APPENDIX III.

PAPERS AND ADDRESSES (Smoking and Health)

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Le Maistre (Member Surgeon General's Advisory Committee on Smoking and Health): "Where the Action is on Smoking": N.I.C. Conference on Smoking and Health, Univ. of Maryland, May, 1966.

McKennell (Social Survey, U.K.): The National Surveys on Smoking, Working Paper, U.I.C.C. 9th International Congress, Tokio, Oct. 1966.

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AMERICAN CANCER SOCIETY, INC.
Five-Year Major Objectives

roduction to Program Objectives

Cancers of the uterus, colon and rectum, breast, oral cavity, lung, and skin constitute over 60 per cent of all cancer cases diagnosed and more than 48 per cent of all cancer deaths.

Early and adequate application of present-day medical knowledge in detection and treatment of cancer at these six sites alone could save thousands of American lives and could prevent the development of cancer in thousands more.

In recognition of these facts, the Board of Directors expressed a desire for full commitment of the Society's resources to aid in a stepped-up attack on cancer of these six sites (Resolution of January 22, 1965). Statistical sample studies are planned to measure the results of several of the five-year objectives.

erefore, through the efforts of other interested parties and ACS emphasis, hope to achieve the following Five-Year Program Objectives:

The performance of Pap smear tests of at least 75 per cent of all women over 21 years of age.

The incorporation of proctoscopic examination into the regular physical examination among at least 30 per cent of the general public over 40 years of age.

The practice of monthly breast self-examination by at least 50 per cent of all women.

The use of oral cancer detection programs by 50 per cent of the medical and dental professions to diagnose pre-cancerous lesions and detect early (Stage I) neoplasms.

The reduction of cigarette smoking among teen-agers by 50 per cent, in the general public by 25 per cent, and among physicians by 50 per cent.

The wide spread dissemination of information in all Units to aid in prevention of skin cancer resulting from excessive exposure to sun light and from environmental hazards.

The support of a greater percentage of research projects recommended as meritorious by the Research Advisory Council, by increasing by 50 per cent over 1964-65, the Society's expenditures for cancer research.

troduction to Crusade Objectives

By 1970, the population of the United States will have increased by 15,360,000 to a total of 206,694,000 -- that is, at a rate of approximately 1.33 per cent each year.

By 1970, an estimated 950,000 men, women and children will be under medical care for cancer if present trends continue -- an increase of approximately 14 per cent over the 1964 figure.

Based on the Society's experience in making research grants, it is estimated that the ACS could use a minimum of 320 million dollars each year by 1970, for support of sound research projects.

Furthermore, to accomplish and effectively expand other programs of the Society's Five-Year Major Objectives in a rapidly increasing population and inflated economy will require an estimated yearly increase of one million dollars over the next five years.

ore, Five-Year Crusade Objectives will be:

The raising, by 1970, of a minimum of $60 million of which at least $48 million comes from Crusade sources, and $12 million from Legacies.

The reaching of 70 per cent of the households with additional materials will require an increase in the number of residential crusaders from 1,400,000 to more than 2,600,000 volunteers.

...tion to Organization and Administration Objectives

The American Cancer Society receives, manages, and spends funds received through public support. There thus exists an obligation that these funds be appropriately controlled and properly expended.

In order to:

-- report the Society's stewardship of funds,
-- conduct programs expeditiously, and
-- manage the Society's programs and operations in general

effective and efficient organization and administration are demanded.

As a voluntary organization, the ACS is directed and controlled through policies determined by volunteer leadership at all levels. To insure effective communication among the various levels of the organization, it is essential that administrative channels be established and maintained for the easier interchange of information and ideas.

ore, Five-Year Organization and Administration Objectives will be:

The organization of Branches in 200 Units with populations of 50,000 or more; the establishment of full Unit organization in every county of more than 15,000 population; and to have 50 per cent of all such Units conduct a regular program of self-appraisal.

The obtaining of combined certified financial statements by increasing the number of audits performed by one certified accounting firm; and compliance with standards of accounting and financial reporting for volunteer health and welfare organizations.

The development and establishment of an effective system for analyzing, predicting and planning for the Society's executive and professional manpower requirements, and to cooperate with Divisions in the establishment of sound and effective programs of personnel administration.

The creation and maintenance of a continuing program of volunteer training, involving induction, orientation, supervision and personal development.

AMERICAN CANCER SOCIETY
Pennsylvania Division, Inc.
Harrisburg, Pennsylvania

UNIT COMMITMENTS FOR 1966-67.

Program Goals:

A. We will participate in a program to persuade an additional _____% of women over 21 to receive "Pap" Smears.

B. We will conduct professional education programs on uterine cancer utilizing the new film. _____Yes _____No.

C. We will contact _____ hospitals and persuade _____% of all hospitals in our county to establish admittance procedures with "Pap" Smear programs.

D. We will participate in _____ county fairs and _____other exhibitions to reach the public with information about the "Pap" test.

E. We will participate in a proctoscopic program to secure its incorporation into the regular physical examination, especially those over 40, for at least _____% of the population.

F. We will conduct educational programs to reach _____ physicians.

G. We will conduct professional education programs using the professional education film on Colon and Rectum Cancer. _____Yes _____No.

H. We will conduct "Talk to Your Physician" programs. _____Yes _____No.

I. We will participate in employee education programs with a goal of reaching _____% of our county population over 40 years of age. _____Yes _____No.

J. We will participate in educational programs for Senior Citizens or Golden Age Clubs to gain acceptance of the proctoscopic examination. _____Yes _____No.

K. A. We will conduct a breast cancer education project in our Unit. _____Yes _____No.

B. We will arrange for professional education showings of the film on Cancer of the Breast. _____Yes _____No.

C. We will have _____Mother-Daughter-Teacher programs in _____ High Schools.

A. We will conduct professional education programs to detect oral cancer. We will attempt to reach _____% of the dentists and _____% of the physicians.

A. We will continue to develop and expand the Unit education program on cigarette smoking and cancer. _____Yes _____No.

B. We will participate in an adult education program around the theme "The Time to Stop Cigarette Smoking is Now". _____Yes _____No.

C. We will have smoking and health programs in _____ elementary schools, and in _____high schools, which is a _____% increase in the number reached.

D. We will form and use speakers bureaus on cigarette smoking and cancer. _____Yes _____No.

...G GOALS

A. We will increase our Crusade goals to _____ to assist in reaching the National Crusade Goal.

B. We will increase Crusade income in April 1967 as follows:
Residential $_____ Federal Employees _____
Special Gifts _____ Special Events _____
Memorials _____ Corporate and Employee _____
Residential Crusaders by _____ for a total of _____%.

C. We will increase distribution of educational materials at the time of the residential Crusade by _____%.

...ZATION AND ADMINISTRATION GOALS

A. We will organize _____ branches in our County Unit.

B. We will conduct volunteer training programs covering:
Recruitment _____Yes _____No; Orientation _____Yes _____No;
Refresher Training Programs _____Yes _____No.

C. We will develop and conduct special promotions to involve more physicians in the Society's activities. _____Yes _____No.

D. We will establish and maintain formal and informal relationships with appropriate community and government organizations to develop recognition and use of ACS programs of service. _____Yes _____No.

E. We will participate in programs of guidance, advice and service to the elderly about quackery and charlatans. _____Yes _____No.

F. We will establish and maintain management controls to reduce by _____% the percentage of expenditures allocated to non-program activities.

