Tobacco Free Initiative

Addressing the Worldwide Tobacco Epidemic through Effective, Evidence-Based Treatment

Expert Meeting
March 1999
Rochester, Minnesota
USA

World Health Organization

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INTRODUCTION

The World Health Organization (WHO) convened a gathering of experts from nine countries at the Mayo Clinic in Rochester, Minnesota, USA, in March 1999 to recommend priorities and methods for implementing tobacco dependence treatment worldwide. The following report summarizes the group's findings. The subheadings in sections II and III represent its main conclusions and recommendations. A list of participants is attached as Annex 1.

INTRODUCTION

En mars 1999, l'Organisation mondiale de la Santé (OMS) a réuni des experts de neuf pays à la Mayo Clinic à Rochester, Minnesota (États-Unis d'Amérique) pour formuler des recommandations concernant les priorités et les moyens d'appliquer le traitement de la dépendance tabagique dans le monde. Le rapport qui suit résume les conclusions du groupe d'experts, dont les principales conclusions et recommandations font l'objet des paragraphes contenus dans les sections II et III. La liste des participants figure à l'Annexe 1.
La Organización Mundial de la Salud (OMS) convocó una reunión de expertos de nueve países en la Clínica Mayo de Rochester, Minnesota (Estados Unidos), en marzo de 1999, a fin de recomendar prioridades y métodos para la aplicación del tratamiento de la dependencia del tabaco en todo el mundo. En el siguiente informe se resumen los resultados del grupo. Los subtítulos de las secciones II y III representan sus conclusiones y recomendaciones principales. Se adjunta la lista de participantes en el anexo 1.

ВВЕДЕНИЕ

В марте 1999 г. Всемирная организация здравоохранения (ВОЗ) созвала совещание экспертов из девяти стран в клинике Майо в Рочестере, штат Миннесота, США, с тем чтобы рекомендовать приоритеты и методы для лечения табачной зависимости в мире. В представляемом ниже докладе приводится резюме по итогам работы указанной группы. Подзаголовки в разделах II и III представляют основные выводы и рекомендации. Список участников дается в Приложении 1.
عقدت منظمة الصحة العالمية لقاءً بين خبراء من تسعة بلدان في مينيسوتا، كلينيك، في روتشستر، مع فرص للاستثناء، في الثلاثين من مارس / آذار 1999 لوضع التوصيات ويرسم السبل اللازمة لتطبيق معالجة ادمان التبغ على نطاق العالم كله. ويلخص التقرير التالي الاستنتاجات التي خلص إليها هذا الفريق، وتشكل العناوين الفرعية في الجزءين الثاني والثالث أعم الالاستنتاجات والتوصيات التي وضعها. وتورد قائمة بأسماء المشاركين في الملحق 1.
The worldwide epidemic of tobacco-related disease and death continues to worsen as tobacco use spreads. At least one-third of the world’s adult population, or 1.1 billion people aged 15 years and older, smoked cigarettes in the early 1990s. This unnecessary, human-created epidemic will kill about 500 million people who are alive today. Effective treatment for tobacco addiction, also called tobacco dependence, is a significant component of an overall tobacco control strategy to reduce exposure to tobacco worldwide. Reducing tobacco exposure at individual and population levels through treatment could mean that by the year 2010 nearly 2 million fewer smokers will die each year worldwide if effective treatment is combined with tobacco control measures. Such treatment, however, is not widely available, even in developed countries, and when it is available, many tobacco users are not motivated to take advantage of it. Not only are these tobacco users at health risk, but involuntary exposure to tobacco smoke also poses a significant health risk to many millions, including half the world’s children. Tobacco use among children and adolescents is also an epidemic.

Tobacco products are highly addictive, and are carefully designed to undermine efforts to stop using them. Moreover, tobacco use becomes woven into everyday life in physiologically, psychologically, and socially reinforcing ways. Consequently, cessation is not simply a matter of choice for the majority of tobacco users, but involves a struggle to overcome an addiction. None the less, ceasing tobacco use at any point in life provides both immediate and long-term benefits to health. However, many tobacco users who attempt to quit find it difficult; most remain abstinent only a few days. Both medications and behavioural therapies are effective in enhancing these attempts to achieve abstinence, and each approach can be effective when used alone.

An increasing number of governments have undertaken the task of outlining guidelines for effective treatment. The recommendations put forward in the various guidelines endorse the provision of brief advice, behavioural therapy, and treatment medications. Treatment for tobacco dependence has proved to be a cost-effective means of helping to control the overall tobacco use epidemic and to save years of life, comparing favourably with most health care procedures.

Governments and health professionals can reduce the likelihood of tobacco-related diseases by doing the following: (1) make treatment a public health priority; (2) make treatment available; (3) assess and monitor tobacco use and provide proven treatments; (4) set an example for peers and patients by ceasing tobacco use; (5) fund effective treatment; (6) motivate tobacco users to quit; (7) monitor and regulate tobacco processing, marketing, and sales; and (8) develop new treatments.

International gains in tobacco treatment start as a national commitment that reaches into the lives of individual tobacco users. Tobacco users must not be left to attempt to quit on their own without assistance and treatment, no matter how few resources a country or community may have. Backed by the momentum of leagues of professionals and a committed worldwide public health community, tobacco dependence treatment can save many millions of lives.
Résumé d'orientation

L'épidémie mondiale de tabagisme, avec son cortège de maladies et de morts, continue de s'aggraver avec le développement de l'usage du tabac. Au moins un tiers des adultes du monde, soit 1,1 milliard de gens de plus de 15 ans, fumaient la cigarette au début des années 90. Cette épidémie entièrement imputable à l'action humaine va tuer quelque 500 000 personnes actuellement en vie. Le traitement de la dépendance à l'égard du tabac est un volet important de toute stratégie de lutte destinée à réduire l'exposition au tabac dans le monde. En réduisant par un traitement l'exposition au niveau individuel comme au niveau des populations, on pourrait d'ici 2010 éviter près de 2 millions de décès de fumeurs chaque année si un traitement efficace était associé aux mesures de lutte antitabac. Cependant, ce traitement n'est pas toujours disponible, même dans les pays développés et, lorsqu'il l'est, bien des fumeurs n'ont pas la motivation nécessaire pour y faire appel. D'un côté ces fumeurs s'exposent à un risque pour leur santé, mais, de l'autre, l'exposition involontaire à la fumée du tabac représente un risque important pour la santé de millions d'autres individus, dont la moitié des enfants du monde. Par ailleurs, le tabagisme parmi les enfants et les adolescents revêt une dimension épidémique.

Les produits du tabac entraînent une forte dépendance et sont expressément conçus pour saper tous les efforts déployés pour renoncer au tabagisme. De plus, l'usage du tabac finit par s'inscrire dans la vie quotidienne sur les plans physiologique, psychologique et social. C'est pourquoi s'arrêter de fumer n'est pas seulement un choix pour la majorité des fumeurs ; c'est aussi un combat pour surmonter une dépendance. Néanmoins, cesser de fumer, quel que soit l'âge, comporte des avantages immédiats comme des avantages à long terme pour la santé. Malgré tout, de nombreux fumeurs ont du mal à essayer de s'arrêter et la plupart ne tiennent que quelques jours. Il existe tant des médicaments que des traitements comportementaux qui peuvent renforcer l'efficacité de ces efforts vers l'abstinence et chaque méthode peut être efficace à elle seule.

