

Reducing the Risk of Cancers

A Distance Learning Resource for Cancer Prevention throughout the EC

Stephen Pattison, Tom Heller and Simon Baines

This paper describes an initiative in distance learning for cancer prevention for health care professionals throughout the EC. 'Reducing the Risk of Cancers' is a multi-media integrated study pack of learning materials prepared by the Open University (U.K.) with funding from the Europe Against Cancer programme of the European Commission. The teaching materials aim to enhance cancer prevention and health promotion skills and competencies amongst health care professionals at local level. In the paper the background to the pack is considered, the production process is described and the aims and philosophy of the teaching materials are outlined. The content of the pack is described and usage, dissemination and evaluation for health professionals throughout Europe are discussed.

Eur J Cancer, Vol. 29A, No. 11, pp. 1643–1647, 1993.

INTRODUCTION

'REDUCING THE RISK OF CANCERS' is a multi-media distance learning pack produced by the Open University (U.K.) in association with the European School of Oncology. Jointly funded by the Europe against Cancer programme of the European Commission and the Open University, it is designed to equip health care professionals throughout Europe with the skills and knowledge relevant to effective cancer prevention at all levels. This paper describes the aims and philosophy of the teaching materials as well as some of the practicalities of the educational technology, which have contributed to the development of the pack. The paper also outlines and discusses its pedagogic components and its usage, dissemination and evaluation throughout Europe.

BACKGROUND

Despite continuing progress in therapeutic responses to cancers, there is clearly a need for more effective cancer prevention throughout the EC if the Europe Against Cancer target of reducing cancer mortality by 15% by the year 2000 is to be achieved [1]. In addition to the personal advantages for individuals which will come from prevention rather than cure, there are substantial economic savings to be made in health care provision.

It is now thought that up to four out of five cancers are theoretically preventable [2]. If cancer prevention is to become a reality on this scale one component will necessarily be a substantial development of training in this subject area amongst health care professionals throughout the EC. Recognising this, the Europe against Cancer programme responded to an initiative from the Open University (U.K.) to prepare a distance learning pack which could be made widely available to health care professionals. It was proposed that an English language teaching pack should at first be developed which draws on the wide European networks of expertise in this subject area. Because of the widespread use of English throughout the scientific

community it was decided that this English language pack should be made available throughout Europe, but that at a later stage it might be adopted and adapted for other countries and languages throughout the EC. The initial pack and the educational development that has gone into its production provides a paradigmatic approach and has evolved a core curriculum for educating and training health care professionals about the action that is needed to bring about a prevention of cancers in primary health care and related fields.

The European Community Committee of Cancer Experts decided to use distance learning techniques to train health professionals throughout Europe about this subject area because they recognised that distance learning using integrated written, audio and video materials is an ideal way of reaching a widely dispersed mass audience. It is flexible, enabling students to study at home or at their place of work, at a pace that suits their own needs and the needs of their employers. It is relevant with materials being specifically designed and produced to meet current training and updating needs identified by key agencies in the field. It is cost effective as study is not dependant on the provision of costly premises and staff. Using distance learning it is also possible to ensure that the quality of teaching materials is very high. Once the core material has been developed then all students can be guaranteed access to the very best academic material. Furthermore, materials can be made available in a variety of ways, from individual learning packs to sets of packs specifically designed for group use. They can be studied on their own, or combined with existing training programmes.

In the production process at the Open University materials are produced by teams of specialist educational technologists, collaborating with recognised experts in the field. Learners thus have the benefit of access to the best academic material currently available. The Open University itself has pioneered the development and use of open and distance learning materials since its foundation in 1969 and has a very wide experience of educational work amongst many different type of professionals including health professionals. Collaboration with The European School of Oncology has enhanced and aided the development of this particular pack and provided access to networks of cancer specialists throughout Europe. The production phase will be followed by a concentrated effort to disseminate and evaluate all

Correspondence to T. Heller.

The authors are at the Department of Health and Social Welfare, The Open University, Walton Hall, Milton Keynes MK7 6AA, U.K.