AUSTRALIAN CANCER SOCIETY

INTERIM REPORT

ON

PRELIMINARY STUDY OF SOME ASPECTS OF THE SOCIAL AND ECONOMIC IMPACT OF CANCER

BACKGROUND

COPY

AUSTRALIAN COUNCIL ON SMOKING & HEALTH

CONSTITUTION

1. NAME

The name of the Council shall be "The Australian Council on Smoking and Health".

2. OBJECTS

The objects of the Council shall be:-

2.1 To enlist the co-operation and support of all bodies in Australia having responsibility or concern with the problem of cigarette smoking and its effect on human health.

2.2 To stimulate public interest and to initiate action at Federal and State levels directed against this public health hazard.

2.3 To encourage and support National, State and other "Smoking and Health" programmes.

2.4 To seek in every way to bring to the people - particularly the young - an increasing awareness of the advantages of not smoking.

3. MEMBERSHIP

Membership, which shall be by invitation from the Council, shall be in two classes:-

3.1 Organizations private, professional, voluntary and Governmental, which have a bona fide interest in the problems of Smoking and Health.

3.2 Individuals interested in the aims of the Council.

AUSTRALIAN CANCER SOCIETY

INTERIM REPORT

ON

PRELIMINARY STUDY OF SOME ASPECTS OF THE SOCIAL AND ECONOMIC IMPACT OF CANCER

BACKGROUND

In April 1964, the Cancer Service Committee of the A.C.S. agreed to sponsor a preliminary study focussed on domiciliary care for cancer patients and on the economic implications of cancer.

It was decided that initially the study should be conducted in N.S.W. and Victoria by part-time social workers appointed for a period of six to twelve months.

Mrs. B. Thomas was appointed in Victoria and in order to ascertain trends in overseas approaches to the matters being studied, undertook a private nine weeks tour of various centres (list attached) before commencing work in the middle of November 1964.

In N.S.W. Miss W. Danby's services were made available on a full-time basis for eight weeks from 24.1.64 to 18.3.66.

As the N.S.W. appointment was not made earlier, all the basic planning was necessarily carried out in Victoria. Owing to the limited time at Miss Danby's disposal, it was impossible to obtain the sample of thirty case studies in N.S.W. by a method similar to that used in Victoria. Although an attempt is being made to standardize the material obtained in both States as far as possible, it will not be strictly comparable.

AIMS OF STUDY

The primary question to be answered is: How far are the needs of cancer patients (in respect of domiciliary care and finances) being met by existing services?

This requires:

1. That the nature of needs should be established and their size measured.
2. A study of relevant services.

It is essential to recognize the fallacy of the widely-held belief that if a service exists, a need is being met.

Two approaches have been adopted:

1. Quantative assessment by schedules of a population of patients drawn from public hospitals (including Peter MacCallum Clinic) and from private practice (through the Anti-Cancer Council of Victoria) in the ratio of 2 : 1. (1) (originally suggested that numbers should be 100 : 50).
2. Case studies of 30 patients from private practice to show qualitatively the natural history of the cancer patient's encounter with existing services.

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(1) This is being done in Victoria only. It should be noted that the Survey carried out in N.S.W. Hospitals in 1964 was of an entirely different kind, being designed to show general trends. There will be no basis of comparison therefore between findings. The main suggestion arising from the N.S.W. Study was the appointment of "a Research Officer to work in conjunction with the hospitals in collecting these data".(data referring to comprehensive day and night nursing service and to meeting housekeeping needs).

SAMPLE

In the absence of relevant figures about the total cancer population, sampling has proved a gargantuan task, and to some extent is an insoluble problem. The total need, against which the sample must be measured, can be established only by using a series of approximations.

Size of Sample

The size of the sample has raised many problems. It must be large enough to provide an acceptable level of overall reliability and also to allow for sufficient breakdown of important subsidiary questions.

The original suggestion of 100 hospital patients and 50 patients from private practice is inadequate. The distribution by age and sex (the only certain discriminators known at this point) would provide cells too small for use:-

Distribution of 150 Cancer Patients According to Age & Sex Incidence as shown by Victorian Cancer Registry (1963)

Age (Years)	Male	Female	Total
15 - 24	0	1	1
25 - 34	3	1	4
35 - 44	4	8	12
45 - 54	12	14	26
55 - 64	20	15	35
65+	36	36	72
Total	75	75	150

It is recommended that if possible in the time available, the number should be increased to 200 hospital patients and 100 patients from private practice.

Nature of Social Problems

In addition to the paucity of information available about the total cancer population, no previous work has been done on the nature of the problems of those cancer patients referred to hospital M.S.W. Departments. This means that here also the Study must start from the beginning. In order to establish the dimensions of the problems, a large series of case records must be examined. Preferably these would be the records of all new patients who are seen routinely by M.S.W.s at the Peter MacCallum Clinic in 1965 and 114 case records from the Alfred Hospital, representing all cancer patients referred to M.S.W.s in the three months February - April 1965. At the latter hospital, policy is that all patients with advanced or terminal cancer are routinely referred to M.S.W.s.

Schedules

The importance of asking the right questions is widely appreciated. It has come to be accepted also that the answers need to be partly known before the questions can be properly framed. In this Study therefore the development of the schedules has been closely related to the material obtained in the case studies. Much attention has been paid to designing and testing the schedules and the form being used in the hospitals should provide specific answers in the major areas. 40 schedules have been completed on patients referred to the A.C.C. by private practitioners.

Present Sample

The population consists of all cancer patients (excluding skin ...cer) referred to:

The M.S.W. Departments of several metropolitan hospitals, taken in order of referral until the required number is reached.
The M.S.W. of the A.C.C. of Victoria, by private medical practitioners, taken in order of referral.

Some bias is inherent in using patients referred for social work ...p but an attempt is being made to correct this by asking private ...ctitioners to refer patients who seem to be managing adequately, as well those with recognized problems.

There are practical limitations, particularly for the hospitals, ...ost are experiencing staff shortages and staff changes and the number ...referrals is usually directly related to the available M.S.W. service. ...e hospital has advised that work cannot commence until May 1st and ...ther until June 1st.

...SE STUDIES

The 30 Victorian case studies have been made on patients referred ...the A.C.C. by private practitioners. All except four have been ...ferred for social work service, which means that the cases are being ...llowed over time and that study and treatment are proceeding together. ...is involves much more work on each case but provides unparallelled ...portunities for first-hand observation of the impact of cancer.

Of the 30 patients, 13 are still alive and 11 are still receiving ...ive social work help.

A typical referral for help with domiciliary care involved 6 ...me visits at fortnightly intervals (return journey 24 miles), 3 office ...terviews with the patient's son, 3 discussions with the treating ...ctors and 8 telephone contacts with outside organizations.

...DIES OF SERVICES

Home Nursing Services and Housekeeper Services are being studied ...om the standpoint of their place in the health and welfare structure ...f the community.

A study is being made also of National Health legislation in ...o far as it may limit the payment of hospital benefits and of the policies ...d practices of the major benefit organizations in Victoria. Much of ...his material has been gathered but is still to be collated and checked ...ith the responsible officers in the various bodies.

...MMENTS

It is too early to draw any conclusions from the information ...btained todate. However, some points are of interest:

1. Public and Private Patients

...ndications are rather that there is a continuum, with some patients who ...eceive full private care at all times at one end and some at the other ... always receive treatment as public patients. In between these ..., patients move freely between public and private treatment and ... is no clear dividing line related e.g. to income.