De plus en plus de gouvernements ont entrepris d'esquisser des lignes directrices pour le traitement. Les recommandations énoncées dans les diverses lignes directrices vont dans le sens de la prestation de quelques conseils, une thérapie comportementale et un traitement par des médicaments. Le traitement de la dépendance tabagique s'est révélé un moyen rentable d'aider à juguler l'épidémie de tabagisme et à prolonger la vie, et ses résultats supportent très bien la comparaison avec la plupart des interventions sanitaires.

Les pouvoirs publics et les professionnels de santé peuvent atténuer le risque de maladies liées au tabac en adoptant les mesures suivantes : 1) faire du traitement une priorité en santé publique ; 2) mettre le traitement à la disposition de ceux qui en ont besoin ; 3) évaluer et surveiller le tabagisme et mettre en place des traitements ayant fait leur preuve ; 4) donner l'exemple à leurs pairs et aux patients en cessant de fumer ; 5) financer un traitement efficace ; 6) motiver les fumeurs pour qu'ils cessent de fumer ; 7) surveiller et réglementer le traitement, la commercialisation et la vente de produits du tabac ; enfin, 8) mettre au point de nouveaux traitements.

Le traitement du tabagisme de portée internationale commence par un engagement national qui concerne la vie de chaque fumeur. Ceux-ci ne doivent pas être laissés à eux-mêmes, sans traitement, pour s'arrêter de fumer, même si le pays ou la communauté n’a que peu de ressources. Avec l’appui dynamique des multiples associations professionnelles et l’engagement de la communauté mondiale de la santé publique, le traitement de la dépendance tabagique pourra sauver des millions de vies.
La epidemia mundial de enfermedades y defunciones relacionadas con el tabaco sigue empeorando a medida que se propaga el consumo de tabaco. A principios de la década de 1990, fumaba al menos un tercio de la población adulta mundial, es decir, 1100 millones de personas de 15 años o más. Esta epidemia inaceptable, provocada por el hombre, acabará con la vida de unos 500 millones de personas en vida actualmente. Un tratamiento eficaz de la adicción al tabaco, también llamada dependencia del tabaco, es un componente importante de la estrategia general de lucha antitabáquica encaminada a reducir la exposición al tabaco en todo el mundo. Reducir la exposición al tabaco mediante un tratamiento, a nivel tanto individual como colectivo, podría suponer que, de aquí a 2010, morirán cada año casi 2 millones menos de fumadores en todo el mundo si se combina un tratamiento eficaz con medidas de lucha antitabáquica. Sin embargo, dicho tratamiento no está ampliamente disponible, ni siquiera en los países desarrollados, y, cuando lo está, muchos consumidores de tabaco no están motivados para aprovecharlo. No sólo corre peligro la salud de esos consumidores sino que también la exposición involuntaria al humo de tabaco supone un importante riesgo para la salud de muchos millones de personas, incluida la mitad de la población infantil mundial. El consumo de tabaco entre niños y adolescentes es también una epidemia. Los productos del tabaco son sumamente adictivos y están cuidadosamente diseñados para debilitar todo intento de abandonar su consumo. Además, el consumo de tabaco se va introduciendo en la vida cotidiana, por mecanismos que se refuerzan fisiológicamente, psicológicamente, y socialmente. En consecuencia, dejar de fumar no es simplemente una cuestión de elección para la mayoría de los consumidores de tabaco, sino que supone una lucha para superar la adicción. Sin embargo, dejar el tabaco, en cualquier momento de la vida, reporta beneficios para la salud tanto inmediatos como a largo plazo, pero, a muchos de los que lo intentan les resulta difícil, y la mayoría únicamente se abstiene algunos días. Tanto los medicamentos como las terapias comportamentales son eficaces para apoyar estos intentos de abstinencia, y cada uno de los distintos métodos puede ser eficaz aisladamente.

Cada vez más gobiernos han asumido la labor de facilitar directrices para un tratamiento eficaz. Las recomendaciones propuestas en las diversas orientaciones respaldan la idea de facilitar asesoramiento breve, terapia comportamental y medicaciones terapéuticas. El tratamiento de la dependencia del tabaco ha resultado ser eficaz en relación con el costo para ayudar a controlar la epidemia general de consumo de tabaco y salvar años de vida, en comparación ventajosa con la mayoría de los procedimientos de atención sanitaria.

Los gobiernos y los profesionales de la salud pueden reducir la probabilidad de contraer enfermedades relacionadas con el tabaco, adoptando las siguientes medidas: 1) hacer del tratamiento una prioridad de salud pública; 2) poner a disposición el tratamiento; 3) evaluar y seguir de cerca el consumo del tabaco y ofrecer tratamientos de eficacia probada; 4) dar ejemplo tanto a los colegas como a los pacientes abandonando el consumo de tabaco; 5) financiar un tratamiento eficaz; 6) motivar a los consumidores de tabaco para que dejen de fumar; 7) seguir de cerca y reglamentar la elaboración, comercialización y venta del tabaco; y 8) desarrollar nuevos tratamientos.

Los beneficios a nivel internacional del tratamiento del tabaquismo comienzan como un compromiso nacional que afecta a las vidas de los consumidores de tabaco. No debe privarse de asistencia o tratamiento a los que intentan abandonar el hábito de fumar, independientemente de si el país o la comunidad dispone de escasos recursos. Respaldado por el impulso de las asociaciones profesionales y por una comunidad mundial comprometida con la defensa de la salud pública, el tratamiento de la dependencia del tabaco puede salvar muchos millones de vidas.
Резюме

Глобальная эпидемия заболеваний и смертельных исходов, связанных с табаком, продолжает расти, по мере того как растет потребление табака. По крайней мере одна треть взрослого населения земли, или 1,1 миллиарда человек в возрасте 15 лет и старше в начале 1990-ых годов курили сигареты. Это ненужная созданная человеком эпидемия убьет приблизительно 500 миллионов человек, которые сегодня еще живы. Эффективное лечение «пристрастия» к табаку, которое называют сегодня также табачной зависимостью, является важным компонентом общей стратегии борьбы против табака, с тем чтобы прекратить его распространение в мире. Сокращение воздействия табака как на индивидуальном уровне, так в целом на уровне всего народонаселения на основе лечения, может означать, что к 2010 г. каждый год во всем мире будут умирать почти на 2 миллиона курильщиков меньше, особенно если эффективное лечение будет сочетаться с мерами по борьбе против табака. Такое лечение, тем не менее, не является сегодня широко доступным даже в промышленно развитых странах, а в тех случаях, когда оно имеется, многие из тех, кто употребляет табак, не имеют достаточных стимулов, для того чтобы этим воспользоваться. Не только те, кто курит, подвергают угрозе свое здоровье: невольное воздействие табачного дыма также представляет собой серьезную угрозу для здоровья многих миллионов, включая половину детского населения в мире. Употребление табака среди детей и подростков сегодня также стало эпидемией.