Received 3 May 1993; accepted 20 May 1993.

the materials, once again using the networks of the European School of Oncology.

PRODUCING THE EDUCATIONAL MATERIAL

The 'Reducing the Risk of Cancers' study pack has been produced over two years (1990–1992) by a multi-professional course team based at the Open University (U.K.). A core team of academics are co-ordinated by a course team manager whose job is to bring together the work of specialist consultants and other part-time team members from most of the countries of the EC. The British Broadcasting Corporation (BBC) provided personnel and production facilities for the making of the audio-visual components of the pack under the academic supervision of the course team.

Figure 1—making the teaching material

Figure 1 shows in diagrammatic form some of the stages that the teaching materials go through before they are ready for publication. After the initial proposal was developed by the core academics at the Open University a consultative conference was held in Lisbon. This became known as the Lisbon Colloquium. During the colloquium a wide variety of European cancer specialists, epidemiologists and health promotion specialists met together to decide the priorities and key topics in the field of cancer prevention. Together they determined the general areas which they thought it was important that health professionals should study, and the key messages that any educational or training programme should aim to teach. The educational content of the colloquium, formally entitled *The Prevention of Cancers: Spreading the Message* was co-ordinated by the Open University (U.K.) and funded by Europe against Cancer. Many of the papers presented at the colloquium form the basis for the first reader of the study pack [3].

At the same time as the colloquium was being prepared and during the following phase when funds were sought for the production of the teaching materials themselves, the core team of academics were involved in a process which involved a very widespread search of all available literature on the subject of cancer prevention and the active seeking out of the views and opinions of many European specialists.

Once funding was received from the Europe Against Cancer programme for making the learning materials, the next educational phase of course production was initiated. This involves the generation of a detailed course descriptor outlining the skills, competencies and knowledge which health care workers could expect to gain from using the finished pack. This descriptor is the product and distillation of all the views and opinions that had been gathered from the specialist field in the preceding months. This proposed course outline and formal statement of educational aims and objectives was sent to 60 experts in cancer studies and health education throughout the EC for comment. The purpose of wide consultation at this stage is to ensure that the teaching materials are educationally firmly rooted, and that all subsequent stages of course production can be constantly checked against this consensus academic plan.

The 60 European experts had some modifications to suggest to the initial outline, all of which were incorporated into the formal course descriptor. After one year of academic planning the first words of the teaching materials themselves have not yet been written. The first draft stage of the writing process is based entirely on the results of the preliminary processes. At this stage the course team invites specialist academics from the field of cancer prevention to prepare structured topic outline plans (STOPs). These are outline chapters which focus on the latest research, the areas of most controversy and the issues which have developed from the previous consultative period. The commissioned STOPs are converted into first draft chapters by the core team of academics. It is at this stage that the activities that our students are expected to complete during their study of the learning materials are designed and are introduced into the text. These activities are formulated to meet the educational aims and objectives of each individual subject area, and to produce the skills and competencies in the students who complete the work in the manner expected of them. In many ways this is the most enjoyable and creative part of the academic process and for the first time it is possible to imagine how individual health professionals or groups of health professionals might study the material and get help from the educational material that is being prepared. The first draft material that emerges from this process is necessarily over length, of mixed

