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HOW TO USE
THE WHPA HEALTH
IMPROVEMENT CARD

A GUIDE FOR HEALTH PROFESSIONALS

The WHPA Health Improvement Card is designed to:

1. Educate individuals on how to improve their health through positive behaviour and lifestyle changes.

2. Empower individuals to work with their health professionals to establish personal health goals and to track their progress over time.

For health professionals, this brochure content is designed to provide useful health facts and help you respond to the most frequently encountered questions:

- What are noncommunicable diseases?
- What is the WHPA Health Improvement Card?
- What are the most important lifestyle/behavioural risk factors that can be modified?
- What are the metabolic/biometric risk factors that should be monitored on a regular basis?
- How can the WHPA Health Improvement Card help patients and members of the public achieve their health goals?

WHAT ARE NONCOMMUNICABLE DISEASES?

Noncommunicable or chronic diseases (NCDs) – mainly cardiovascular diseases, diabetes, some cancers and chronic respiratory diseases – are a global epidemic, causing more deaths and disability than all other diseases combined. Yet the incidence of NCDs could be significantly reduced and prevented through proven and affordable measures.
There are other important NCDs, such as oral diseases, mental disorders and arthritis, that are often neglected but play a significant role in general well-being. For example, strong association has been shown between oral diseases and psychosocial, speech, nutritional and educational outcomes as well as other systemic conditions.

To make a meaningful reduction in all NCDs, it is necessary to take action on the broader factors that influence people’s health lifestyles and behaviour: the conditions in which they are born, grow, live, work and age, and the influence of society. To reduce the impact of NCDs, it is important to have a holistic approach that links individual risk factors with social and economic determinants of health.

**KEY FACTS**

- Of the 57 million global deaths in 2008, 36 million, or 63%, were due to NCDs, with nearly 80% of NCD deaths occurring in low- and middle-income countries.
- In African nations, NCDs are rising rapidly and are projected to exceed communicable, maternal, perinatal and nutritional diseases as the most common causes of death by 2030.
- All NCDs can either be prevented or, if identified early, treated and managed in a way that significantly reduces disability, financial and societal costs and prolongs healthy years of life.

Four common, modifiable, lifestyle/behavioural risk factors are largely responsible for the ill health, suffering and premature deaths associated with NCDs: unhealthy diet, physical inactivity, tobacco use and the harmful use of alcohol.

These are generally associated with four key metabolic/physiological risk factors: raised blood pressure, raised fasting blood glucose, raised LDL cholesterol and overweight/obesity, which increase the risk of mortality.

As part of daily interactions with patients and the general public, nurses, pharmacists, physicians, dentists and physical therapists have numerous opportunities to educate and empower people on how they may maintain a healthy lifestyle and avoid risky behaviours.

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This includes providing education and information on public health campaigns and services and facilitating access to preventive, curative and rehabilitation services.

**WHAT IS THE WHPA HEALTH IMPROVEMENT CARD?**

Most people are exposed to a multiplicity of environmental and social influences, which predispose them to adopt unhealthy lifestyles/behaviours, leading to poor health and NCDs.

The WHPA Health Improvement Card is a simple, universal, educational tool for adults to assess and record their current status related to common risk factors. It also encourages both individuals and their health professional to take a proactive approach in preventing NCDs and associated disability. The information obtained through its use can then help the health professional and the individual to develop interventions specific to his/her status related to the four lifestyle/behavioural risk factors.

**THE WHPA HEALTH IMPROVEMENT CARD HAS THREE MAIN COMPONENTS:**

1. Assessment on four lifestyle/behavioural risk factors;
2. Assessment on four metabolic/biometric risk factors.
3. Action plan and goals targeting lifestyle/behavioural and metabolic/biometric risk factors;

The potential consequences (-) and the steps the individual might take (+) to address the respective lifestyle/behavioural and metabolic/biometric risk factors are described clearly.

The use of a “traffic light” colour-coding provides a powerful visual message on what needs to be achieved by the patient or individual as a **goal**; what needs to be improved as **caution**; and what is to be avoided as **high risk**.
WHAT ARE THE MOST IMPORTANT LIFESTYLE/BEHAVIOURAL RISK FACTORS THAT CAN BE MODIFIED?
The following is the matrix for the four main lifestyle/behavioural risk factors with recommendations for appropriate actions to achieve ideal health goals.