Табачная продукция вызывает зависимость и то, как она преподносится, противодействует усилиям, направленным на отказ от вредной привычки. Более того, потребление табака стало как бы частью повседневной жизни в физиологическом, психологическом и социальном смысле. С учетом этого прекращение курения – это не только вопрос личного выбора для большинства курильщиков, но это и определенные усилия, для того чтобы преодолеть зависимость. Тем не менее, прекращение употребления табака на любом этапе человеческой жизни обеспечивает незамедлительные и долгосрочные
преимущества для здоровья. Вместе с тем многие курильщики, которые хотят бросить курить, сталкиваются с трудностями; большинство могут отказаться от курения лишь на несколько дней. Для содействия в попытках отказаться от курения эффективными являются как лекарственные средства, так и курс бихевиоральной терапии, причем каждый из этих подходов может быть эффективным при самостоятельном использовании.

Все большее число правительств берет на себя задачу определения тех принципов, которые обеспечивают успешное лечение. Рекомендации, которые содержатся в целом ряде руководств, положительно оценивают как короткие консультации, так и бихевиоральную терапию, а также лечение с помощью лекарственных средств. Лечение табачной зависимости оказалось экономически эффективным средством в борьбе с общей табачной эпидемией, с тем чтобы сохранить людям годы жизни, и потому его можно успешно сравнивать с большинством лечебных процедур.

Правительства и работники здравоохранения могут уменьшить вероятность возникновения заболеваний, связанных с табаком за счет: (1) определения курса лечения табачной зависимости в качестве приоритета общественного здравоохранения; (2) предоставления необходимого лечения; (3) обеспечения оценки и мониторинга использования табака с предоставлением зараекомендовавших себя видов лечения; (4) обеспечения личного примера для коллег и пациентов за счет отказа от курения; (5) выявления эффективных методов лечения; (6) обеспечения стимулов для курильщиков, чтобы они отказались от курения; (7) обеспечения мониторинга и регулирования переработки табака, его маркетинга и сбыта; и (8) разработки новых методов лечения.

Достижения по лечению табачной зависимости в международном плане также начинаются с национальных обязательств, которые касаются образа жизни отдельных курильщиков. Курильщики не должны быть оставлены без внимания при попытке бросить курить, нуждаясь при этом в помощи и лечении, независимо от того, сколь скудными ресурсами располагает страна или община. При поддержке профессионалов и общественности во всем мире, которая приняла на себя соответствующие обязательства, лечение табачной зависимости может содействовать спасению многих миллионов жизней.
ملقى وباء الأمراض والوفيات المتعلقة بالتبغ يتفاقم في كافة أرجاء العالم بازدياد تعاطي التبغ. حيث كان ثلاثينيات القرن العشرين من سكان العالم على الأقل، أي 1.1 مليار نسمة بين سن الخامسة عشرة وما فوق، يدخنون السجائر في أوائل التسعينيات. وسيفضي هذا الوباء الذي هو من البشر دون داع إلى وفاة ما يقارب 500 مليون إنسان منهم هم على قيد الحياة اليوم. ويعد العلاج الناجح لداء التبغ، الذي يطلق عليه أيضًا اسم "الاعتماد على التبغ"، عنصرًا هاماً في استراتيجية شاملة لمكافحة التبغ ترمي إلى الإقلاع من التعرض للتبغ في شتى أنحاء العالم، وقد يعني الإقلاع من التعرض للتبغ على مستوى الفرد والسكان ككل، من خلال العلاج، أن عدد الذين سيموتون من المدخنين سنويًا بحلول عام 2020 سيقل بما يقدر بـ 10% نسبيًا في العالم كله إذا ما اقترنت العلاج الناجح بتداعيات لمكافحة التبغ. يبد أن هذا العلاج لا يتوقف على نطاق واسع حتى في البلدان المقدمة، أما عندما يكون متواصلاً فإن العديد من متعاطي التبغ لا يجدون دافعاً يحفزهم على الاستقلال منه. ولا يقتصر الخطر الصحي على متعاطي التبغ وحده، لكن التعرض القسري لدخان التبغ يشكل أيضًا خطراً صحياً شديداً يشهد عليه الملايين من البشر، بما في ذلك نصف أطفال العالم. وبشكل تعاطي التبغ بين الأطفال والمراهقين وراء بحد ذاته أيضاً.

إن منتجات التبغ تضر على الأدمان الشديد، وقد صممت بديلاً للتمويض الجهود الرامية إلى وقف استعمالها. زد على ذلك أن تعاطي التبغ يصبح جزءًا من لحمة الحياة اليومية بتراجع أهداف من الأخر في فتى محلياً ونسبياً واجتماعياً. وهذا فان الإقلاع عن التدخين ليس مجرد مسألة خيار فحسب بالنسبة لغالبية المدخنين، بل يتطلب جهوداً مضنية للتغلب على الإدمان. ومع ذلك فإن الإقلاع عن تعاطي التبغ في أي فترة من فترات العمر يجلب فوائد صحية فورية وطويلة الأجل، غير أن كثيرين من متعاطي التبغ الذين يحاولون الإقلاع عن التدخين، أن يكون ذلك أمعاً في غاية الصعوبية، ولا يجدون إمكانيًا معهم عن سوءه بضعة أيام فقط. وقد أثبتت الأدلة والمعلومات السكرية على حد سواء نجاحها في تمرز المحاورات الهادفة إلى الإقلاع عنه، كما أن كل نهج من هذه التدابير يمكن أن يكون فعالاً إذا ما توج لوحده.

وقد تضاعى عدد متزايد من الحكومات لمهمة وضع مبادئ توجيهية للتعامل الناجم. وتؤيد التوصيات المطروحة في مختلف هذه الارشادات لاساءة المشروعة المقدرة، والتعامل السكرية، والعلاج بالأدوية. وقد أثبتت معالجة الاستخدام على التبغ عن مروحيتها كوسيلة للمساعدة على مكافحة
كامل وبناء تعاطي التبغ والعقاقير من الموت قبل الأوان بسنوات، وبذا فإنها تضاهي معظم الإجراءات المتبعة في ميدان الرعاية الصحية.

ويعود الحكومات والمهنيين الصحيين الحد من احتمال حدوث الأمراض المتعلقة بالتبغ بالقيام بما يلي: (1) اعطاء العلاج الأولوية في ميدان الصحة العمومية؛ (2) اتاحة المعالجة لمئات يحتاجها؛ (3) تقييم ورصد تعاطي التبغ وتوفير أنواع العلاج التي أثبتت نجاحها؛ (4) التصرف كمثال يحتذى من قبل الزملاء والمرضى بالاقلاع عن تعاطي التبغ؛ (5) تمويل العلاج الناجح؛ (6) إيجاد الحافز لتعاطي التبغ للإقلاع عنه؛ (7) رصد وتنظيم تجهيز التبغ وتسويق وبيعه؛ (8) استعداد علاجات جديدة.

