrease your mental stress. Doing regular physical activity also helps you sleep better at night, leaving you more refreshed and energetic during the day.

(3) I don’t need to lose weight so I don’t need to be physically active. Physical activity has benefits for everyone, regardless of your shape or size. A full-body workout that includes all of the major muscle groups, cardiovascular activity and flexibility will help you manage stress, give you more energy, and improve blood pressure and cholesterol levels. Improvements to your overall health are likely to happen before you notice any significant changes to your physical appearance.

(4) Being physically active is too expensive. It takes equipment, special shoes and clothes...and sometimes you even have to pay to use sports facilities. It only takes 30 minutes of moderate-intensity physical activity five days per week to improve and maintain your health. However, this does not mean that physical activity must always be performed for 30 minutes at a time. The activity can be accumulated over the course of the day: a 10-minute brisk walk three times a day; or 20 minutes in the morning and 10 minutes later in the day.

These activities can be incorporated into your daily routine – at work, school, home or play. Simple things like taking the stairs, riding a bike to work or getting off the bus two stops before your final destination and then walking the rest of the way can accumulate over the day and can form an important part of your regular daily activities.

Even if you are very busy, you can still fit in 30 minutes of physical activity into your daily routine to improve your health.

(5) I’m very busy. Physical activity takes too much time! Physical activity can be done almost anywhere and does not necessarily require equipment. Carrying groceries, wood, books or children are good complementary physical activities, as is climbing the stairs instead of using the elevator. Walking is perhaps the most practised and most highly recommended physical activity and is absolutely free. Some urban areas have parks, waterfronts or other pedestrian areas that are ideal for walking, running or playing. It is not imperative to go to a gym, pool or other special sports facility to be physically active.

(6) Children by nature have so much energy. They hardly sit still. There’s no need to spend time or energy teaching them about physical activity. They are already so active. Each day children and youth aged 5–17 years should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity to ensure healthy development. However, physical activity levels are decreasing among young people in countries around the world, especially in poor urban areas. This decline is largely due to increasingly common sedentary ways of life. For example, fewer children walk or cycle to school and excessive time is devoted to watching television, playing computer games, and using computers and mobile devices, often at the expense of time and opportunities for physical activity and sports. Physical education and other school-based physical activities have also been decreasing.

Importantly, patterns of physical activity and healthy lifestyles acquired during childhood and adolescence are more likely to be maintained throughout the lifespan. Consequently,
improving physical activity levels in young people is imperative for the future health of all populations.

(7) Physical activity is for people in the “prime of life”. At my age, I don’t need to be concerned with it. Regular physical activity has been shown to improve the functional status and quality of life of older adults. It is recommended that adults aged 65 years and above do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week.

Many noncommunicable diseases (NCDs: cardiovascular disease, osteoarthritis, osteoporosis, hypertension, falls) prevalent in older adults can benefit from participation in regular physical activity. Physical activity has also been shown to improve mental health and cognitive function in older adults and has been found to contribute to the management of disorders such as depression and anxiety. Active lifestyles often provide older persons with regular occasions to make new friends, maintain social networks and interact with other people of all ages.

(8) Physical activity is needed only in industrialized countries. Developing countries have other problems. Physical inactivity is now identified as the fourth leading risk factor for global mortality. Importantly, 80% of deaths from common NCDs occur in low- and middle-income countries. Therefore, NCDs associated with physical inactivity are a significant public health problem in most countries around the world.

Levels of inactivity are high in virtually all developed and developing countries. In rapidly growing large cities of the developing world, physical inactivity is an even greater problem. Urbanization has resulted in several environmental factors that discourage participation in physical activity, particularly in the transport and occupational domains. In rural areas of developing countries, sedentary pastimes (e.g. watching television) are also becoming increasingly popular.

Activity 3. Using the 5A’s and 5R’s brief interventions to promote physical activity: 20 minutes

Step 1. Ask participants the following questions. Write the responses on a flipchart/whiteboard.

- How do you promote physical activity among patients in health facilities?
- What challenges do you face in promoting physical activity in your practice?
- What role can you play in promoting physical activity in health facilities and communities?

Step 2. Divide participants into convenient groups.