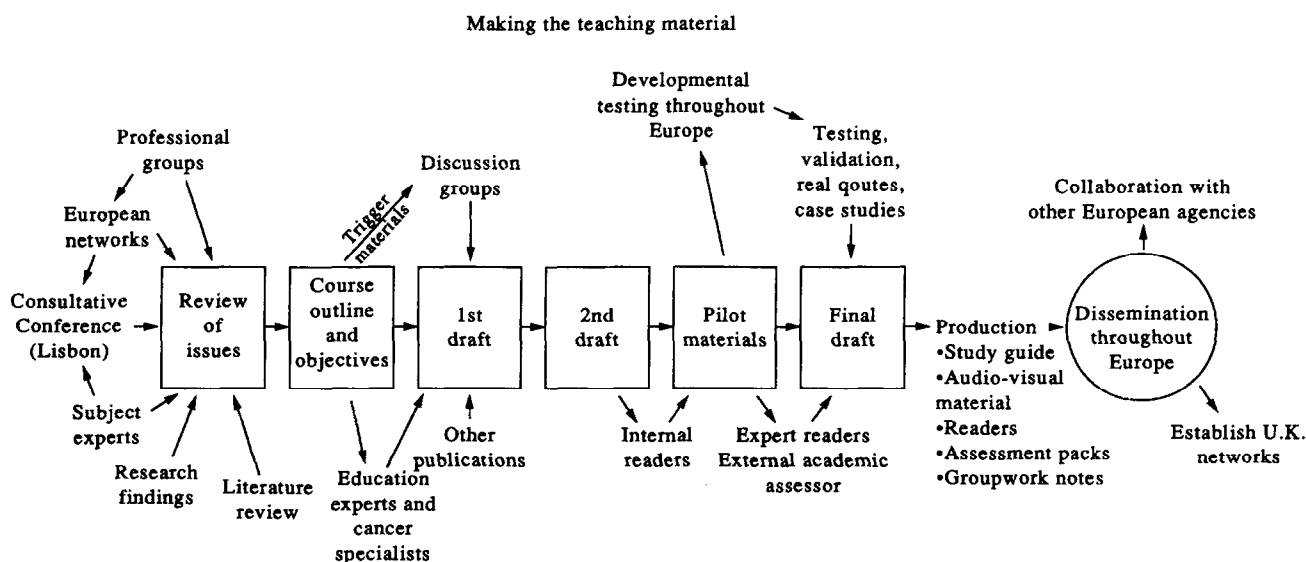


Fig. 1. Making the teaching material.

style and often has overlaps and inconsistencies. The course team then goes into a period of review during which we comment on and criticise our first attempts. From this review process a second draft of the teaching material emerges which has a more uniform style, with inconsistencies and overlaps eliminated and with remaining gaps identified. The second drafts are again commented on by experts within the Open University to check for educational errors and to determine independently whether the material does in fact meet the educational aims and objectives that have been set in the course descriptor. After further transformation by the core course team a pilot draft was sent out to 120 testers, again spread throughout the EC. These 'developmental testers' represent our target audience. They were drawn from health promotion and other health care workers throughout Europe. Their job is to behave as if they are typical students and to pick up problems in the course material. They all send back their finished work and are encouraged to make comments about the teaching material itself. A final modification process and re-writing of the sections that the developmental testers found unclear is undertaken. In addition many of the examples that the student testers included in their responses are included in the final workbook.

Simultaneously with the process described above, audio-visual materials were prepared and articles on particular subjects were commissioned and edited for the second reader in the pack [4]. The production of the audio-visual materials follows a similar process to the written materials with a formal academic plan for each component. Three video and three audio recordings emerged from this process for the students to study. The use of audio-visual materials, integrated into the teaching material in this way and designed to enhance and develop key educational objectives is one of the major strengths of the teaching material. The use of audio-visual material helps to bring the subject to life and helps the students to identify strongly with the subject matter.

Working with the European School of Oncology

The European School of Oncology have made the European dimension to the course possible. They have been involved in the continual academic checking of the materials on the course and have helped in the access to cancer experts and developmental testers throughout Europe. They have ensured that the illustrations and examples used in the course material have a mix of European flavours, rather than being the product of one single country. In the future we will continue our collaboration and the translation, European dissemination, cultural adaptation and evaluation of the material will depend on our continued partnership.

AIMS AND PHILOSOPHY

The learning materials contained in 'Reducing the Risk of Cancers' have two main aims. First, and specifically, they help health workers to learn about and understand cancer prevention more fully so they can become better and more effectively engaged in it. Second, they introduce some of the concepts of and practice of health promotion in a more general way. Our students will soon discover that many of the principles and approaches which apply to cancer prevention are also relevant to other areas of disease prevention, such as coronary heart disease, for example.