وتنطبق المكاسب الدولية المتترة على المعالجة من التبغ كالتزام وطني ينفذ إلى جيئة أهاد متعاطي التبغ. وتسعى عدم ترك متعاطي التبغ ليحاولوا الإقلاع عنه بمفردتهم دون تقديم المساعدة أو العلاج، بغض النظر عن كمية الموارد المتفرطة للبلد أو المجتمع المحلي. وإذا ما توفر للمعالجة من الاعتماد على التبغ التأديب من الزخم الذي يتمتع به الرابطات المهنية والتنزيم أسرة الصحة العمومية على نطاق العالم كلما فان هذه المعالجة يمكن أن تنقذ ملايين الأرواح.
随着烟草使用的蔓延，与烟草有关疾病在全球的流行和死亡日益严重。20世纪90年代初，全球成年人的至少三分之一，或11亿15岁以上的人口吸烟。这一不必要的人类创始的流行将造成现今生存的5亿人民死亡。有效地治疗烟草成瘾—也称为吸烟依赖症—是降低全球接触烟草的全盘烟草控制战略的一个重要组成部分。通过治疗减少个人和人群对烟草的接触意味着如果将有效的治疗与烟草控制措施相结合，到2010年时全球每年因烟草导致的死亡近乎将减少200万。然而，并不是所有地方均能提供这种治疗，即便在发达国家中。而且，在能够提供此种治疗的地方，很多烟草使用者并不积极对待之加以利用。不仅是烟草使用者处于健康危害之中，对烟草烟雾的非自愿接触也对数百万人口，其中包括数十的世界儿童，带来严重的健康危害。儿童和青少年对烟草的使用也在流行。

烟草制品具有高度成瘾性，它们被精心设计得使人们难以作出努力停止使用。此外，烟草的使用已在心理、精神和社会方面以强化的方式交织在每日生活之中。从而，停止使用烟草不单纯是绝大多数烟草使用者的选择问题，而是涉及到战胜成瘾的一场斗争。但是，在生命的任何时候停止烟草使用对健康都有直接和长期的益处。然而，很多力图戒烟的烟草使用者感到很困难；大多数人的戒烟只能维持几天。药物和行为疗法对于加强实现戒烟的这些努力均有效，而且单独使用每一种作法均能奏效。

越来越多的政府已为有效治疗开始了拟订指导原则的工作。各种指导原则提出的建议同意提供简要咨询，行为疗法和治疗药物。经证实，对烟草成瘾的治疗是有助于控制烟草使用的全面流行和挽救生命年的一种经济有效的手段，较大多数卫生保健方法更为有利。

政府和卫生专业人员可采取下述作法降低与烟草有关疾病发生的可能性：(1)将治疗作为一项公共卫生重点；(2)提供治疗；(3)评估和监测烟草的使用并提供已
经验证的治疗方法；(4)向同伴和病人提供戒除使用烟草的榜样；(5)资助有效的治疗方法；(6)鼓励烟草使用者戒烟；(7)监测和管理烟草的制造、推销和销售；以及(8)研究新的治疗方法。

烟草治疗在国际方面取得的成果起始于国家的承诺，这一承诺深入到个体烟草使用者的生活之中。不管一个国家或社区具有的资源是多么稀少，绝不能让烟草使用者对戒烟的努力得不到援助和治疗而处于孤立无援的处境。在专业人员联盟和作出承诺的全球公共卫生界强有力的支持下，对烟草成瘾的治疗可以拯救数百万人的生命。
BACKGROUND

The worldwide epidemic of tobacco-related disease and death continues to worsen as tobacco use spreads. This unnecessary, human-created epidemic will kill about 500 million people who are alive today. The Director General of the World Health Organization, Dr. Gro Harlem Brundtland (1999) has described her first awareness of tobacco's health impact: “The evidence told a shocking story... What I saw was an emerging epidemic. Worldwide mortality from tobacco is likely to rise from about 4 million deaths a year in 1998 to about 10 million a year in 2030. Ten million deaths—that is more than the total deaths from malaria, maternal and major childhood conditions, and tuberculosis combined”. Not only were those statistics “shocking”, but more than 70% of the deaths are predicted to be in the developing world. She added: “By 2020, smoking will cause about one in three of all adult deaths, up from one in six adult deaths in 1990”.

The day that Dr Brundtland took office, on 21 July 1998, WHO launched its Tobacco Free Initiative, with the goals of galvanizing global support for scientifically sound tobacco control policies and strategies; building partnerships to heighten awareness and mobilize resources; and accelerating national, regional, and global strategies. A significant aspect of this overall approach is a “focus on individuals”. In her words, “To change the trends, we need to get smokers to quit and nonsmokers not to pick up the addictive habit”.

Effective treatment for tobacco addiction, also called tobacco dependence, is a significant component of an overall tobacco control strategy to reduce exposure to tobacco worldwide. Through effective treatment for tobacco dependence, millions of people could be saved from disease and premature death. Treatment and prevention can work hand in hand as complementary strategies that reduce tobacco-caused disease and maximize benefits to public health. Henningfield & Slade (1998) explain that reducing tobacco exposure at individual and population levels through treatment could result in dramatic decreases in mortality from smoking-related causes, even within just a few years (see Figure 1). By the year 2010, nearly 2 million fewer smokers would die each year worldwide if effective treatment were combined with tobacco control measures. By 2025, the annual number of lives saved would be 4 million. By 2050, more than half of the cumulative premature deaths from tobacco would be prevented, representing some 12 million lives (World Health Organization, 1999b).

Such treatment, however, is not widely available. Even in developed areas such as Europe and North America, treatment is not available for all tobacco users who need or want it. When it is available, many tobacco users are not motivated to take advantage of it. Although smoking has been studied more extensively than any other form of tobacco, public access to effective treatment remains low throughout much of the world. Additionally, treatment regimens for forms of tobacco other than cigarette smoking are largely unavailable in most countries. In the United States of America, historically only about 2.5% of smokers who attempt to quit smoking without assistance succeed in any given cessation effort (e.g. Garvey et al., 1992; Giovino, Shelton & Schooley, 1993). More than a third of current cessation attempts in the United States involve the use of medication (Hughes, in press), a sizeable increase that has coincided with the availability of new treatment medications. The likelihood of long-term abstinence among quitting smokers increases with the addition of
behavioural treatment and nonprescription and prescription medication (see Fiore et al., 1996).

Scientists and clinicians have learned much about how to help tobacco users quit. Even so, many key questions remain, including:

- How can tobacco dependence treatment be more accessible and successful?
- How can effective treatment be implemented worldwide, considering the many cultural and legal differences among nations and regions?
- How can treatment work in concert with other tobacco control measures to reduce morbidity and mortality from tobacco-related causes on a worldwide scale?
Tobacco and Treatment

Tobacco use is widespread

At least one-third of the global adult population, or 1.1 billion people aged 15 years and older, smoked cigarettes in the early 1990s.¹ About 300 million of these smokers were in developed countries, twice as many men as women using tobacco. In less developed countries, about 700 million men and 100 million women were smokers. An estimated 48% of men and 7% of women in developing countries smoked. In industrialized countries, 42% of men and 24% of women smoked, representing a marked increase among women (World Health Organization, 1997). Although tobacco use has decreased in many developed countries, it has increased in most developing countries. Data-gathering studies such as the WHO MONICA project (to MONitor trends and determinants of CArdiovascular disease) have tracked rising smoking rates among European women smokers and among Asian men, two populations of concern (Dobson et al., 1998). Reports from various countries are informative:

> The smoking rate among Russian men aged 25-34 is 73%; among women aged 18-34, the rate is 27%, indicating that “tobacco poses a major threat to the health of future generations in Russia”, particularly women (McKee et al., 1998).
> Some 69% of men in Mumbai, India, use tobacco, with 24% smoking and the rest using smokeless tobacco (betel quid with tobacco); 57% of women in Mumbai use a form of smokeless tobacco, accounting for almost all tobacco use among women (Gupta, 1996).
> Men in Ecuador, of whom 45% smoke, are not only more likely than Ecuadorian women to use tobacco, but they also use 60% more tobacco than women (Ockene, Chiriboga, & Zevallos, 1996).
> About 58% of Bulgarian men aged 30-39 smoke, while 30% of women in that age group smoke. Tobacco use is more common among those who live in cities, those who are widowed or divorced, and those who do not own homes (Balabanova, Bobak, & McKee, 1998).
> Smoking rates among men in Asian and Pacific countries rose from 50% in 1994 to 60% in 1997 (World Health Organization, 1998).