Step 3. Ask participants to carefully go through the brief intervention in the workbook. Ask if there are any points for clarification that need to be discussed.
<table>
<thead>
<tr>
<th><strong>SA’s</strong></th>
<th><strong>Physical activity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ask</strong></td>
<td>In the past week, on how many days have you been physically active for a total of 30 minutes or more? For example: walking, cycling, cleaning, gardening, climbing stairs, dancing or playing sport. Adapt examples to local context.</td>
</tr>
<tr>
<td><strong>Advise</strong></td>
<td>All adults should do at least 2½ hours (150 minutes) of physical activity per week. This can be spread over short sessions throughout the day and week, starting from as little as 10 minutes per session. Being more active can start in small ways which are part of daily life. This can include going for a walk, playing with children, gardening and domestic chores. Adapt examples to local context. Advantages of physical activity: - Reduces the risk of developing hypertension, diabetes, heart attack, stroke and cancer - Can help to control blood pressure, cholesterol and diabetes - Helps with weight loss and weight control - Helps to prevent and manage depression. - Some physical activity is better than none.</td>
</tr>
<tr>
<td><strong>Assess</strong></td>
<td>1. Are you ready to start being more physically active? 2. Do you think you will be able to succeed in increasing your activity levels?</td>
</tr>
<tr>
<td>Question 1</td>
<td>Yes</td>
</tr>
<tr>
<td>Question 2</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Any answer in the shaded area indicates that person is not yet ready to change. In this case, the effort needs to be made to increase motivation for change. Answers in the white area suggest that you and the patient can move on to the next step.
<table>
<thead>
<tr>
<th>5A’s</th>
<th>Physical activity</th>
</tr>
</thead>
</table>
| Assist | Help the patient to develop a plan to start increasing physical activity. Provide practical counselling.  
◦ Help the patient to identify areas of their daily life where they could start to increase their physical activity levels.  
◦ Help to identify activities that they would enjoy doing.  
◦ Help to identify possible challenges and suggest how to overcome them.  
◦ Provide social support.  
◦ Encourage the patient to talk with family, friends and work colleagues about their efforts to increase physical activity levels.  
◦ Provide health education materials and information on additional resources.  
◦ These could include contact details for organizations such as walking groups and activity clubs  
| Adapt to local context.  
Provide (if available) or advise on devices to help motivate or monitor activity e.g. a pedometer. |
| Arrange | Refer to specialist support services if needed and available.  
Follow-up: decide the timeline and method and schedule the next appointment. Ask about successes and challenges.  
For those who have become more physically active:  
◦ Congratulate them on their success.  
◦ For those experiencing challenges:  
  — Remind them to view the process as a learning experience and that it takes time to establish new habits.  
  — Review circumstances, discuss ways to address challenges and encourage recommitment to their plan.  
  — Link with more intensive support if available.  
◦ Remind all patients of any additional support and resources that are available. |

5R’s interventions for to help people who are not ready to increase physical activity at this time

<table>
<thead>
<tr>
<th>5R’s</th>
<th>What to say/do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>What kind of effects do you think your current low level of physical activity is having on your health and life?</td>
</tr>
</tbody>
</table>
| Risks | What do you understand about the risks of being physically inactive for your health?  
Go over the list of risks of a low level of physical activity and ask the person if they are concerned about any of these. |
### 5R’s What to say/do

**Rewards**

*Can you think of any benefits to you if you made some changes to your physical activity level?*

Go over the benefits of having a physically active life, specifically highlighting the ways in which healthier choices could address the concerns previously mentioned.

**Roadblocks**

*Have you ever tried to be more physically active in the past?*

*Are there things that make it difficult to change your physical activity level?*

*Can you think of ways to reduce these difficulties?*

Acknowledge the challenges and encourage the person to think of various options to address them.

**Repetition**

*Now that we have had a chat, let’s see if you feel differently:*

1. *Would you like to make changes to your physical activity level to help you achieve a healthier life?*
2. *Do you think you have a chance of successfully making changes to your physical activity level?*

If the person remains unwilling to start making changes to their physical activity level at this time, end the discussion in a positive way, assure them of your support and invite them to return for further discussion if they change their mind.

Provide health education materials.

At the next follow up visit, ask again if they feel ready to make changes to their physical activity level.