Of the 40 patients referred to the A.C.C. by private
...itioners, 13 have been treated privately throughout,
8 had private treatmont until terminal hospital care
was necessary.
19 have moved back and forth between public and private
treatment.

2. Social Work Service

There is some indication that referrals to the A.C.C. for
...al work help are more often related to short life expectancy than to
...ther single factor. The help requested may be of many different kinds.

The 36 A.C.C. cases (40 - 4 referred for study purposes only)
... referred for the following reasons (Some referred for more than one
...n):

1. Hospital Placement (long-term or terminal):	14.	6 required financial subsidy.
2. Home Care Plans:	11.	1 needed financial help to pay for night nurse.
3. Long-term Family Plans (usually involving major re-adjustment in way of life):	9.	
4. Counselling:	3.	
5. Financial Assistance:	3	

There has been a sharp increase in the number of people referred to
...C.C. for social work help. Referrals in the first three months of
...equal 40% of the total number of cases referred in 1965. The extent
...hich this may be related to the study is not yet clear, but certainly
doctors are using the service for the first time.

There is some evidence also that the perception by doctors of
patient's needs is affected by participation in the Study. This
help to account for the small percentage of patients without problems
...rred for the Study. A similar effect was noted in an earlier study
...ardiac patients.

Beryl B. Thomas.

Beryl B. Thomas
Medical Social Worker. 13.4.1966

ORGANIZATIONS VISITED BY MRS. THOMAS

September - November, 1965

I. U.S.A.

1. Memorial Centre for Treatment of Cancer and Allied Diseases.
2. American Public Welfare Association Conference. Session on Medicare - Title XVIII (Dr. Yerbi).
3. Cancer Care Inc.
4. Presbyterian Hospital - M.S.W. Dept. and Delafield Hospital (Cancer Research - Dr. Alfred Gelhorn).
5. Columbia University School of Social Work.
6. American Cancer Society - New York Division (Mrs. Joyce).
7. Community Service Society of New York (Mrs. Siegle).
8. New York City Dept. of Hospitals (Miss Richards, Miss Snyder)
9. American Cancer Society (National Headquarters) (Dr. Cooney, Mrs. Allen).
10. Montefiore Hospital - Home Service Dept. (Administrator Mrs.Epstein) - Visit with Home Care Team.
11. National Council for Homemakers Service (Mrs. Anderson).
12. Metropolitan Hospital (Home Care Programme) (Mrs. Haas).
13. Washington) Visits connected with social work but
    Boston) unrelated to cancer.
    U.N. Commission on Housing.

II. ENGLAND

1. Institute of Medical Social Workers
2. National Old People's Welfare Council.
3. Royal Marsden Hospital.
4. St. Mary's Hospital.
5. St. Luke's Hospital (Terminal Care Annexe of St. Mary's - Dr. Patricia Graeme)
6. British Empire Cancer Campaign (Capt. Tours)
7. Marie Curie Foundation (Wing Commander Robinson).
8. Cowley Road Hospital, Oxford (Dr. Cosin)
9. Guy's Hospital - M.S.W. Dept.
10. "Harestone", Caterham, Surrey, Terminal Care Home of Marie Curie Foundation.
11. Borough of Camden - Day Care Scheme
    - Role of Local Authority in Health & Welfare Services.
12. National Council for Social Work Training.
13. Younghusband 2 yr. training for general social workers.

III. SWEDEN

Stockholm.

a) Karolinska Hospital
   Radiumhammett
b) Swedish Cancer Society (Director Mrs. Johlin)
c) Southern Hospital.

IV. SWITZERLAND

Zurich — Zurich Division of Swiss Cancer Society.
Geneva — U.I.C.C. - Dr. Delafresnaye
W.H.O. Cancer Unit - Dr. Tuyns, Dr. Demin.

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A PLAN FOR THE PUBLIC EDUCATION OF YOUNG PEOPLE ON SMOKING AND LUNG CANCER

The social and commercial pressures to take up smoking are so powerful, and once acquired, the addiction to it is so hard to overcome, that a sustained and many-sided anti-smoking campaign among children and adolescents is required, to make a pronounced and lasting impact. The benefits to the future health of the juvenile population of not developing the tobacco habit fully justify a major effort in this field. The campaign should embrace the schools both State and non-State, parents, sporting and youth groups and popular young people's magazines and television programmes.

1. Schools

Teachers are by far the best agents for implementing a cancer education programme among young people. Through them, all children in the community can be reached and their training and position of prestige with their pupils fit them particularly for this task. It is necessary to ensure that teachers are given the incentive, the knowledge and the facilities to instruct their pupils effectively on the subject of cancer, including its relationship to smoking. Much more is required than an annual talk to students. Cancer education should be made an integral part of the school curriculum. Research indicates that anti-smoking tuition should begin in the primary school. An effective programme in schools would embrace the following measures:

1. In primary schools provision should be made in State Education Department Health syllabuses for lessons to the upper classes pointing out the dangers and disadvantages of smoking.

2. At the secondary level, the dangers attendant on smoking should be studied in the context of the wider problem of cancer generally and due stress should preferably be given to the known relationship of smoking to other major diseases. In this way, the smoking problem will not be elevated to a position of undesirable uniqueness and adolescents will be faced with the interesting intellectual challenge presented by cancer. In addition, the systematic study of cancer at school will do much to ensure that future adults will not be beset by the ignorance and fear of cancer so prevalent today among their elders.

The subject should form a part of the first three years' course in Health Education, General Science or Biology. In terms of teaching method in relation to the smoking issue, class involvement and commitment to anti-smoking attitudes may best be obtained by pupil participation in the formulation of anti-smoking policies at school and by utilizing permissive discussion techniques for a rational and frank examination of all relevant aspects of smoking.

...ted from The ... Australia. 1964. 2: 388 (September 5).

3. The provision of cancer materials in school syllabuses would pave the way for the inclusion of cancer as a subject of study by trainee teachers, but in any case, teachers' colleges should be pressed to give their students adequate instruction about cancer.

4. Education Departments should be requested to make cancer education a part of the in-service training of teachers in the field.

5. A special approach could be made to physical education teachers urging them to counsel their pupils on the injurious physical effects of smoking.

6. Education Departments should require teachers to set an example by not smoking in the presence of their pupils at school. Where such a regulation already exists, teachers should be reminded of their duty in this respect.

7. For cancer instruction in schools to be effective, teachers need to be supplied regularly with up-to-date information on various aspects of cancer and even in the methodology of cancer education. This may be done by means of articles in teachers' journals or education gazettes and perhaps, by the distribution of pamphlets to individual schools.

8. Instructional aids such as films, filmstrips, charts, diagrams, posters, and pamphlets relating to cancer should be made available to Education Department Visual Aids Sections for use in schools. In some cases, particularly as relating to smoking, it may be practicable to issue suitable pamphlets to individual pupils. There is at present a particular need for at least two Australian films on smoking, one suited to primary children and the other one for adolescents.

9. There is some merit in the sponsorship among school children of Junior Leagues of Non-smokers, as this practice invokes group decision, support and commitment. The organising of essay or poster competitions on such topics as the undesirability of smoking has some limited value.