Tobacco dependence may be higher among remaining smokers in countries with low smoking prevalence, where smokers of lower levels of dependence have already stopped. Although prevalence rates may be low, those remaining users may have more difficulty quitting (Fagerström et al., 1996).

A long-term tobacco user has a 50% chance of dying prematurely from tobacco-caused disease (Thun et al., 1995). In 1990, tobacco accounted for nearly a quarter of all male deaths and 7% of all female deaths worldwide, including more than 40% of deaths among men in formerly socialist areas. Tobacco-related diseases shortened the lives of affected smokers by an average of 16 years (Peto et al., 1996). A decade ago, tobacco caused some 3 million deaths per year. At present, tobacco causes some 4 million premature deaths yearly, a million of these occurring in developing countries that can least afford the health care burden.

Involuntary exposure to tobacco smoke also poses a significant health risk that may not be evident from tobacco-use statistics alone (e.g. National Health and Medical Research Council, 1997). A recent meta-analysis of epidemiological studies from Japan, the United States, Scotland, England, China, New Zealand, Australia, Italy, and Argentina (He et al.,

¹ A billion = 1000 million
1999) identified an increased risk for coronary heart disease among those exposed to tobacco smoke. This confirmed findings from a previous meta-analysis (Law, Morris & Wald, 1997) that showed an increased risk of ischaemic heart disease among those exposed through passive smoking. The recent International Consultation on Environmental Tobacco Smoke (ETS) and Child Health (World Health Organization, 1999a) concluded that ETS is "a real and substantial threat to child health, causing death and suffering throughout the world". WHO estimates that that some 700 million children—half the world's children—are exposed to tobacco smoke.

Tobacco use among children and adolescents is also an epidemic. Most tobacco use starts during childhood and adolescence (Mackay & Crofton, 1996), and worldwide statistics indicate an upward trend in tobacco initiation and use among children. Tobacco is available to children in many countries, even countries with legal prohibitions against tobacco sales to those younger than the age of accountability (e.g. DiFranza et al., 1994; Radecki & Zdunich, 1993). The numerous demographic and psychosocial factors implicated in tobacco use initiation and continued use among children and adolescents deserve continuing, thorough examination (Tyas & Pedersen, 1998).

**Tobacco products are highly addictive**

Tobacco products are carefully designed to undermine efforts to stop using them (e.g. Hurt & Robertson, 1998). Consequently, cessation is not simply a matter of choice for the majority of tobacco users. Instead, it involves a struggle to overcome an addiction (Royal Society of Canada, 1989; US Department of Health and Human Services, 1988). As Stitzer and deWit (1998) explain, the "abuse liability" of nicotine from tobacco products is high. This means that tobacco users are likely to regularly self-administer nicotine via tobacco, in spite of adverse consequences. Cigarettes are "the most highly abusable nicotine delivery product", Stitzer and deWit note. Benowitz (1998) points out that the nicotine in tobacco achieves many purposes. Nicotine is reinforcing, provides sensory stimulus that enhances satisfaction, affects performance, controls mood and body weight, and may be self-administered to relieve symptoms of some psychiatric disorders, such as depression. Nicotine inhaled through smoking passes quickly through the arterial blood stream and into the brain, resulting in intense effects in the central nervous system that are behaviourally reinforcing because of their time proximity in relation to inhalation. Nicotine levels drop between cigarettes, allowing the brain's nicotinic receptors to desensitize. Additionally, the rapid delivery of nicotine to the brain allows the smoker to regulate the dose of nicotine from a cigarette to achieve specific psychoactive effects.

In addition to these properties and effects, tobacco use also becomes woven into everyday life in physiologically, psychologically, and socially reinforcing ways. Numerous reports from many branches of science detail the interactions between genetics, demographics, personality, psychopathology, and other factors that contribute to the likelihood of a person's becoming and remaining a tobacco user. Particularly compelling is evidence indicating that smokers use the nicotine from smoked tobacco as a form of affect modulation or regulation—a fact that becomes evident to many former tobacco users who experience depression during abstinence (American Psychiatric Association, 1996). Understandably, withdrawal effects, the worst of which last about a month, are a major motivation for continuing to use tobacco. These well-examined effects of abstinence (Hughes & Hatsukami, 1986) pose an obstacle difficult for many smokers to overcome. Dependent smokers typically experience some constellation of the following symptoms during the early days and weeks of tobacco abstinence: cravings and urges to smoke, difficulty concentrating, nervousness, restlessness, irritability, anxiety, cognitive impairment,
increased appetite and (eventually) weight gain. The development and refinement of medications have provided a safe way for smokers to stop using tobacco without experiencing the full range and extent of withdrawal symptoms (Hughes et al., 1999).

**Quitting benefits health**

Quitting tobacco use at any point in life provides both immediate and long-term benefits to health. Within a day of ceasing, a smoker’s carbon monoxide levels approximate those of a nonsmoker. The acute cardiovascular effects of nicotine and tobacco begin to normalize, and heart rate decreases. At all ages, eliminating exposure to tobacco is a form of primary prevention of disease. Even those who have smoked for years and who are experiencing the health consequences of tobacco use can benefit from cessation. The risk of recurrent heart attack diminishes among newly abstinent patients with heart disease. Quitting smoking reduces risks and increases exercise tolerance in those who already have peripheral artery occlusive disease. The clinical course of patients with gastric and duodenal ulcers improves when they stop using tobacco. Smokers with cancer can reduce their risk of additional cancers if they quit. Quitting smoking also reduces the risk of respiratory infections such as chronic obstructive lung disease. Women who stop smoking before pregnancy give birth to babies with the same birth weight as babies born to mothers who never smoked (see US Department of Health and Human Services, 1990.) Conversely, no amount of tobacco use is safe. The use of any tobacco product, even one bearing claims of reduced risk, involves some hazard to health (US US Department of Health and Human Services, 1988; American Council on Science and Health, 1997). Risk varies from product to product: cigarettes carry a higher hazard for cardiovascular disease than smokeless tobacco, while fermented smokeless tobacco is implicated in oral cancers. Those who attempt to minimize their tobacco use to reduce health risk are often surprised to find that they are unable to smoke only a few cigarettes a day or use only a small amount of snuff. Because few tobacco users are able to avoid becoming addicted to nicotine, abstinence from tobacco products and freedom from exposure to second hand smoke are necessary for maximizing health and minimizing risk (see Whelan, 1997).

