INTRODUCTION

The Fifty-first World Health Assembly (Resolution WHA51.9, May 1998) requested the Director-General of WHO to develop a guide on medical products and the Internet. The guide was intended to serve as a model for Member States to adapt into locally meaningful advice for Internet users in order to help them to obtain reliable, independent and comparable information on medicinal products. The guide in this booklet has been prepared to meet the Health Assembly request. It has been developed in consultation with drug regulatory authorities, drug information experts, consumer organizations, and the pharmaceutical industry. It is a model guide, designed to be translated into national languages and modified as the local situation may require.

WHO would be grateful to receive any comments on experience gained from the practical use of the guide which would help in developing it further. Contact information appears below.

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Finally, national health authorities – such as drug regulatory agencies – and WHO are working together to address the illegal advertising and sale of medical products through the Internet. It is important that Internet users report suspected illegal activities and problem cases to their national health authorities.
MEDICAL PRODUCTS AND THE INTERNET
A guide to finding reliable information

Summary of Key Points

1. If used properly, the Internet allows quick and easy access to health information. It provides useful information on such topics as diseases, conditions, therapies, medical products, and health and medical organizations and institutions (see Point I).

2. The information you obtain from the Internet can be helpful when you consult your doctor or other health care provider about your disease or condition. But the guidance from the Internet should not replace consultation with your health care provider (see Point II).

3. Although it is often difficult to determine, you still need to verify the source of information available on the Internet (see Point II).

4. Information that sounds too good to be true, in particular, requires verification and careful assessment (see Point III).

5. Be cautious about buying medical products via the Internet. In many countries, selling or buying medical products via the Internet may at present be an illegal activity. You are strongly advised to obtain your medical products through legitimate distribution channels such as pharmacies (see Point IV).

6. Consult your doctor or other health care professional before you decide to treat yourself (see Point V).

POINT I: THE INTERNET IS A VALUABLE SOURCE OF INFORMATION, BUT BE SURE YOU KNOW AND TRUST THE SOURCE

The Internet is a valuable source of health information on topics such as diseases, conditions, therapies, medical products, and health and medical organizations. When used properly, it allows quick and easy access to such information from on-line medical libraries, universities, health associations and government agencies. However, the quality of health and medical product information on the Internet varies, and it is often difficult for the Internet user to identify the true source of the information and to determine whether it is reliable, complete and up to date.
POINT II: FINDING RELIABLE HEALTH AND MEDICAL INFORMATION ON THE INTERNET

Reliable sources of health and medical information are available on the Internet. This information can be helpful when you consult your health care provider about your disease or condition, though it should not replace such consultation (see Point V). As you search for and evaluate information, however, keep these considerations in mind:

1. It may be difficult to determine the source of the information you find on a web site and to verify that source. If you are not familiar with the source of information, you may be able to find out more about it from health care professionals or reliable organizations with which you are familiar. Your own reliable sources may be able to give you help to evaluate the reliability and quality of the web site information.

2. The box below outlines the minimum information that a web site should contain.

   LOOKING AT A WEB SITE? CHECK THE FOLLOWING:
   • Is there clear indication of the name and contact address of the web site owner?
   • Is it clear which organization(s) contribute funding, services, or other support to the web site?
   • If advertising or sponsorship is a source of funding, is this clearly stated?
   • Is this a site for consumers, health professionals, or some other audience?
   • When was the information displayed last updated?

There are many health and medical sites on the Internet which do provide good information that may not be easily available from other media. They may be designed for health professionals or for consumers. However, even information from reliable sources may require special training in order to evaluate it properly and to determine whether the information applies to your disease or condition. The information provided by these web sites covers such topics as:

1. Research being conducted on a particular disease or a condition – including rare diseases – and related clinical trials;
2. New product approvals by health authorities in your country for a specific disease or condition;
3. General information about diseases or conditions, such as high blood pressure, arthritis or obesity;
4. Support groups for people with certain diseases and conditions, such as HIV/AIDS or cancer;
5. Lists of international, national and local organizations that provide support and information for a disease or condition.
Health authorities and organizations in each country can provide a list of sites with links to reliable sources of health and medical information. Additionally, several private organizations are actively searching for ways to ensure the quality of information on the Internet. Internet users may be interested in following or participating in these discussions and reading what others have to say on this topic. The following box lists two examples of organizations that are conducting such activities. National authorities should identify and list additional organizations and reliable web sites known to them.