The pack is intensely practical and will encourage and enhance health promotion activity as well as increasing theoretical knowledge. It will help to develop preventive skills and competences

and it aims to turn health workers who may be more familiar with clinical working with individuals into effective health promoters. More especially it provides teaching and training materials about cancer prevention, technical knowledge about the causation and preventability of cancers, teaching on the European Code Against Cancer and access to the integrated multi-sectoral health promotion perspective and process. Through imaginative activities the students are required to look closely at their own work practices and their own communities. This helps them to develop their skills and competencies in health promotion and health education and helps them to relate theoretical knowledge to practical preventive work in a local primary health care setting. In addition to learning how to promote individual personal health the materials also explore ways in which cancers can be prevented by policy changes at various levels and by the action of a variety of agencies, including governments.

A distinctive philosophy or rationale has been embodied into the learning materials. This underlying health promotion philosophy of the pack, which is explicitly shared with the students, ensures that their approach is:

- person-centred and takes personal concerns and experience seriously
- characterised by a mutual, sharing, democratic approach
- contextual, participative, and sensitive to particular contexts
- dialogical and exploratory
- encourages critical reflection and evaluation
- advocates a dynamic, continuing process of change.

CONTENT

At the centre of the teaching materials of 'Reducing the Risk of Cancers', is a 108 page 2-colour workbook containing the main text in topic form which is easy to study. This orients learners and guides them interactively through the various subject areas and academic and audio-visual components of the pack.

The main topics in the workbook are divided into three distinct sections. See Fig. 2.

Figure 2—workbook structure

In the first four chapters the theoretical background to cancer prevention is explored. This gives the student all the cognitive and factual material that is necessary to become more competent in this subject area. The central section of the workbook helps the student to put the theory of health promotion and the ways that it is possible to help people to adopt a healthy lifestyle into practice. The last four chapters give detailed case-studies for action by the students, including tobacco-related cancers, environmental cancers and diet and nutritional cancers. The final chapter explores in detail the screening and early detection of cancers.

The workbook is supplemented by two academic texts which are called readers, *Reducing the Risk of Cancers* and *Preventing Cancers*. These books are each of 100 000 words in length and contain a selection of authoritative papers by leading cancer and health promotion specialists from more than eight different EC countries and beyond. The majority of the papers were specially commissioned for this pack.

There are also two audiotapes in each individual student pack. These contain 90 minutes of interviews and discussion between health promotion experts, policy makers and campaigners working in the field around Europe on the costs of cancers, health

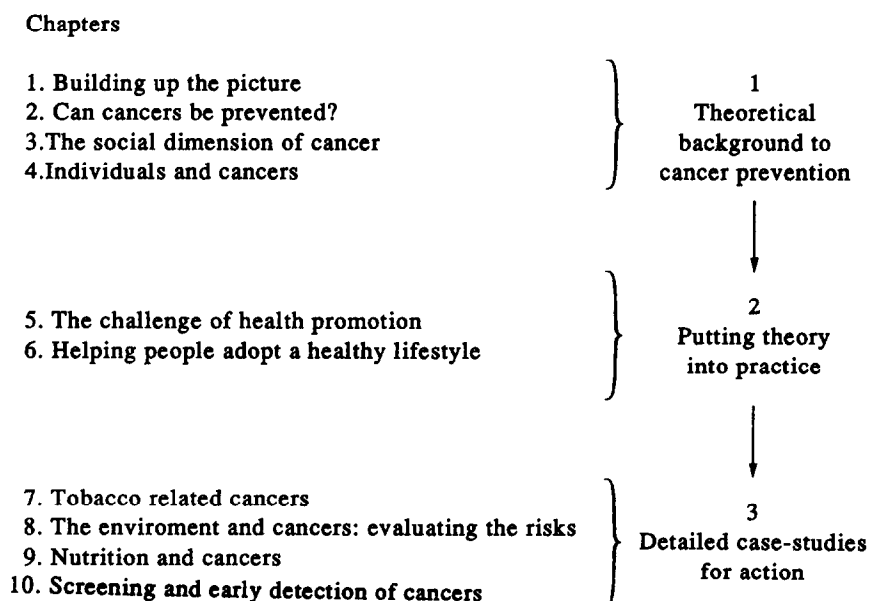


Fig. 2. Workbook structure.

beliefs, helping people change and integrated health promotion activity.