10. The Roman Catholic schools, which on an Australia-wide basis, contain about 80% of non-State pupils, usually follow State courses of instruction, but the provision of cancer materials and instructional aids for teachers in these schools may be arranged through State Catholic Education Offices. Other non-government schools would generally have to be contacted individually in connection with cancer education measures.

II. Parents

There is evidence to indicate that the most prominent cause of juvenile smoking is family influence, particularly smoking by parents and parental acceptance of the habit as normal behaviour. This indicates the importance

...Australia. 1964. 2: 388 (September 5).

...enlisting the co-operation of the home in any anti-smoking campaign ...ed at young people. Parents should be acquainted with the dangers ...smoking, the crucial role they play in regard to the growth of the ...ting habit among their children and the importance of their active ...port in reinforcing the anti-smoking efforts of the school and other ...dies.

Parents could best be contacted by means of the Parents' and ...itizens' Associations generally connected with State schools, for this ...cedure makes use of an existing organisation which embraces the majority ...parents. The initial approach would be to The Federation of P. & C. ...sociations - the controlling body in each State through which all school ...sociations may be contacted. In addition, however, suitable literature ...uld be sent to individual schools for distribution by the Principal to ...rents.

Catholic schools have Parents' and Friends' Associations which may ...e contacted normally through the Catholic Education Office located in ...ch State. Organisations of parents associated with other non-State schools ...ill have to be approached through individual schools.

III. Leaders in Youth Organisations

Leaders or coaches of youth and junior sporting clubs, such as ...couts, Guides, Church Youth Movements and Athletic Clubs should be asked ...o co-operate in urging young people in their charge not to smoke and to ...rovide an example themselves by not smoking, at least in the presence of ...heir group members.

IV. Popular Juvenile Magazines and Television Programmes:

These media may be utilized in several ways to promote cancer education.

1. Short articles about smoking and lung cancer may be written at a suitable level for magazines favoured by the young.

2. Such publications may be willing to print advertisements featuring pop singers, sporting personalities and other teenage idols who do not smoke.

3. There is the possibility of devising for publication a comic strip series on smoking and various aspects of cancer. A good example of this type is "Dollar Bill", the cartoon strip creation designed to disseminate information on the new decimal currency.

4. The A.B.C. and even perhaps commercial television stations could be requested to include films on smoking and lung cancer in their television programmes for young people.

V. Research:

To give direction and foundation to anti-smoking campaigns among the juvenile population, as well as to provide a basis for the later evaluation of the effects of such programmes, there is an immediate and pressing need for a large-scale and representative sample survey of the smoking patterns of young Australians. Ideally, this inquiry should be wide enough in scope and sufficiently sophisticated in technique to investigate the psychological and other factors which have persuaded children and adolescents in Australia to start smoking.

VI. Government Action:

The Federal Government should be requested to support health education programmes against smoking among young people. Government action could include:

1. A legislative ban on cigarette advertising over television.
2. Sponsorship of the large-scale juvenile smoking survey outlined in V.
3. Provision of funds to organisations undertaking anti-smoking campaigns.
4. Commissioning the Commonwealth Office of Information Film Unit to produce Australian films on smoking for use with children and with adolescents.

VII. Changing Social Attitudes to Smoking:

A basic problem is the presently held view of the social acceptability and even desirability of smoking. With young people the problem is curcial in relation to the attitudes to smoking of the two social groups which are most influential at their age level - the family and the peer group of age mates. If either or both of these groups accept smoking as a desirable or normal form of behaviour, the social pressures in the young to imitate and conform will be too strong for many to resist. The plan outlined above takes into account the importance of parents and the peer group in the classroom.

Anti-smoking education programmes should, however, be supplemented by long term measures to reduce the general acceptability of smoking and the opportunities to indulge in the practice in the community at large and in the peer group.

A programme to facilitate adult attitude change in relation to smoking would include:

1. A campaign making use of all possible media aimed at discrediting the smoking habit in the eyes of the community.

2. Government legislation aimed at restricting (i) the advertising of tobacco and (ii) the opportunities to smoke on public premises and utilities, e.g. theatres, transport, lifts.

3. Enlistment of the co-operation of governments and industry and commerce to require public servants and persons in business organisations not to smoke when dealing with members of the general public.

4. A request to television stations to reduce as much as possible smoking by participants in live television programmes and to take similar action with regard to theatre productions.

5. Medical example and pressure to reduce smoking, e.g. by medical officers setting an example in this matter, particularly in public, by medical advice to patients on the dangers of the habit and by restricting smoking in hospitals as much as possible.

6. The preceding measures will in turn have some effect on peer group attitudes and practices. As a guide to further action, however, research is needed to delve into the psycho-social dynamics of peer group influence and behaviour related to smoking. To a lesser extent, research on adults is required to ascertain more exactly the social pressures which at present operate in favour of smoking.

THE AIMS OF THE AUSTRALIAN CANCER SOCIETY IN THE RESTRICTION OF CIGARETTE ADVERTISING

In view of the vulnerability of youth to the lure of smoking, the Society urges the Federal Government to legislate for the banning of cigarette advertising on television.

The Case for Government Action

(a) The Society is of the opinion that the health hazards of cigarette smoking are so firmly established, the habit so widespread, and tobacco promotion campaigns so strong, that nothing short of firm governmental action can be effective in combatting the smoking problem.

(b) There are now several overseas examples to indicate that Australia is lagging in this matter. In the following countries, action has already been taken to restrict or ban cigarette advertising.

(i) Voluntary Restrictions by Tobacco Companies:

In Norway, West Germany and the U.S.A. restricted advertising codes have been adopted, particularly in relation to television. In Denmark, at present, cigarettes are advertised only in the daily press while in Finland, no such advertising is carried out on television.

(ii) Legislative Restrictions and Total Bans:

On 9th February, 1965, the British Government announced a ban on all cigarette advertising over television. The New Zealand Broadcasting Corporation restricts the contents of radio and television cigarette commercials. The Federal Government of the U.S.A. has announced its intention to legislate for compulsory labelling of cigarettes as injurious to health. Governments in Italy and the U.S.S.R. have imposed a total ban on cigarette advertising and a government Commission recommendation for a total ban in Denmark is at present under consideration.

(c) Government action is justified and is invoked in protecting the general public from dangerous foodstuffs and drugs. Cigarette smoking has been established as injurious enough to come under this category.

(d) The Society feels that lack of positive government support in this matter, particularly at the Federal level, may lead some people to take the view that smoking must be too innocuous to require official measures to discourage it.

(e) The Society is concerned that most State cancer organisations are planning or conducting anti-smoking campaigns with funds raised by public subscription and that such public monies will be largely wasted through being counteracted by the powerful advertising campaigns of the tobacco companies.

II. Reasons for Concentrating Action on Young People

(a) Available research evidence indicates that many children begin smoking at the primary school level and that the most vital years in the establishment of the smoking habit appear to be the 12-14 age range. Most smokers seem to acquire the habit in their teens.

(b) No fewer than two fifths of Australia's population, at present, is under 21 years of age.

(c) Young people are very vulnerable to example and advice from authoritative sources, which include the media they favour and, to some extent, the adults who figure therein.

(d) Once a person acquires the smoking habit, it becomes particularly difficult to break. The best hope for reducing the number of future smokers threfore lies with the younger generation.

III. Arguments for Imposing a Ban on Television Advertising.

(a) The importance attached to television is indicated by the fact that television has been involved in every overseas country where measures have been taken to ban or restrict cigarette advertising.