<table>
<thead>
<tr>
<th>Health on the Net Foundation</th>
<th><a href="http://www.hon.ch">http://www.hon.ch</a></th>
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<tr>
<td>Internet Healthcare Coalition</td>
<td><a href="http://www.ihc.net">http://www.ihc.net</a></td>
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POINT III: FINDING RELIABLE MEDICAL PRODUCT INFORMATION ON THE INTERNET

The Internet also offers information on medical products. As you search for and evaluate product information, however, keep these considerations in mind:

3. If information sounds too good to be true, it probably is. The following lists some warning signs that medical product information may not be truthful:
   - Advertisements or information that use phrases such as "scientific breakthrough", "miraculous cure", "exclusive product", "secret formula", "ancient ingredient", "without risk", "anti-ageing", "improve sexual performance", and "all natural";
   - Case histories from "cured" customers claiming amazing results. When you see a testimonial, ask for proof of its "typical" nature;
• A list of symptoms and diseases it is claimed the product cures – for example, claims that one product can cure or treat HIV/AIDS, cancer, arthritis, Alzheimer's disease, wrinkles, weight problems, memory loss, and so on;
• Advertisements that tout the latest trendy ingredient in the news headlines;
• Claims that the product is available from only one source, for a limited time;
• Testimonials from "famous" medical experts;
• Claims of "no risk" or lack of any risk information – remember: *no product or treatment is completely risk-free*;
• Claims that a product is "scientifically proven" and "absolutely safe".

4. Products with the same name may contain different ingredients in different countries. Therefore, when searching for information you should look at the International Nonproprietary Name (INN) of the active ingredients and not just the product name (brand name, trade name).

5. Product information should be as complete as possible, and it should include at least the elements outlined in the following box:

<table>
<thead>
<tr>
<th>LOOKING AT PRODUCT INFORMATION? A RELIABLE WEB SITE WILL PROVIDE THE FOLLOWING INFORMATION:</th>
</tr>
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<tbody>
<tr>
<td>• product name</td>
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<tr>
<td>• active ingredient(s)</td>
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<tr>
<td>• name of other ingredients known to cause problems to some people</td>
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<tr>
<td>• what to use the product for</td>
</tr>
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<td>• when not to use the product (for example, in pregnancy, allergies, interactions with other medicines or foods)</td>
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<tr>
<td>• how to use the product</td>
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<td>• possible undesired effects</td>
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<tr>
<td>• how to store the product</td>
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<tr>
<td>• manufacturer's name and contact information</td>
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<tr>
<td>• last update of the information</td>
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**POINT IV. BE CAUTIOUS ABOUT BUYING MEDICAL PRODUCTS ON THE INTERNET**

Medical products are often offered for sale on the Internet. Offering for sale and selling medical products or buying medical products from another country via the Internet may be illegal. Therefore, before buying a product, you should find out if it is legal to do so. If you are considering buying medical products through the Internet, be cautious, because you may risk your health and waste your money. Consult your health care professional before self-treatment.
There are many reasons why medical products bought through the Internet could represent a danger to you, or at the least cause inconvenience or loss of money? Ten of these reasons are discussed here.

1. Safety and efficacy assurance may be lacking

In many countries, before medical products are approved, licensed or authorized for sale, the companies that develop and market them must conduct research and demonstrate to a drug regulatory authority that the products are safe, effective and of good quality for human use. Although these authorized medical products may be available through the Internet, there may also be products for sale that have not been studied and evaluated according to the laws and regulations of your country. There is no assurance of safety and effectiveness for such unauthorized products. As an Internet user, you may find it difficult to distinguish between products that have met the requirements of your government and those that have not.

Information about medical products being developed and tested in humans is available on the Internet. If you have a disease or condition for which there is currently no treatment or cure, you may have searched for information about your disease or condition and read about these new products on the Internet. Although new products are often not available for prescription, sometimes a health care professional may prescribe a medication for you before approval, or discuss enrolling you in a clinical trial to study the product. It is important to understand that there may be additional risks to using such a product before approval, because the possible adverse effects (which may be serious or life-threatening) and the effectiveness and proper dosage schedule may not be known. In some cases, a prescription product may be unavailable in your country but approved for use in another. In such a case, your country may have special legal procedures allowing you to import prescribed medicines from abroad. This could be done with the help of your health care professional, through legitimate distribution channels.

2. Instructions for use may be inadequate

To be used properly and safely, medical products need to be accompanied by precise instructions. There is no assurance that a product obtained via the Internet will have the correct instructions for use, dosage and precautions. In addition, instructions may be printed in a language that you do not know, or they may be unreliable, out of date, or otherwise unusable.