Effective treatment for tobacco dependence can significantly improve overall public health within only a few years. No other intervention or prevention mechanism has the potential to reduce tobacco-related disease and death as quickly as treatment for tobacco dependence (see Fig. 1; Henningfield & Slade, 1998). A combination of treatment and other tobacco control strategies, notably prevention, can reduce rates of death and disease dramatically. Over the next 30 years, the extent of tobacco-caused death and disease will be determined largely by the numbers of existing smokers who are able to become abstinent or greatly reduce their exposure to tobacco.

**Current treatment methods work**

Tobacco users who attempt to quit on their own tend to remain abstinent only a few days at most. Medications and behavioural therapies are both effective, and each approach can be effective when used alone. The use of pharmacotherapy can double short-term success rates compared to placebos (Fiore et al., 1996). Controlled trials indicate that medications can work independently of behavioural or psychosocial therapy, or of other interventions (Hughes et al., 1999). Meta-analyses of hundreds of controlled scientific studies have created a road map for providing successful tobacco dependence treatment, even though the range of what constitutes treatment is wide. Treatment could involve attending a stop-smoking group at a local health clinic, or the use of over-the-counter medication. It could also involve a physician, dentist, psychologist, nurse, or pharmacist.
enquiring about tobacco use status and offering to help the user quit. Effective treatment can involve a variety of methods, such as a combination of behavioural treatment and pharmacotherapy (e.g. nicotine replacement, non-nicotine medication such as bupropion, or both). Treatments that are the most effective deal with the reality that tobacco dependence is a chronic disorder and the fact that dependent users are prone to relapse. A single treatment intervention may have only a minor impact, but extended efforts, information, and contact can result in long-term benefits.

An increasing number of governments have undertaken the task of outlining guidelines for effective treatment. Two leading efforts in this regard were guidelines issued in 1996 by the US Agency for Health Care Policy and Research (AHCPR), *Smoking cessation* (Fiore et al., 1996), and England’s “Smoking cessation guidelines for health professionals” published in the journal *Thorax* (Raw, McNeill, & West, 1998). This document was published in parallel with guidance on the cost-effectiveness of treatment. Additionally, the American Psychiatric Association (1996) published guidelines for treatment of tobacco dependence in psychiatric patients and tobacco users otherwise unable to quit. All three of these sets of guidelines are “evidence-based”, in that their recommendations are based on statistical findings of treatment efficacy, and on published evidence and expert opinion.

The recommendations promoted in the various guidelines are similar. The treatments endorsed generally include brief advice, behavioural therapy, nicotine replacement, and bupropion. Primary care providers and their associates are asked to assess smoking status of patients at every opportunity, to advise tobacco users to stop, to assist them in doing so, to offer follow-up, and to refer the patient to a specialist service if necessary. Caregiver teams should recommend pharmacotherapy for all smokers who want to stop, and should provide accurate information and advice about medications. These expectations extend to all other health professionals as well. Psychologists (Wetter et al., 1998) and pharmacists (e.g., Sinclair et al., 1998; Tomasello, 1997) in particular have been given guidance in implementing recommendations such as those provided by the AHCPR. By the time the *Thorax* guidelines were published, the document had been endorsed by numerous governmental and professional groups, including nurses, physicians, midwives, and pharmacists.

Treatment for tobacco dependence has proved to be a cost-effective means of helping to control the overall tobacco use epidemic, as explained in the companion document to England’s treatment guidelines (Parrott et al., 1998). The authors outline potential health gains and costs of implementing interventions across the country’s population. In an examination of life-years saved as a result of treatment, tobacco dependence treatment compares favourably with most health care procedures, and is far less expensive than the median societal cost of many life-preserving medical interventions.
Implementing Treatment

Make treatment a public health priority

*T*obacco dependence is listed as a disorder in the current International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10), (World Health Organization, 1992). This underscores the obligation to provide treatment as part of an overall public health strategy. Meeting this responsibility may involve collaboration among such constituencies as public health departments, health agencies, insurers, regulatory agencies, non-profit groups, scientific organizations, and treatment providers. Collaborative groups can unite to approach governments about the nature and health threat of tobacco use, and about treatment options.

An initial step to providing effective treatment is to make treatment a public health priority. Offering treatment requires planning and education. Needs vary from country to country, but many of the principles are broadly applicable. Treatment for most tobacco users need not be expensive or elaborate, but it should be consistent and effective. To government leaders, Dr Brandtland (1999) offers this challenge:

"People in government...have the power to act. Those actions, both personal and official, will decide if tobacco shall claim new millions of victims in your home countries. Those actions will help prevent the cost of treating hundreds of thousands of cancer and heart disease patients from breaking the back of your health systems in the coming decades. Those actions will see to it that children don't lose their parents prematurely through cancer and heart diseases caused by smoking. Those actions will help prevent teenagers from being fooled into an addiction which gives them only a 50% chance of surviving middle age."

Make treatment available

*Treatment* must not be the privilege only of those who can afford private help and expensive medications. Health care systems—in whatever form they exist in different countries—should establish a goal of offering accessible, practical, scientifically based and proven interventions to all tobacco users, regardless of economic level, age, sex, and level of tobacco dependence. These interventions can be implemented by health professionals and supported by local leaders in governments and the community. The concept of *treatment* should be broadened to include treating tobacco use in children and adolescents, reducing family exposure to tobacco, motivating tobacco users to quit, and providing treatment medications when appropriate (Hatsukami & Lando, 1998). These efforts will also strengthen prevention measures. The process of providing treatment can be facilitated by incorporating tobacco dependence treatment into primary care, drug dependence treatment (American Psychiatric Association, 1996), reproductive and maternal and child services (Windsor, Boyd & Orleans, 1998), programmes with outreach to underserved populations (Ahluwalia, 1997), and non-traditional venues such as religious institutions.

Cultural cohesion and traditions unique to a given locale can provide a framework for treatment and may in some cases reduce the need for formal treatment. Those with experience in culturally unique settings (e.g. Groth-Marnat, Leslie & Renneker, 1996)
recommend the following: encouraging indigenous people to develop their own programmes; considering unique rituals that could increase tobacco users’ power to change; enhancing change by working with healers or others of status in the community; considering health promotion in relation to cultural values; and not expecting or demanding early change. They also suggest gradually developing a committed relationship over time.

Assess tobacco use and offer treatment

Health care providers should assess and document tobacco use and should provide proven treatments as an essential part of total health care to individuals of all socioeconomic levels. Ongoing monitoring of tobacco use (World Health Organization, 1998) is a critical aspect of thorough and careful epidemiological research. The complex demographics of tobacco use are important to consider in assessing use and providing treatment. An example of this is the use of moist oral snuff in Sweden, where more women than men smoke, but as many men use snuff (nonfermented) as use cigarettes (e.g. Schildt et al., 1998). Some tobacco users also consume multiple forms of tobacco. Additionally, overall smoking prevalence rates can be misleading. Although overall rates may decrease, the rate may increase among a high-risk group, such as young women. Also, when comparing smoking rates across age groups over time, it is important to follow the cohort and not only compare persons in an age group at one time point with those in the same age group at a later time point. Another factor to consider in examining smoking and cessation rates is the extent of tobacco exposure. Research indicates that ceasing to smoke is somewhat easier for individuals who are less dependent on tobacco. Current ex-smokers may have been less dependent on tobacco than are continuing smokers, a possibility that underscores the necessity of surveying not only prevalence of use and extent of tobacco exposure but also level of tobacco dependence and motivation to quit (Fagerström et al., 1996; Ramström, 1997).