(b) Authentic research studies have indicated that English 10-14 year olds watch television for 11-13 hours a week and that for young Australians, the time involved is likely to be the same except for adolescents who may view a little less. For children, this represents about one-third of their leisure hours and one-half of the time they spend in school. It has been shown that the cumulative effect of a consistent audio-visual message, often heightened by dramatic techniques, can influence children's value judgements and outlooks.

(c) Television is the only mass medium favoured largely by young people in which extensive cigarette advertising occurs at present in Australia.

(d) The restriction of cigarette advertisements on television to programmes appearing after 9 p.m., as was the case until recently in the U.K., is largely ineffectual. Large numbers of the 12-14 age group, so crucial in the smoking issue, have been shown to watch adult programmes regularly until 10 p.m. and sometimes later. Furthermore, whatever restrictions are imposed on television cigarette commercials, young people are still presented repeatedly with adult examples which they are appealingly urged to follow, at least by implication.

The most influential pressure to take to cigarettes is the desire to conform - with age-groups, with parents and with other adults. Television cigarette advertisements of almost any present form constantly and persuasively reinforce the position of cigarette smoking as an acceptable and desirable form of behaviour.

The Medical Journal of Australia, 1964, 2: 388 (September 5).

SMOKING AND YOUNG PEOPLE: AN ANALYSIS OF RESEARCH AND RECOMMENDATIONS FOR REMEDIAL EDUCATIVE ACTION

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AVOIDANCE of smoking is one of the few established cancer preventive measures and the smoking habit is usually acquired by people before they reach adulthood. For these reasons, anti-smoking measures among young people should be given a high priority in any cancer education campaign. To provide a fairly reliable basis for a plan of educative action, it was considered necessary to analyse the relatively few and sometimes small investigations in the field of juvenile smoking, in order to arrive at a reasonable consensus among research findings.

The Incidence of Smoking among Children and Adolescents

Salber *et alii* (1961) summarized the prevalence of smoking among students aged 15 to 17 years as shown in six large surveys in the United Kingdom, Canada and the U.S.A. The proportion who smoked one or more cigarettes per week varied from 27·8% to 44·7% of boys, and 4·1% to 40·7% of girls. Those who smoked 20 or more cigarettes a week ranged from 5% to 34·7% of boys, and from nil to 25·8% of girls. A national study of American student smoking habits cited by Horn (1963) indicated that in 1959 one-third of all high school students were regular cigarette smokers (38% of boys, 29% of girls). There was a fairly regular increase in smoking among pupils as they progressed from the first to the final high-school year, the proportion rising from 21% to 44%. The Danish Cancer Society's survey of over 3000 children aged 12 and 13 years (Danish Cancer Society, 1962) revealed that 80% of the boys and 56% of the girls were smokers, although over half of these in each case smoked but seldom. A New Zealand study of 4274 children (Gardiner *et alii*, 1961) indicated that 89% of the boys and 63% of the girls had smoked, about half of these being regular smokers. Of the smokers aged 14 to 16 years, 11·3% of the boys and 4·3% of the girls consumed 40 or more cigarettes a week. In a small unrepresentative adolescent study conducted in 1959 in Brisbane (Sands, 1959), 39·5% of the boys and 4·2% of the girls smoked occasionally or regularly, the average rate of consumption for both sexes being 18 cigarettes per week.

Several investigations indicated that smoking started at an early age. Horn (1963) calculated that 10% of American smokers developed the habit with some degree of regularity before the teens, and 65% during high school, 13 and 14 being the crucial years in the formation of the smoking habit. Among Danish children (Danish Cancer Society, 1962), smoking normally started in the 11 to 14 years age range. In the New Zealand sample (Gardiner *et alii*, 1961), the average age for boys to start smoking was 11 years and for girls 12. In a survey in Winnipeg, Canada (Morison *et alii*, 1964), 6% of the boys aged 11 and 12 years and 2% of the girls were regular smokers, but the numbers of experimenters in the age group were 35% and 17% respectively. The greatest rate of recruitment to the smokers' ranks occurred in the age group 13 to 16 years. Most of the smokers in the Brisbane study (Sands, 1959) had their first cigarette between the ages of eight and 13 years, with 11·5 years as the average age for both sexes. In the Danish investigation (Danish Cancer Society, 1962), 39% of the boys and 9% of the girls started smoking at about the age of nine years, and the greatest increase in the number of smokers occurred from the ages of 11 and 12 years among boys and from the ages of 13 and 14 years among girls.

Salber *et alii* (1961) reported a time lapse among American boys of a little over two years from the first cigarette to regular smoking, and only 1·7 years for girls. In New Zealand (Gardiner *et alii*, 1961), this time lapse was 2·8 years for boys and two years for girls.

From these studies, it is possible to draw several conclusions which may be relevant to Australian children.

1. Experimentation with smoking begins for many children at the primary school level, and some become regular smokers before adolescence.

2. There is a fairly high incidence of regular and occasional smoking among pupils in the secondary school of several countries, especially among the boys.

3. The most vital years in the establishment of the smoking habit appear to be around the 12 to 14 years age range.

4. Experimenters tend to become regular smokers in two to three years, or perhaps even less in the case of girls

5. Girls tend to start smoking a little later than boys but develop into regular smokers more quickly.

Why Young People Smoke

Reasons Given by Children and Adolescents

Studies in Denmark (Danish Cancer Society, 1962), in Massachusetts, U.S.A. (Salber *et alii*, 1963) and in Brisbane, Australia (Sands, 1959), show a marked uniformity in the reasons given for taking up smoking. Young people's responses fall into the following categories which for lack of evidence are not listed in any order of priority: (i) conformity with the peer group; (ii) to maintain oneself or impress others; (iii) parental example; (iv) emulation of adults; (v) rebellion against authority; (vi) curiosity; (vii) enjoyment, relaxation, relief from tension.

Reasons Established by Researchers

The most important cluster of factors seem to be family influences, paramount among these being whether or not the parents smoke. Horn (1963) found that this factor accounted for one-third to one-half of the smoking among students in his Portland study.

Salber and MacMahon (1961) in the U.S.A., Sands (1959) in Brisbane and the Danish Cancer Society (1962) also reported that students were directly influenced by parental smoking habits, and Horn (1963) and Salber *et alii* (1963) gave evidence of the higher incidence of smoking among children whose elder brothers or sisters were smokers. The Danish study (Danish Cancer Society, 1962) and Horn's research (1960) further indicated that the amount of juvenile smoking is also related to parental attitudes:

> What seems to matter is whether or not smoking is accepted by the family as a normal and expected form of behaviour. When it is, smoking becomes to younger family members a part of growing up. (Horn, 1960.)

Other factors in the family situation may also operate to foster the taking up of smoking. According to Hoffstaedt (1964), domestic reasons given by children for doing so include: ". . . spite, if the parents try to prohibit the child from smoking, loneliness and frustration, and the tendency to compensate for their inadequacies by 'adult behaviour'." Horn (1963) gives support to part of this statement with his finding that 8% of his sample of young smokers in Portland were smoking despite parental prohibition.