3. Quality may not be assured

When you buy a medical product through the appropriate channels, such as through your pharmacy, you can generally rely on the product meeting manufacturing requirements and you can count on its quality – in other words – the product contains the right active ingredients and has been manufactured, packaged, transported and properly stored before you buy it. By buying medical products through the Internet, you may forfeit the quality assurance offered by authorized channels of medical product manufacturing, distribution and sales in your country.
4. Products may circumvent regulatory protections

Medical products sold through the Internet may circumvent the regulatory protection provided by health authorities and your government. You may be unable to obtain compensation from the manufacturer or distributor for any damage resulting from the use of these products. The identities and locations of the sources of the products may be disguised. This is especially common in the case of fraudulent medical products.

5. Products may be fraudulent and harmful to your health

Products promoted and offered for sale on the Internet may be fraudulent if they do not meet the standards required for approval in your country and are not sold by licensed or authorized health organizations. Using such products to treat yourself may be harmful to your health. The products may provide no benefit to your disease or condition and you may miss an opportunity to be properly treated by health care professionals. Inefficacy of a medical product is not only frustrating; it can also be dangerous. Treatment with fraudulent products may actually be harmful to your health, not just without benefit.

6. Reimbursement may not be possible

In many countries health insurance programmes may not agree to reimburse you for medical products bought through the Internet. Before you purchase a medical product through this channel, even if the product seems legitimate to you, contact your insurance or other health coverage organization to find out if the purchase would be covered and if the Internet medical product provider is recognized by your health insurer or organization.

7. Products may waste your resources

By seeking medical treatment through the Internet instead of through health care professionals, you could be wasting valuable resources – your time and money – because the treatments may not help and, therefore, your money has been wasted. In addition, you may spend valuable time in treating yourself with an ineffective product when you could have been properly treated during that time by going to a health care professional.

8. Products bought across borders may not be allowed in your country

Countries have different laws about what medical products can be sold and shipped across national borders. This means that it is possible that products that are not approved for marketing in your country or products that have been identified as a hazard to public health may not be allowed into your country if they are identified at entry. If you have already paid for the product, you may not be able to receive it or have its cost reimbursed. In addition, the prescription status of medical products varies from country to country. For instance,
products that are available only on prescription in one country may be sold without 
prescription, or may even be unregulated, in another.

9. Products with the same name may be different in different countries

Internet users need to be aware that products with the same name may contain different 
ingredients in different countries. Therefore, you may be taking the wrong product. In 
addition, countries may have different standards for the quality of medical products and 
their manufacture. Products purchased across borders might not be exactly the same product 
or quality as in your own country.

10. Your personal information may not remain confidential

Many web sites require you to disclose personal medical data. Users must be aware that 
there is no assurance that this information will be kept confidential. Users who feel 
uncomfortable with the potential use of their personal data should purchase their medical 
products through conventional, legitimate distribution channels.

POINT V: SEE YOUR HEALTH CARE PROFESSIONAL BEFORE YOU DECIDE 
TO TREAT YOURSELF OR CHANGE YOUR MEDICATION

Even after finding reliable, truthful health or medical information on the Internet, it is 
important to go to your health care provider to discuss your disease or condition and the 
information you have found before you take steps to treat yourself. This is important for 
several reasons:

• Not all diseases and symptoms need medical treatment. You may be taking medicines or 
using medical products unnecessarily and exposing yourself to an unnecessary risk.

• Many medications or other medical products may cause harm if they are used 
improperly. It is important to be under the care of a health care professional when using 
such products.

• Appropriate medication or appropriate medical treatment for your disease or symptoms 
is important to your health. Not every medication is appropriate for everyone. For 
extample, some individuals may be allergic to certain medications. A health care 
professional can help you to determine the best medicine or treatment for your disease 
or condition.
• A health care professional can provide guidance on how best to take your medication safely. For example, the effectiveness of some medications may be influenced by other products, such as other medications, alcohol or certain foods. Mixing your medication with these other products could strengthen or weaken the effect of the medication or cause an adverse reaction. This could be dangerous to your health or, at the least, interfere with your timely recovery.

• Patients with particular characteristics, such as pregnant or breast-feeding women, the elderly and children, have special concerns, needs and considerations when taking medication or using medical products. In particular, a number of medications are specifically known to cause harm to unborn children, so that pregnant women should be sure to consult a health care professional before self treatment.

• Any time you take medication or use a medical product it is important to inform your health care professional of any side-effects you may experience when using the product. By going through your health care professional for treatment, you can make sure that he or she will be better prepared to advise you or change the treatment if you do have an adverse reaction to a product.

• By ordering medical products through the Internet you may deprive yourself of the opportunity for personal, professional care and advice from your doctor, pharmacist or other health care professional.