### Activity 4. Role-play: 5A’s and 5R’s interventions: **30 minutes**

**Providing 5A’s brief intervention to increase physical activity**

**ASK THE LEVEL OF PHYSICAL ACTIVITY**

**Step 1.** Ask for two volunteers. The first volunteer will act as a primary health care worker and the second volunteer as a patient.

**Step 2.** Instruct other participants to observe the session.

**Step 3.** Ask the health care worker to use the above algorithm and ask questions about the level of physical activity on a typical day, adapting the examples to local context.
Step 4. After the session, ask the participants to share the good practices observed and suggestions for improvement in the ASK session. Thank the health care worker volunteer.

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**ADVISE PROVIDING A CLEAR, FRANK AND PERSONALIZED MESSAGE**

Step 5. Ask the patient volunteer to stay in the role play and invite the third volunteer to come forward.

Step 6. Ask the third volunteer to advise the patient to improve physical level activity based on the information elicited in the ASK session.

- Instruct other participants to observe the session.
- Using the algorithm, the health care worker provides clear, frank and personalized advice on improving the level of physical activity. (If the patient is achieving the recommended level of physical activity, encourage them to continue.)
- After the session, ask the participants:
  - to note the good practices and provide suggestions for improvement in the ADVISE session;
  - to determine if the advice provided was clear, frank and personalized;
  - to list the personalized messages that were used well by the health counsellor to advise the patient.

Step 7. Thank the health care worker volunteer and ask the patient volunteer to remain in the front.

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**ASSESS READINESS TO CHANGE**

Step 8. Invite the fourth volunteer to come forward.

Step 9. Ask the fourth volunteer to ASSESS the level of motivation for improvement of physical activity using the above algorithm.

Step 10. Instruct other participants to observe the session.

- Using the algorithm, the health care worker assesses readiness to make changes to a healthier physical activity level.
- Patient expresses the readiness to increase the physical activity level.
ASSIST AND ARRANGE

**Step 11.** Ask the patient to continue the role play.

**Step 12.** Invite the fifth health care worker volunteer. Using the algorithm, the health care worker ASSISTS and provides practical counselling on physical activity.

**Step 13.** After the session, ask the participants:
- to share the good practices observed in the ASSIST and ARRANGE sessions;
- to provide suggestions for improvement in the ASSIST and ARRANGE sessions.

**Step 14.** Thank the fifth health care worker volunteer and invite a sixth volunteer to come forward.

**Step 15.** Ask the patient volunteer to stay in the role play.

**Step 16.** Ask the participants to discuss the following questions:
- What goals were set for physical activity with the patient?
- How did the health-care worker encourage the patient?
- How were patient’s obstacles discussed, which led to the health-care provider making arrangements for the follow-up visit?

PROVIDING 5’RS BRIEF INTERVENTION TO INCREASE MOTIVATION

**Step 17.** Ask the patient volunteer to continue to role play.

**Step 18.** Invite the sixth health care worker volunteer. The health care worker asks questions to assess the readiness of the patient to improve physical activity level.
- This time, the patient does not show readiness to change.
- The health care worker uses the 5R’s framework to enhance the motivation of the patient.
- Instruct the other participants to observe the session.
Step 19. After the session, ask the participants:

- to share the good practices observed;
- to list suggestions for improvement in the 5R’s session to successfully motivate the patient.

Step 20. Thank the patient volunteer and health care worker volunteer.

**Activity 5. Populationwide interventions to promote physical activity**

Step 1. Discuss the existing initiatives in your communities to improve physical activity.

Step 2. Ask participants to propose innovative initiatives to promote physical activity in their communities. Describe how they would ensure maximum participation and support from the communities.
BACKGROUND INFORMATION

Physical activity recommendation

Physical activity in a day for 30 minutes or more

At least 30 minutes of moderate physical activity should be achieved in a day. Physical activity may include walking or cycling for recreation or to get to and from places, gardening, and exercise or sport that lasts for at least 10 minutes.

The intensity of physical activity must be high enough to increase the heart rate, make you feel warmer and make you breathe a little faster. The "walkie talkie" test is a good way of measuring intensity. If you are walking at a moderate intensity you would be able to carry on a conversation, taking a few extra breaths between sentences, but you would not be able to sing.