Salber and MacMahon (1961) also showed that the proportion of smokers is lower among students of the upper social-class groups than in those from lower social-class homes. No explanation is given for this, but it may be related to different parental smoking habits and attitudes to children's smoking, and perhaps to differences in the general home atmosphere. Horn (1963), however, suspects that low parental socio-economic status is related only secondarily to more smoking among children, through the fact that more of the low-achievement students come from low social status families. In his opinion, poor academic progress is the root cause.

next most important source of factors determining makes a smoker appears to centre around the ents' need for peer-group status and acceptance. (1933)) found that about one-quarter of the smoking rtland schools was due to:

> a syndrome of intercorrelated measures. . . . Smoking s high among those who have fallen behind their age-pals in schools, do not participate in extracurricular ivities (notably athletics) and are taking the scholastically less demanding course of school work. This (minority) group . . . has apparently not achieved satisfaction from its peer group relationship. . . . It may well do that, in this group, smoking is a compensatory form of behaviour, a symptom of their problems of emotional health.

staedt (1964) states that "the social pressure of roup, the desire to appear big and virile . . . to do the thing, to dare . . ., are the more common forces teenage smoking". He also comments on the social of smoking for the adolescent "who is not sure rself, who is shy, easily embarrassed, who finds it lt to make contact with and converse with other le". The importance of peer-group smoking habits ested by two other small studies (Bergen and Olesen, Sands, 1959).

large-scale inquiries among young people by Salber (1962) and by Morison *et alii* (1964) support Horn's ation of a causal relationship between school achieve- and smoking. Salber *et alii* (1962) put up the thesis that, owing to the importance given to academic irement in American society, pupils with superior astic records tend to be in better standing with ats, peers and teachers. The poor achievers, on the r hand, may tend to take up smoking as a compensatory s of gaining peer-group acceptance.

e great strength of adolescent peer-group pressures ested by numerous studies. To give an Australian ple from a semi-rural area, Campbell (1963) examined respective influences of the home, school, peer group church on a sample of adolescents. From their onses to his test situation he derived an index of ficance. This enabled him to compare the influence e home (which was found to be the most important) that of the other social organizations. The relative es were: home, 100; peer group, 75; school, 67; ch, 50.

dies relating to peer-group pressures imply the ence of certain personality traits which may be iated with smoking, and which act as a deterrent ocial acceptability and status. Withdrawn, hyper-tive children and those who feel generally inadequate be examples of these. Psychological traits may also spose some children to smoke, irrespective of any group implications. Further research is required to e and determine such factors.

ing people themselves have drawn attention to the rtance of the smoking habits and attitudes of dcant adults in their lives, in addition to the parents. g American participants in the Williamsburg Youth rence on Cigarette Smoking stressed the influence of moking habits of teachers and coaches for sporting ties (American Cancer Society, 1962). Children tify themselves very readily with adults who have gh prestige value in their view, and readily adopt attitudes and behaviours. This process of identifica- s facilitated by the adolescent characteristic of ready ment to ideals—particularly ideals of people whom admire. The smoking habits, therefore, of film elevision stars, teachers, sporting heroes and youth rs are obviously influential factors in the incidence oking among the young. As a result of her investi- ns of smoking amongst young adolescents, Jefferys) concluded that many children had to reject the of a causal relationship between lung cancer and ing. If they did not do so, "they would have to the unpleasant conclusion that many of the adults they love and admire are either acting irrationally king great risks".

Children's Reasons for not Smoking and for Stopping Smoking

In a large American study (Salber *et alii*, 1963), the following kinds of reasons were given for not smoking, or for giving up smoking: (i) injurious to health or athletic ability; (ii) expense; (iii) influence of others—mainly parents, friends, doctors; (iv) æsthetic or moral objections; (v) dislike or no enjoyment.

The deleterious effects on health and athletic prowess were the reasons most frequently advanced by boys for not smoking, whereas the girls were most frequently deterred by æsthetic or moral reasons, though considerations of health were almost as important. The American findings are in close conformity with those of the much smaller Brisbane investigation (Sands, 1959).

The Impact on Children of Some Anti-Smoking Campaigns and Measures

The viewing of an anti-smoking film or a television programme, or any such isolated and brief attempts to influence children's smoking attitudes and practices, has been demonstrated to be futile (Jefferys, 1963). These procedures do not take into account the complex nature of the problem, the difficulties involved in changing attitudes, and the need to create a favourable climate of opinion among children's groups.

A more ambitious programme was initiated in Canada. Over a three-year period, high-school students were subjected to an anti-smoking programme which consisted of "the use of film and filmstrips, talks to students, supply of information to teachers and to student newspapers and a general student participation in various forms" (Morison *et alii*, 1964). An unsuccessful attempt was made to involve the parents in the programme. The evaluation of this programme after three years indicated that: (i) there was not an unquestionable reduction in the smoking habits of the students concerned; (ii) the majority of the students believed that smoking caused lung cancer and had other harmful effects; (iii) by both their actions and their statements, a large number of students will smoke in spite of their admission of the harmful effects of the habit.

In view of these findings, the investigators called for a profound and skilled study of the development of the smoking habit, to give a fuller understanding of the paradox of smoking in the face of known hazards (Morison *et alii*, 1964).

In a careful experiment by Horn (1960), five large groups of adolescents were each subjected, three times during a school year, to a different educational approach based predominantly on pamphlets and posters. He found that an objective, unemotional and non-authoritarian approach worked best, and significantly lowered by 5% the number of new recruits to smoking, in comparison with a control group. However, this reduction was small, and only a few smokers were induced to desist. This rational approach also laid stress on the long-term effects of smoking, for Horn had noted on other occasions that the use of projective tests on teenage smokers had revealed an underlying, though seldom directly expressed, concern with remote effects.

Participants in the Williamsburg Youth Conference on Smoking considered that anti-smoking authoritarian and moralistic approaches were unsatisfactory, and that the most effective approaches to youth could be made through young people themselves (American Cancer Society, 1962). The British Ministry of Health is experimenting with various approaches, and reported in a letter to the writer that the use of humour and ridicule showed some promise of success. Hoffstaedt's experience with the smoking problem led him to advocate for children the use of educational films on the subject, supplemented by the consistent use of impressive cartoons which repeatedly carried the message that smoking was utterly ridiculous, square, old-fashioned, filthy, anti-sex appealing, and just not done (Hoffstaedt, 1964).

Some Implications and Recommendations for Remedial Action

The results of anti-smoking campaigns brought to the writer's notice have been small and limited, even when the campaigns were pursued over a period of time with the use of several media and more than one technique. This indicates the necessity for a more intensive and sophisticated approach, which will take into account the multiplicity and complexity of the factors associated with juvenile smoking, and in which a wide range of media and teaching devices will be employed.

Because of the prime importance of home practices and attitudes in relation to smoking, any campaign among children should be supported by measures to acquaint parents fully of their decisive role in influencing their children in regard to smoking and how they can be most helpful.

The attitudes to smoking of the peer group are almost as vital. One of the most significant peer groups of any student will be the fellow students with whom he associates at school, and these will usually include some of his classmates. The teacher will be the best means of access to these peers. By using methods of pupil participation in the formulation of anti-smoking policies at school, and by utilizing permissive discussion techniques for a rational and frank examination of all relevant aspects of smoking, the teacher may best enlist the cooperation and commitment of the class group to anti-smoking attitudes and actions.