<table>
<thead>
<tr>
<th>WHAT</th>
<th>GOAL</th>
<th>CAUTION</th>
<th>HIGH RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTHY DIET</td>
<td>An unhealthy diet increases your risk of being overweight, obese and developing oral diseases</td>
<td>5 portions of fruit and vegetables per day</td>
<td>Less than 5 portions of fruit and vegetables per day</td>
</tr>
<tr>
<td>PHYSICAL ACTIVITY</td>
<td>Lack of physical activity increases your risk of cardiovascular diseases, diabetes and some cancers</td>
<td>Physical activity at least 30 minutes per day</td>
<td>Physical activity less than 30 minutes per day</td>
</tr>
<tr>
<td>TOBACCO USE</td>
<td>Tobacco use increases your risk, and the risk of those around you, of cancer, lung diseases, heart attack and stroke</td>
<td>No, I never use or have stopped using tobacco</td>
<td>Yes, I use tobacco</td>
</tr>
<tr>
<td>USE OF ALCOHOL</td>
<td>Harmful use of alcohol increase your risk of mental illnesses, and liver damage and other alcohol related deaths</td>
<td>&lt; 2 drinks per day</td>
<td>3-4 drinks per day</td>
</tr>
</tbody>
</table>

WHAT DO I NEED TO DO AS A HEALTH PROFESSIONAL?
- Mark a tick ☑ in the coloured box on each row, indicating the person's current risk level.
- Highlight both positive and negative aspects of changing lifestyles and behaviours with the patient or member of the public in order to improve health and prevent NCDs.
- Talk to the person about possible approaches to a healthier lifestyle.
• Support the person in developing a plan to help them track progress. Once a person is aware of the dangers and wants to change, many discover that willpower alone is not enough: they need a plan and the help and support of others.

• Provide copies of the User Guide for Patients and Public on the WHPA Health Improvement Card, which provides basic information and simple suggestions on what can be done to encourage positive healthy lifestyle/behaviour change.

• Use the WHPA Health Improvement Card as an educational tool and as a conversation starter to remind people that, by following simple recommendations, health and well-being can be enhanced and many chronic diseases and losses of function can be prevented.

• Discuss with the person about participating in relevant national NCD campaigns or screening programmes targeting these risk factors.

The ultimate goal is for the person to achieve four “greens” for lifestyle/behaviour risk factors. Depending on the current levels of risk, it may be necessary to establish step-wise milestones as part of the Health Improvement Action plan that can be self-monitored at home, or tracked for progress and monitored by the health professional.

IMPROVEMENTS RELATIVE TO LIFESTYLE BEHAVIOURAL RISK FACTORS

RECOMMENDATION TO ACHIEVE A HEALTHY DIET
A healthy diet gives people the energy they need to work, exercise and enjoy life. Some foods can boost energy, stimulate memory and stabilise mood; they can also reduce risk of diseases. A healthy diet does not mean giving up the foods people love, but it does mean being aware of some basic facts about the risks associated with certain foods. Health professionals can discuss and advise on how to achieve a healthy diet particularly as regards consumption of fruits and vegetables, salt, sugar and fat.
RECOMMENDATIONS TO INCREASE PHYSICAL ACTIVITY LEVELS

Adopting an active lifestyle and making physical activity part of the daily routine is the first objective. In terms of making recommendations for increasing physical activity levels for individuals through a more structured programme, it is important to understand how physical activity may be measured and what are the different forms of activity that would be suitable for different age groups and fitness levels.

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

Physical activity recommendations are usually expressed in terms of frequency (how often), duration (how long), and intensity (how much). The intensity is the level of effort and is usually described as moderate to vigorous physical activity.

- Moderate-intensity activity makes your heart beat faster than normal and you are breathing harder than usual.
- Vigorous-intensity activity makes your heart beat much faster and you will be breathing much harder than usual. You will not be able to say a few words without pausing for a breath.

Emphasise that walking is the most common and popular physical activity of all. Many activities such as walking, bicycle riding and swimming can be moderate or vigorous intensity depending on the level of effort as well as the level of fitness of the person.