150 minutes of moderate physical activity over the course of the week

Adults should accumulate at least 150 minutes of moderate physical activity over the course of each week. This can be achieved in a number of ways, such as:

- 30 minutes of moderate physical activity on most days of the week
- a two-and-a-half hour walk or cycle ride at the weekend
- a combination of activity options totalling a minimum of 150 minutes.

The term "physical activity" should not be mistaken for “exercise”. Exercise is a subcategory of physical activity that is planned, structured, repetitive and purposeful in the sense that the improvement or maintenance of one or more components of physical fitness is the objective. Physical activity includes exercise as well as other activities that involve bodily movement and are done as part of playing, working, active transportation, house chores and recreational activities.

Increasing physical inactivity is a societal and not just an individual problem. Therefore it demands a population-based, multisectoral, multidisciplinary and culturally relevant approach.

At the individual level, physical activity should be recommended based on the individual’s health condition and initial level of fitness. For example, people who are sedentary or physically inactive should start slowly but regularly, and gradually build up their fitness.

The levels of physical activity are defined by four components: frequency, intensity, time (duration) and type (FITT).
What is moderate-intensity and vigorous-intensity physical activity?

- **Intensity of physical activity**\(^1\)
  - Intensity refers to the rate at which the activity is being performed or the magnitude of the effort required to perform an activity or exercise. It can be thought of “how hard a person works to do the activity”.
  - The intensity of different forms of physical activity varies between people. The intensity of physical activity depends on an individual’s previous exercise experience and their relative level of fitness. Consequently, the examples given below are provided as a guide only and will vary between individuals.

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<tr>
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<tr>
<td>Gardening</td>
<td>Fast cycling</td>
</tr>
<tr>
<td>Housework and domestic chores</td>
<td>Aerobics</td>
</tr>
<tr>
<td>Traditional hunting and gathering</td>
<td>Fast swimming</td>
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<td>Competitive sports and games (e.g. traditional games, football, volleyball, hockey, basketball)</td>
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<td>General building tasks (e.g. roofing, thatching, painting)</td>
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<td>Carrying/moving moderate loads (&lt;20 kg)</td>
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**Additional reading resources**

2. Global action plan on physical activity 2018–2030: more active people for a healthier world. World Health Organization, 2018

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Promotion of physical activity in primary health care

Activity 1: Step 5

Definitions: physical activity and exercise

- Physical activity: any bodily movement produced by skeletal muscles that requires energy expenditure
- Exercise: planned, structured, repetitive, and aims to improve or maintain one or more components of physical fitness.
Types of activities for various levels of physical activity

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Benefits of physical activities

- Reduces body weight
- Reduces blood pressure
- Raises HDL ("good") cholesterol
- Reduces the risk of cardiovascular diseases, diabetes and some cancers
- Improves psychological well-being, including gaining more self-confidence and higher self-esteem.

Physical activity recommendations

Children and adolescents aged 5–17 years

- Should do at least 60 minutes of moderate to vigorous-intensity physical activity daily
- Physical activity of amounts greater than 60 minutes daily will provide additional health benefits
- Should include activities that strengthen muscle and bone, at least 3 times per week.
Physical activity recommendations

**Adults aged 18–64 years**
- Should do at least 150 minutes of moderate-intensity physical activity throughout the week, or do at least 75 minutes of vigorous-intensity physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity
- For additional health benefits, adults should increase their moderate-intensity physical activity to 300 minutes per week, or equivalent
- Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.

Physical activity recommendations

**Adults aged 65 years and above**
- Should do at least 150 minutes of moderate-intensity physical activity throughout the week, or at least 75 minutes of vigorous-intensity physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity
- For additional health benefits, they should increase moderate-intensity physical activity to 300 minutes per week, or equivalent
- Those with poor mobility should perform physical activity to enhance balance and prevent falls, 3 or more days per week
- Muscle-strengthening activities should be done involving major muscle groups, 2 or more days a week.

Primary health care worker role

- Health worker should include counselling and health education on physical activity in their practice
- Discuss physical activity with the patients and risks associated with physical inactivity at every consultation
- Use 5 A's technique to discuss about physical activity and assist clients to make plans for physical activity.