The various interrelating factors which induce smoking proneness in young people are reasonably well established—smoking parents or older siblings, poor academic achievement, unsatisfactory peer-group relationships, and personal inadequacy and insecurity. The teacher could obtain any such information which was not already known about pupils. Therefore, although students may not be willing to admit in school that they smoke, these factors could give teachers a smoking-proneness index whereby the likely smokers could be identified. The teacher's anti-smoking efforts could then be concentrated, to some extent, on this smaller group of children, with consequent increased chances of success. However, such an approach by teachers would need to be subtle, in that considerable care would be required to ensure that the likely smokers were not isolated from their fellows, or made conspicuous by an accentuation of their differences from the others in background or personal characteristics.

As an authority figure, the teacher's example is very important. Education departments should be asked to require that no teachers in their schools should smoke within the sight of pupils while on school premises. Much-admired adults who are non-smokers are important witnesses in the sight of children. Attempts should be made to get them to speak out against the smoking habit, and these statements should be publicized by all possible means. Of particular significance here are sporting celebrities, for many Australian adolescents get intense satisfaction from achievement in sporting activities. There is some evidence that health considerations are most important in preventing adolescents from smoking, especially among boys, and this focuses attention on the importance of example and exhortation not to smoke by members of the medical profession.

In general, it appears likely that anti-smoking propaganda should stress the injurious effect of smoking on health and athletic prowess, while its objectionable features in relation to æsthetic considerations should also be accented, particularly with girls. In addition, if adolescents can be convinced that smoking is an anti-sex-appealing habit—for example, being dirty and smelly and causing bad breath—the impression is very likely to make a distinct impact. On the negative side, there is a great need to induce governmental action to restrict cigarette advertising, particularly on television. The present incessant and alluring television advertisements are aimed strongly at young people.

An anti-smoking campaign will be a long-term process, and on available evidence it should start in the upper years of the primary school and be given special emphasis during the first two years of secondary education. Th aim should be to prevent children from starting smoke, as, even with light, regular adolescent smoker it appears difficult to break the habit. The multip causative factors in smoking demand that this continuin campaign should also be fairly intensive. The on practicable way to do this is through the teachers schools though support should be sought from other you organizations and from parents. At the secondary lev it is held that the dangers of smoking should be studi as an important facet of the wider problem of canc generally, as this will put the matter in a suitable contex and will tend to interest adolescents by virtue of t intellectual challenge presented by cancer. The study cancer and of smoking should normally be included health education syllabuses, or alternatively, in biolo or general science courses at the secondary level. T participation of teachers generally in an anti-smoki campaign means that they must be equipped to perfor this task. This implies that the subject of cancer shou be included in the health education syllabuses of teache training college courses, and that for teachers in t field, in-service training programmes should be provide Furthermore, teachers should be regularly supplied wi up-to-date information on cancer and on the incidence a effects of smoking. This may be done by publishing artic on these topics in teachers' journals, or by issuing teache with occasional bulletins or booklets. Instructional ai in the form of films, charts, diagrams, cartoons a posters should also be made available to all teache Pamphlets on smoking could also be distributed individual pupils in schools.

Finally, to give direction and foundation to anti-smoki campaigns among the juvenile population, as well as provide a basis for the later evaluation of the effects such programmes, there is an immediate and pressing ne for a large-scale and representative sample survey of smoking patterns of young Australians. Ideally, t inquiry should be wide enough in scope and sufficien sophisticated in technique to investigate the psychologi and other factors which have persuaded children a adolescents in Australia to start smoking.

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AUSTRALASIAN MEDICAL PUBLISHING COMPANY LIMITED
Seamer and Arundel Streets, Glebe, Sydney, N.S.W.

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SMOKING AND YOUNG PEOPLE

An Analysis of Research and Recommendations for Remedial Educative Action

(Revised)

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Avoidance of smoking is one of the few established cancer preventive measures and the smoking habit is usually acquired by people before they reach adulthood. For these reasons, anti-smoking measures among young people should be given a high priority in any cancer education campaign. To provide a fairly reliable basis for a plan of educative action, it was considered necessary to analyse the relatively few and sometimes small investigations in the field of juvenile smoking, in order to arrive at a reasonable consensus among research findings.

I. The Incidence of Smoking Among Children and Adolescents.

Salber et.al. (11) summarized the prevalence of smoking among 15 to 17 year old students as shown in six large surveys in the United Kingdom, Canada, and the U.S.A. The number who smoked one or more cigarettes per week varied from 27.8% to 44.7% for boys, and 4.1% to 40.7% for girls. Those who smoked twenty or more cigarettes a week ranged from 5% to 34.7% for boys, and from nil to 25.8% for girls. A national study of American student smoking habits cited by Horn (7) indicated that in 1959 one-third of all high school students was a regular cigarette smoker (38% boys: 29% girls). There was a fairly regular increase in smoking among pupils as they progressed from the first to the final high school year, the proportion rising from 21 to 44%. The Danish Cancer Society's survey of over 3,000 twelve and thirteen year olds (4) revealed that 80% of the boys and 56% of the girls were smokers, although over half of these in each case smoked but seldom. A New Zealand study of 4,274 children (5) indicated that 89% of the boys and 63% of the girls had smoked - about half of these being regular smokers. Of the 14 - 16 year old smokers, 11.3% of the boys and 4.3% of the girls consumed forty or more cigarettes a week. In a small unrepresentative adolescent study conducted in 1959 at Brisbane, Australia (16), 39.5% of the boys and 4.2% of the girls smoked occasionally or regularly, the average rate of consumption for both sexes being eighteen cigarettes per week.

Several investigations indicated that smoking started at an early age. Horn (7) calculated that 10% of American smokers developed the habit with some degree of regularity before the teens, and 65% during high school, 13 to 14 being the crucial years in the formation of the smoking habit. Among Danish children (4), smoking normally started in the 11 to 14 year old age range. In the New Zealand sample (5) the average age for boys to start smoking was 11 and for girls, 12. In a survey in Winnipeg, Canada (10), 6% of the 11 and 12 year old boys and 2% of the girls were regular smokers, but the number of experimenters in the age group was 35% and 17% respectively. The greatest rate of recruitment to the smokers' ranks occurred in the 13 - 16 age group. Most of the smokers in the Brisbane study (16) had their first cigarette between the ages of 8 and 13, with 11.5 years as the average age for both sexes. In the Danish investigation (4), 39% of the boys and 9% of the girls started smoking at about the age of 9, and the greatest increase in the number of smokers occurred from the ages of 11 to 12 among boys and from 13 to 14 with girls.

Salber (11) reported a time lapse among American boys of a little over two years from the first cigarette to regular smoking, and only 1.5 years for girls. In New Zealand (5), this time lapse was 2.8 years for boys and two years for girls.

From these studies it is possible to draw several conclusions which may be relevant to Australian children:

(i) Experimentation with smoking begins for many children at the primary school level and some become regular smokers before adolescence.

(ii) There is a fairly high incidence of regular and occasional smoking among pupils in the secondary schools of several countries - especially among the boys.

(iii) The most vital years in the establishment of the smoking habit appear to be around the 12 to 14 age range.

(iv) Experimenters tend to become regular smokers in two to three years, or perhaps even less time, in the case of girls.

(v) Girls tend to start smoking a little later than boys but develop into regular smokers more quickly.

II. Why Young People Smoke.

(a). Reasons given by children and adolescents.

Studies in Denmark (4), Massachusetts, U.S.A. (12) and Brisbane, Australia (16) show a marked uniformity in the reasons given for taking up smoking. Young people's responses fall into the following categories, which for lack of evidence are not listed in any order of priority:

1. Conformity to the peer group
2. To maintain oneself or impress others
3. Parental example
4. Emulation of adults
5. Rebellion against authority
6. Curiosity
7. Enjoyment, relaxation, relief from tension.