The following table provides general recommendations for different age groups on the frequency, duration and intensity of different forms of physical activities and needs to be adapted to the health level of the individual:
For more guidance about World Health Organization (WHO) global recommendations on physical activity and information on the dose-response relationship between the frequency, duration, intensity, type and total amount of physical activity needed for the prevention of NCDs, please visit:

RECOMMENDATIONS FOR TOBACCO CESSTION
Health professionals should increase awareness about the risks of tobacco and provide information on tobacco cessation strategies. These may include national tobacco cessation programmes, support lines, pharmacological treatments and relapse prophylaxis. These activities increase cessation rates to 15-20%.

RECOMMENDATIONS TO PREVENT HARMFUL USE OF ALCOHOL
It is recommended that health professionals refer to the national guideline for alcohol consumption in their own country. WHO guidelines for safe alcohol consumption per week are:
- Men: 21 units of alcohol
- Women: 14 Units of alcohol

In general, one unit is approximately:
- 1 small bottle of moderate strength beer (250 ml) or
- 1 small glass of moderate strength wine (90 ml) or
- 1 measure (20 ml) of a spirit such as whisky or vodka

To calculate the exact unit value of a drink, the bottle label usually indicates ‘alcohol by volume’. Take this volume and multiply it by the quantity in the bottle (expressed as a fraction of a litre: 250 ml = 0.25 l). Moderate strength beer is 4% alcohol by volume. Moderate strength wine is 12% alcohol by volume.

The International Centre for Alcohol Policies has also compiled a list of national guidelines from various countries. It lists the entity that developed the guidelines and includes recommendations for men and women, size of standard drink and other notes:
http://www.icap.org/table/InternationalDrinkingGuidelines

Health professionals should be aware of the signs and symptoms of alcohol use disorders and at-risk drinking behaviours and try to motivate high-risk drinkers to moderate their consumption and advise on where to receive specialised treatment and support. Specialised treatment may include mental support, use of evidence-based pharmaceuticals and rehabilitation for alcohol-dependent individuals and assistance to their families.
WHAT ARE THE MOST IMPORTANT METABOLIC / BIOMETRIC RISK FACTORS THAT SHOULD BE MONITORED ON A REGULAR BASIS?

The following is the matrix for the four main metabolic/biometric risk factors with values for each risk level.

<table>
<thead>
<tr>
<th></th>
<th>GOAL</th>
<th>CAUTION</th>
<th>HIGH RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BODY MASS INDEX</strong></td>
<td>18.5 - 24.9</td>
<td>25 - 29.9</td>
<td>30 or greater</td>
</tr>
<tr>
<td><strong>FASTING BLOOD SUGAR</strong></td>
<td>less than 100 mg/dL</td>
<td>100 - 125 mg/dL or treat to goal</td>
<td>126 mg/dL or more</td>
</tr>
<tr>
<td></td>
<td>Less than 200 mg/dL untreated</td>
<td>200 - 239 mg/dL or treat to goal</td>
<td>240 mg/dL or more</td>
</tr>
<tr>
<td><strong>BLOOD PRESSURE</strong></td>
<td>SBP less than 120 mmHg and DBP less than 80 mmHg</td>
<td>SBP 120 - 139 mmHg and DBP 80 - 89 mmHg</td>
<td>SBP more than 140 mmHg and DBP more than 90 mmHg</td>
</tr>
</tbody>
</table>

WHERE:

**BODY MASS INDEX (BMI)** is calculated as measured weight in kilograms divided by measured height in metres squared.

\[
BMI = \frac{\text{weight (kg)}}{\text{height (m)} \times \text{height(m)}} \quad (\text{kg/m}^2)
\]

OR

\[
BMI = \frac{\text{weight (lb)}}{\text{height (in)} \times \text{height(in)}} \times 703 \quad (\text{lb/in}^2)
\]

**FASTING BLOOD SUGAR** is determined from a test for plasma glucose levels in a blood sample taken from an individual who has not eaten any foods or drinks other than water for at least eight hours. An accurate test can be obtained by using an approved blood glucose meter.

**SERUM CHOLESTEROL** refers to the total level of cholesterol that is found in the blood stream. Measuring the level of total cholesterol
includes identifying all types or classes of cholesterol that are found in the system. Laboratory test results may vary depending on age, gender, health history, the method used for the test, and many other factors.

**BLOOD PRESSURE** can be measured using a standard mercury sphygmomanometer or more easily with a blood pressure monitor or machine. Choose a machine that measures from the top of the arm, rather than the wrist or the finger. Finger monitors will not give accurate readings and wrist monitors are also less likely than upper arm monitors to give an accurate reading.