Elements that should be considered in assessing tobacco exposure in a country include other tobacco use in addition to cigarettes (e.g. smokeless tobacco and cigars), ratio of men and women tobacco users, subgroups based on socioeconomic status, urban or rural residence, age of onset of tobacco use, types of tobacco material, frequency of use, and amounts of use. With this information, health care planners in a country can assess the potential disease burden of tobacco, and can plan interventions accordingly. However, few countries have access to such data at present (Ramström, 1997).

Providing effective treatment for tobacco users with different levels and patterns of usage necessitates an adaptive application of evidence-based treatment principles. Health care providers should assume responsibility for learning about tobacco use and treatment, so that they can provide proven interventions for patients and clients with differing needs. Additionally, health care providers, educators, and community leaders should take advantage of teachable moments and opportunities for prevention and intervention.

Set an example for peers and patients by ceasing tobacco use

In some areas of the world, large percentages of physicians and other health professionals smoke, presumably because smoking is a sign of status in some cultures. Health workers function as exemplars and educators for their patients, and consequently should set an example by abstaining from tobacco. When this point is emphasized in professional organizations and through the education system that trains professionals, their tobacco use rates decline. An example of this occurred in the United States, where nearly 19% of physicians smoked a decade after the first US Surgeon General’s advisory committee report in 1964 on the health costs of smoking. As tobacco use among health professionals
became a focus of concern, that rate dropped to 3% by the early 1990s. In parallel, the smoking rate among registered nurses fell from 32% to 18% between the mid-1970s and the early 1990s. Among licensed practical nurses it fell from 37% to 27% (Nelson et al., 1994).

**Fund effective treatment**

Governments and health care organizations should ensure that evidence-based treatment is widely available and, where appropriate, is reimbursable to health care providers. Increasing the institutional and human capacity for providing this service involves training health care workers to deliver treatment and implementing a curriculum for students in the health professions. Only about a third of the world’s medical schools currently provide instruction in tobacco dependence treatment, although 88% include the topic of tobacco in their curriculum. Respondents to a worldwide survey about tobacco education in medical schools indicated that programmes could be enhanced if selected staff received training in countries with well developed programmes, if international experts offered training, if materials were more available, if the public received more information about tobacco, and if legislation and governmental attitudes were more supportive (Richmond et al., 1998).

Another aspect of effective treatment is the development of resource centres to provide information on treatment certification, resources and materials, and updated information on effective treatments and guidelines (Hatsukami & Lando, 1998). Web-based sites can provide extensive information to the public and to professionals. Additionally, treatment standards are enhanced by encouraging the creation and maintenance of centres of excellence in treating tobacco dependence. An overarching result of this process is the reduction of barriers between tobacco users and treatment, so that effective treatment can be made available to all tobacco users regardless of age, sex, ethnicity, locale, and income level. However, even direct efforts to remove barriers require careful evaluation. For example, allowing medications to be sold without a physician’s prescription removes one barrier but may create another if smokers are unable or unwilling to buy the medications unless the expense is subsidized.

**Motivate tobacco users**

Most tobacco users who would like to quit are not yet ready to do so (Etter, Perneger & Ronchi, 1997). Governments, health providers, and community groups share a responsibility for motivating tobacco users to stop and to remain abstinent. This can be accomplished through educating the public about the health risks of tobacco use; enacting smoke-free laws and policies; encouraging tobacco users to seek treatment; and making treatment available, affordable, and accessible. If health professionals and researchers focus as much on efforts to prompt attempts at tobacco cessation as on creating new approaches to treatment, many additional tobacco users will be motivated to quit. One motivational approach is for health professionals to explain at each visit the risks of tobacco, the rewards of cessation, and the relevance to the individual (Fiore et al., 1996). Many experimental studies have shown that physician advice does increase both immediate and more distant attempts to quit. Recent work using the Transtheoretical, or Stages of Change, model (Prochaska & DiClemente, 1992) indicates that this approach can prompt successful cessation and is acceptable to a majority of smokers. Another model is motivational interviewing (Miller & Rollnick, 1991), which has been effective in alcohol and drug dependence treatment.

Motivation to quit must be stronger than incentives for continuing to use tobacco. For many smokers, the incentive to smoke is driven by media depictions and by cultural and
societal acceptance of tobacco use. By the time they are only a few years old, many children throughout the world can identify tobacco advertising icons (e.g. Emri et al., 1998; Fischer et al., 1991). Public education campaigns and counter-advertising face a substantial obstacle in overcoming the power of years of effective advertising and marketing of tobacco products. The Marlboro Man was named brand image of the century in 1999 by Advertising age magazine, whose editors expressed their ambivalence at selecting a symbol that had established Marlboro as the best-selling cigarette in the world. They acknowledged, “More than any other issue, the ethics of tobacco advertising—both morally and legally—have divided the advertising industry”. (Advertising age, 1999). They noted that the Marlboro Man’s image has so much “clout” that no matter how minimal the imagery becomes, “reduced on occasion to little more than a saddle and a splash of red”, the image is still evocative of “a mythical Marlboro country, of a mythical American cowboy and of the No. 1 brand of cigarettes that gave that cowboy real lung cancer”.

No counter-advertising image has approached the success of the Marlboro Man, or even of his closest competitors in the contest for icon of the century—Ronald McDonald, The Green Giant, Betty Crocker, and the Energizer Bunny. Success in counter-advertising not only requires powerful images and an extensive advertising budget, but also depends on several factors that are difficult to achieve in many political climates: adequate, long-term funding; a campaign free from political interference; a broad-based focus not targeted exclusively at children; and a campaign that complements other tobacco control activities, such as support for indoor smoking restrictions (Cummings & Clarke, 1998).

Population-based methods such as telephone helplines and national and international tobacco-free days also can help motivate tobacco users toward treatment. A “Quit and Win” contest has resulted in success rates that far exceed typical cessation rates among tobacco users who stop without assistance (Tillgren et al., 1995). To be eligible to win prizes, participants—users of smokeless or smoked tobacco—had to remain abstinent for four weeks. Winners had to submit guarantees of no-tobacco status signed by two independent witnesses, and a smaller sample also had to pass a biological test (saliva measurement of cotinine, a metabolite of nicotine) for verification. A recruitment strategy combining mass media and local organizations attracted larger numbers of participants.