The final component of the individual pack is the activity booklet. This contains exercises and activities which students undertake in order to assimilate course material and to explore its practical relevance to their own local situation. It forms a valuable record of the learner's interaction with the materials in the pack and provides a structure for devising a practical, relevant health promotion plan oriented to cancer prevention in primary health care. It is anticipated that individuals should take at least 50 h to complete their academic and practical work on the teaching material in the pack. This is, however, only an indicative figure which has been suggested by our developmental testers and students may take more or less time according to preference and interest.

The teaching material is also suitable for group study, and for this purpose additional components have been produced. Groups studying the pack can in addition watch two videotapes produced by the BBC containing three half hour programmes. These cover the topics of preventing tobacco-related cancers, integrated anti-tobacco health promotion activity and breast screening. The videotapes form a suitable basis for group discussion and learning and are supplemented by group leader's notes which give guidance for group leaders on how to use the videos to best educational advantage.

Finally, users may choose to have their learning assessed by filling in the assessment package which enables learners to submit assignments for computer-marked assessment by the Open University (U.K.).

USAGE AND AVAILABILITY

It is anticipated that those who will find 'Reducing the Risk of Cancers' useful are all health care professionals who are qualified or in training. This will include doctors and medical students, nurses and nursing students, health educators and health promoters, nutritionists and dieticians, health policy makers, public health professionals and occupational health professionals. The pack is especially suitable for in-service training and education for these groups, but would also form a good basis for pre-

qualification studies in cancer prevention and health promotion. It is designed to form a good basis for group learning in a primary health care setting.

'Reducing the Risk of Cancers' is available only in English in the first instance. Collaboration is actively being sought so that the pack can be translated, adopted and adapted for use in non-English speaking parts of the EC, as well as in post-communist Europe. Every effort has been made by the use of contributions and consultants from all over the EC in literary and audio-visual contributions to ensure that the pack is relevant to learners from all member states.

EVALUATION

All Open University materials undergo rigorous evaluation in many different forms. Individual students are followed up and assessed on their increased knowledge and any changes in their attitudes to the subject area as well as being asked about any changes they have made in their actual work practice as a result of studying the materials. In addition groups using the packs, within the European School of Oncology programme as well as a selection of other groups will have a rigorous evaluation procedure applied to their work with these teaching materials. In this way, full feedback is ensured and it is possible to check the quality of the materials themselves and the effectiveness of their message during clinical practice.

CONCLUSION

Cancer is a European problem, a fact to which the existence of the EC initiative, Europe against Cancer, bears clear witness. The study pack 'Reducing the Risk of Cancers' represents a significant attempt at pan-EC co-operation to enhance education and training for health care professionals at local level in cancer prevention and health promotion. It is hoped that this distance learning pack will find wide usage throughout the member states of the EC and beyond in the interests of substantially reducing the incidence of cancers by the year 2000.

For further details about the pack and its availability contact: Simon Baines, Senior Course Manager, Department of Community Education, The Open University, Walton Hall, Milton Keynes MK7 6AA, U.K.

1. Europe Against Cancer, European File, September 1990. Commission of the European Communities, Luxembourg.
2. Doll R. The prevention of cancer: opportunities and challenges. In Heller T, Davey B, Bailey L. eds. *Reducing the Risk of Cancers*, Hodder and Stoughton, London, 1989.
3. Heller T, Davey B, Bailey L. eds. *Reducing the Risk of Cancers*, Hodder and Stoughton, London, 1989.