**WAIST CIRCUMFERENCE** is a convenient and simple measure, which is unrelated to height, correlates closely with BMI and the ratio of waist-to-hip circumference, and is an approximate index of intra-abdominal fat mass and total body fat. Furthermore, changes in waist circumference reflect changes in risk factors for cardiovascular disease and other forms of chronic diseases, even though the risks seem to vary in different populations. There is an increased risk of metabolic/biometric complications for men with a waist circumference ≥102 cm (40 inches), and women with a waist circumference ≥88 cm (35 inches).

**WHAT DO I NEED TO DO AS A HEALTH CARE PROFESSIONAL?**

- Mark a tick ☑️ in one of the coloured boxes on each row, indicating the person's current risk level.

The ultimate goal is to achieve four “greens” for metabolic/physiological risk factors. Depending on the person’s current level of risks, it may be necessary to establish step-wise milestones as part of the Health Improvement Action plan that can be self-monitored at home or tracked for progress and monitored by the health professional.

**HOW CAN THE WHPA HEALTH IMPROVEMENT CARD HELP PATIENTS ACHIEVE THEIR HEALTH GOALS?**

The Health Improvement Action plan has been included on the Health Improvement Card for individuals and their health professional to establish mutually agreed goals so as to improve both lifestyle/behavioural and metabolic/biometric risk factors over time.
WHERE:
My commitment refers to the target that both you, as the health professional, and the patient/individual wish to achieve by setting a specific target date, such as for reducing weight, blood pressure, and/or tobacco use.

My action refers to a task that the patient or individual has agreed to undertake on his/her own (such as walking to work instead of using public transport or reducing the number of alcoholic drinks per week).

Health professional action is where the nurse, pharmacist, physician, dentist or physical therapist may indicate locally available diagnostic tests or make a referral to a district health centre or other health professional. It is also where the health professional may prescribe specific interventions (such as checking total cholesterol at a local laboratory centre, making a referral to a district hospital or further evaluation checking blood pressure within one month).

USEFUL HEALTH FACTS
The following information has been obtained from the World Health Organization and may be useful to the health professional when counselling patients and the public.

Many of the most effective interventions should be made at a population level through the implementation and enforcement of relevant health and non-health policies affecting diet, physical activity, tobacco use and harmful use of alcohol. However, it remains critical that a multi-disciplinary and culturally relevant approach is taken by health professionals in order to effectively empower all individuals to take responsibility for their own health.
DIET
At least 2.8 million adults die each year as a result of being overweight or obese. In addition, 44% of the diabetes burden, 23% of the ischaemic heart disease burden and between 7% and 41% of certain cancer burdens are attributable to overweight and obesity. Overweight, obesity and related noncommunicable diseases are largely preventable. Supportive environments and communities are fundamental in shaping people’s choices, making the healthier choice of foods and regular physical activity the easier alternative, thus preventing obesity.

PHYSICAL ACTIVITY
Physical inactivity (lack of physical activity) has been identified as the fourth leading risk factor for global mortality (6% of deaths globally). Moreover, physical inactivity is estimated to be the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and approximately 30% of ischaemic heart disease burden.

TOBACCO USE
Almost 6 million people die from tobacco use each year, both from direct tobacco use and second-hand smoke. By 2020, this number will increase to 7.5 million, accounting for 10% of all deaths. Smoking is estimated to cause about 71% of lung cancer, 42% of chronic respiratory disease and nearly 10% of cardiovascular disease.

Counselling and use of nicotine-replacement therapy (NRT) can more than double the chance that a smoker who tries to quit will succeed. From 2009 onwards, NRT has been on the WHO Essential Medicines List.

HARMFUL USE OF ALCOHOL
Approximately 2.3 million people die each year from the harmful use of alcohol, accounting for about 3.8% of all deaths in the world. More than half of these deaths occur from NCDs, including cancers, cardiovascular disease and cirrhosis of the liver.

Two separate but related dimensions of drinking largely determine the impact of alcohol consumption on disease and injury: the total volume of alcohol consumed and the pattern of drinking. Therefore, a broad range of alcohol consumption patterns, from occasional hazardous drinking to daily heavy drinking, creates significant public health and safety problems in nearly all countries.