National and international tobacco-free days also can be effective ways to prompt tobacco users to quit, as well as to provide a forum for dissemination of health information. The 1999 World No-Tobacco Day was an opportunity for the Australian Federal Government to air commercials encouraging tobacco users to quit. The federal health minister publicized consumer reactions to an awareness campaign called “Every cigarette is doing you damage.” Also in Australia, the New South Wales Cancer Council prepared for World No-Tobacco Day by launching an initiative to discount the cost of nicotine replacement gum by about 75%. A representative of the Cancer Council explained that low-income tobacco users had found the regular price of nicotine replacement gum to be “a bit of a barrier to taking up a course”. (Australian Broadcasting Corporation, 1999a, 1999b). On the other side of the Earth, seven Lebanese nongovernmental organizations marked World No-Tobacco Day with a “Put it out before it puts you out” campaign. They erected tents where they distributed leaflets and showed videos reflecting the dangers of smoking (Zaatari, 1999). The evidence of success of these events can be difficult to gather and assess. However, one indication of the impact of no-tobacco days can be inferred from a study of occupational safety, in which data from 10 years of annual United Kingdom no-smoking days indicates a rise in abstinence from nicotine on those days (Waters, Jarvis & Sutton, 1998). Although these types of approaches might have small individual effects, their combined impact can be sizeable (Burns, in press).

Monitor and regulate tobacco

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Some efforts that encourage and facilitate abstinence are within the domain of governments to accomplish or underwrite. These include monitoring and reporting on tobacco use, to provide accurate tracking of epidemiological data about the extent of tobacco exposure among a country's residents. Governments also bear the responsibility to tax tobacco products as a means of controlling accessibility (Meier & Licari, 1997; Warner et al., 1995). To stem widespread tobacco dependence, governments also must regulate the sale and marketing of tobacco products (Sweenor, 1997). When combined, these efforts help reduce initiation of tobacco use and fund effective treatments. Thus, the responsible regulation of tobacco products can reduce tobacco use and limit risk.

Necessary components of public education include accurate testing of tobacco products, awareness of product design, and responsible labelling. Many tobacco users throughout the world have no access to information about the tobacco they consume. Tobacco users typically are unaware of nicotine and tar levels (Kozlowski et al., 1998b). As a group, they do not know that so-called "light" and "ultra-light" cigarettes can give them the same tar and nicotine as regular cigarettes (Kozlowski et al., 1998a), or that smokers compensate for lower tar and nicotine in cigarettes (e.g. Kozlowski, Pillitteri & Sweeney, 1994). A committee advising the United Kingdom's Department of Health recently called on that country's Government to "require that the tobacco industry behave like other consumer product companies" (Henningfield & Slade, 1998; United Kingdom Department of Health and Social Security, 1998). The Scientific Committee on Tobacco or Health recommended that the United Kingdom Government require standards in assessing the health effects of products, acceptance that tobacco is a major cause of premature death, and standards of disclosure of the nature and magnitude of hazards to consumers. In this spirit, governments could collaboratively assess tobacco products in a way that would provide meaningful and accurate ratings of nicotine and other chemicals in tobacco products.

Governments also can regulate the toxicity and addictiveness of tobacco products to reduce the harm of tobacco use. Slade and Henningfield (1998) summarize steps that government regulatory agencies should explore:

- use activated charcoal filters to reduce levels of vapour phase toxins;
- remove additives that contribute to toxicity and addictiveness;
- require additives that reduce toxicity and addictiveness;
- set a ceiling for tobacco-specific nitrosamines;
- improve the efficiency of combustion;
- reduce the addictiveness of tobacco products by eliminating ingredients that enhance nicotine delivery;
- examine ways to reduce the proportion of respirable particles;
- explore ventilation in relation to nicotine delivery and pH;
- diminish the consumer appeal of the most toxic products;
- prevent blockage of cigarette ventilation holes;
- reduce the likelihood that cigarettes will cause fires.

**Develop new treatments**

Investing in the science and technology of treatment improves its efficacy. The recent development of medications for treating tobacco dependence is a success story for applied science. This research field has considered the new goals of tobacco use reduction and relief from withdrawal symptoms, employed new methods such as sensory replacement, and begun to tailor treatment to fit tobacco users' profiles and needs. Novel methods of pharmacotherapy offer tobacco users many choices. In addition, recent findings about the efficacy of new medications add further hope for higher rates of successful cessation.
Research should focus not on pharmacotherapy alone, but also on developing high-volume, lost-cost treatments for tobacco users and health systems with few economic resources. The development of new treatments involves much more than carrying out continuing series of clinical trials. Each new finding about the effects of nicotine and tobacco enhances the possibility of effective treatment. Examples include scientific findings about the effects of maternal tobacco use on the unborn child, possible genetic bases of nicotine addiction, sex-specific effects of nicotine on metabolism, and population trends in tobacco use. Even though information may not seem directly related to the design and implementation of a treatment programme, each piece of scientifically valid information adds to the pool of knowledge on which treatment is based. Virtually no areas of legitimate research should be considered too unrelated or trivial to have an impact on treatment.

Although present treatments can be efficacious, current scientific knowledge cannot perfectly predict how best to motivate and help a tobacco user to quit. Worldwide research efforts have yet to reveal many keys to successful prevention and treatment among diverse peoples and cultures. Nearly every treatment-related article in professional journals includes numerous recommendations for further exploration. Most major monographs or policy statements about the global tobacco epidemic include a “wish list” of areas that remain unexplored. The document Smoking kills: a white paper on tobacco (1998) lists seven major areas needing further research:

- the safety of nicotine replacement therapy during pregnancy;
- the safety and effectiveness of nicotine replacement therapy when used as an aid to smoking reduction, used over an extended time, and used by children;
- effective methods of helping groups of smokers such as schoolchildren and pregnant women cease smoking, and the settings in which they might find help;
- the effectiveness of tapering off smoking as an approach to quitting;
- the effectiveness of the white paper itself in making an impact on health and health education;
- the relationship between tobacco brands and nicotine exposure;
- those in diverse populations and underserved groups; effective treatments should be developed for groups for whom treatment has not been available, such as children and adolescents.

These areas for consideration are merely a beginning. Exploring each of them, as well as other worthwhile areas not listed, will open multiple avenues that can enlarge the effectiveness and appeal of tobacco dependence treatment.
Conclusion

International gains in tobacco treatment start as a national commitment that reaches into the lives of individual tobacco users. This effort might involve coalitions and cooperation among health professionals, educators, journalists and entertainers, governments, researchers, and policy-makers. For the individual tobacco user, tobacco-free health might start with a question from a caregiver, such as a midwife or a dentist, leading to a life-lengthening commitment to tobacco abstinence. In the process of achieving and maintaining that abstinence, the tobacco user may need to draw on many resources, such as groups of other persons quitting tobacco, medications, and publications that provide information and encouragement. Tobacco users must not be left to attempt to cease on their own without assistance and treatment, no matter how few resources a country or community may have. The first steps toward providing treatment might be relatively simple ones, such as instructing nurses in helping patients who smoke, including information about tobacco in course-work for dental hygienists, challenging physicians to stop using tobacco, encouraging counsellors to bring together tobacco users for group discussions, or recommending that pharmacists assist those using treatment medications. With the momentum of leagues of professionals and a committed worldwide public health community, tobacco dependence treatment can save many millions of lives.
Projected Tobacco-Caused Mortality Patterns

Projections of smoking-caused mortality based on present trends (Current Course), compared with projections of effective prevention (Prevention Effect) and effects of combined prevention and treatment (Prevention and Treatment Effect). (Henningfield & Slade, 1998.)
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