4. Heller T, Bailey L, Pattison S. eds. *Preventing Cancers*, Open University Press, Buckingham, 1992.

Acknowledgements—This paper, and the learning pack which it discusses, have been supported by a grant from the Europe against Cancer programme of the European Commission.

Eur J Cancer, Vol. 29A, No. 11, pp. 1647–1648, 1993.
Printed in Great Britain

0964-1947/93 \$6.00 + 0.00
Pergamon Press Ltd

The Educational Programmes of the European Community

Germaine Heeren

BACKGROUND AND CONTEXT

NOT SINCE the Middle-Ages when it was common for scholars and students to roam over Europe shopping for “the ultimate”—the “Summa” in science and knowledge in monasteries and emerging universities has a similar wave of travelling teachers and learners been produced. “ERASMUS” students have become a very visible and outspoken minority at European universities, followed more recently by “TEMPUS” visitors from Central and Eastern Europe and holders of MED-CAMPUS scholarships from the non-EC Mediterranean countries.

The educational programmes of the European Community are generally perceived as a “noble” initiative, stimulating students and teachers to leave their secure shells to go out to meet, in the framework of a teaching/learning situation, people from other cultures with different traditions, university curricula and languages. Could indeed a better recipe for doing away with prejudice and stereotype-thinking and for furthering peace be devised?

To some readers it may come as a slight disappointment, therefore, to learn that the origins of these programmes are rooted in economics. With the completion of the internal market, the post-1992 Community would need a vast supply of graduates who feel at home in the European space; regard the whole of Europe rather than a single nation state as their natural area of activities; have a first-hand experience of studying, living and working in an other Community country; are proficient in a number of community languages; and, even more important, are able to understand and appreciate the culture and mentality of other nations. It was perceived that the success of the Internal Market would depend on having people with this capacity to operate across national and cultural boundaries. Mobility was viewed as the most effective instrument in producing this kind of graduate and the historical relationships between higher education institutes were looked upon as an asset to the Community in its growing world role. The objective stated for 1992 as the minimum required to meet the future needs of the community was a student mobility of 10%.

But only 4% of the student population had by 1992 the opportunity to spend an integrated period of study in another Member State. Disappointing as this figure may be to the Commission, to a neutral observer it sounds like a remarkable

achievement, a real success story for in 1992 ERASMUS had been operational for only 5 years!

Likewise, the TEMPUS Programme of the European Community was devised not only to give fellow Europeans from the post communist countries a taste of western European democracy, but also to support the economic reform process in the area. Not surprisingly the TEMPUS scheme is funded by the PHARE Programme which establishes priorities for global Community assistance to the economic restructuring of the countries of Central and Eastern Europe.

Expressed in quantifiable terms its success is certainly comparable to that of the ERASMUS Programme. In its fifth operational year, the ERASMUS Scheme put 72 101 students and 3616 university teachers on the move. The TEMPUS Programme generated in 1991, when only in its second year of operation, 6339 staff and 3808 student mobility applications.

The MED-CAMPUS Scheme is still in its pilot phase. In the selection process for the current academic year, medicine was excluded as a priority area.

While promoting exchange and mobility is their main priority, the scope of the European educational programmes is much broader. They provide incentives for inter-university cooperation, for the development of common curricula and for the joint organisation of intensive training courses. A huge effort is also being invested in getting a “European Credit Transfer System” (ECTS) off the ground. As such the programmes under discussion try to add a specific European dimension to a broad EC policy aiming at stimulating participation in and access to higher education as outlined in the “Memorandum on Higher Education in the European Community” elaborated by its Task Force Human Resources.

Euro-sceptics who have apprehensions about EC involvement in a matter as closely linked to the national identity as education should bear in mind that the Maastricht Treaty has explicitly allocated the responsibility for the organisation of education to the Member States.

On the other hand, the Single European Act states that “The internal market shall comprise an area without frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaty”.

The only EC Council Directive shouldering the free movement of persons in the professional sphere provides in “a general system for the recognition of higher education diplomas awarded on completion of professional education and training of at least 3 years’ duration” and by sectoral directives governing the