(b). Reasons established by researchers.

The most important cluster of factors seem to be family influences, paramount among these being whether or not the parents are smoking. Horn (7) found that this factor accounted for one-third to one-half of the smoking among students in his Portland study.

Salber and MacMahon(12) in the U.S.A., Sands in Brisbane (16) and the Danish Cancer Society (4) also reported that students' were directly influenced by parental smoking habits and Horn (2) and Salber, et.al. (13) gave evidence of the higher incidence of smoking among children whose elder brothers or sisters were smokers. The Danish study (4) and Horn's research (7) further indicated that the amount of juvenile smoking is also related to parental attitudes:

"What seems to matter is whether or not smoking is accepted by the family as a normal and expected form of behaviour. When it is, smoking becomes to younger family members a part of growing up." (7)

Other factors in the family situation may also operate to foster the taking up of smoking. According to Hoffstaedt (6), domestic reasons given by children for doing so include:

"....spite, if the parents try to prohibit the child from smoking, loneliness and frustration, and the tendency to compensate for their inadequacies by 'adult behaviour'."

Horn (7) gives support to part of this statement with his finding that 8% of his sample of young smokers in Portland were smoking despite parental prohibition.

Salber and MacMahon (12) also showed that the proportion of smokers is lower among students of the upper social-class groups than in those from lower social-class homes. No explanation is given for this, but it may be related to different parental smoking habits and attitudes to children's smoking, and perhaps to differences in the general home atmosphere. Horn (7), however, suspects that low parental socio-economic status is related only secondarily to more smoking among children through the fact that more of the low achievement students come from low social status families. In his opinion, poor academic progress is the root cause.

The next most important source of factors determining what makes a smoker appears to centre around the adolescents' need for peer group sta and acceptance. Horn (7) found that about one-quarter of the smoking in Portland schools was due to:

"a syndrome of intercorrelated measures.....Smoking is high among ...who have fallen behind their age-equals in schools, do not participate ...extra-curricula activities (notably athletics) and are taking the scholastically less demanding course of school work. This (minority) group.... ...apparently not achieved satisfaction from the peer group relationship .....It may well be that, in this group, smoking is a compensatory form ...behaviour, a symptom of their problems of emotional health".

Hoffstaedt (6) claims that "the social pressure of the group, the ...are to appear big and virile.....to do the done thing, to dare....., are ...the more common forces behind teenage smoking". He also comments on the ...social value of smoking for the adolescent "who is not sure of himself, who ...is shy, easily embarrassed, who finds it difficult to make contact with and ...converse with other people". The importance of peer group smoking habits ...is attested by two other small studies (2,16).

The large-scale enquiries among young people by Salber et.al. (14) ...and by Morrison et.al. (10), support Horn's contention of a causal relation-...ship between school achievement and smoking. Salber, et.al. put up the ...hypothesis that due to the importance given to academic achievement in ...American society, pupils with superior scholastic records tend to be in ...better standing with parents, peers and teachers. The poor achievers, how-...ever, may tend to take up smoking as a compensatory means of gaining peer ...group acceptance.

The great strength of adolescent peer group pressures is attested ...by numerous studies. To give an Australian example from a semi-rural area, ...Campbell (3) examined the respective influences of the home, school, peer ...group and church, on a sample of adolescents. From their responses to his ...test situation he derived an Index of Significance. This enabled him to ...compare the influence of the home (which was found to be the most important) ...with that of the other social organisations. The relative indices were: ...Home, 100; Peer Group 75; School, 67; Church, 50.

Studies relating to peer group pressures imply the existence of certain personality traits which may be associated with smoking and which act as a deterrent to social acceptability and status. Withdrawn, hypersensitive children and those who feel generally inadequate may be examples of these. Psychological traits may also predispose some children to smoke, irrespective of any peer group implications. Further research is required to isolate and determine such factors.

Young people themselves have drawn attention to the importance of the smoking habits and attitudes of significant adults in their lives, in addition to the parents. Young American participants in the Williamsburg Youth Conference on Cigarette smoking stressed the influence of the smoking habits of teachers and coaches for sporting activities (1). Children identify themselves very readily with adults who have a high prestige value in their view, and readily adopt their attitudes and behaviours. This process of identification is facilitated by the adolescent characteristic of ready attachment to ideals - particularly ideals of people whom they admire. The smoking habits, therefore, of film and television stars, teachers, sporting heroes and youth leaders are obviously influential factors in the incidence of smoking among the young. As a result of her investigations of smoking amongst young adolescents, Jefferys (9) concluded that many children had to reject the fact of a causal relationship between lung cancer and smoking. If they did not do so, "they would have to reach the unpleasant conclusion that many of the adults whom they love and admire are either acting irrationally or taking great risks".

III. Children's Reasons for not Smoking and for Stopping Smoking.

In a large American study (15), the following kinds of reasons were given for not smoking, or for giving it up.

1. Injurious to health or athletic ability
2. Expense
3. Influence of others - mainly parents, friends, doctors
4. Aesthetic or moral objections
5. Dislike or no enjoyment.

The deleterious effects on health and athletic prowess were the reasons most frequently advanced by boys for not smoking, whereas the gir were most frequently deterred by aesthetic or moral reasons, though considerations of health were almost as important. The American findings are in close conformity with those of the much smaller Brisbane investigation (16).

IV. The Impact on Children of Some Anti-Smoking Campaigns and Measures.

The viewing of an anti-smoking film or a television programme, or any such isolated and brief attempts to influence children's smoking attitudes and practices has been demonstrated to be futile (Jefferys (9)). These procedures do not take into account the complex nature of the problem, the difficulties involved in changing attitudes, and the need to create a favourable climate of opinion among children's groups.

A more ambitious programme was initiated in Canada. Over a three-year period, high school students were subjected to an anti-smoking programme which consisted of "the use of film and filmstrips, talks to students, supply of information to teachers and to student newspapers and a general student participation in various forms." (10) An unsuccessful attempt was made to involve the parents in the programme. The evaluation of this programme after three years indicated that:

(1) There was not an unquestionable reduction in the smoking habits of the students concerned.

(2) The majority of the students believed that smoking caused lung cancer and had other harmful effects.

(3) By both their actions and their statements, a large number of students will smoke in spite of their admission of the harmful effects of the habit.

In view of these findings, the investigators called for a profound and skilled study of the development of the smoking habit to give a fuller understanding of the paradox of smoking in the face of known hazards. (10)

In a careful experiment by Horn (8), five large groups of adolescents were each subjected, three times during a school year, to a different educational approach based predominantly on pamphlets and posters. He found an objective, unemotional and non-authoritarian approach worked best and significantly lowered by 5% the number of new recruits to smoking, in comparison with a control group. However, this reduction was small, and only a few smokers were induced to desist. This rational approach also laid stress on the long-term effects of smoking for Horn had noted on other occasions that the use of projective tests on teenage smokers had revealed an underlying though seldom directly expressed concern with remote effects.

Participants in the Williamsburg Youth Conference on Smoking considered that anti-smoking authoritarian and moralistic approaches were unsatisfactory, and that the most effective approaches to youth could be made through youth themselves. (1) The British Ministry of Health is experimenting with various approaches and had reported in a letter to the writer that the use of humour and ridicule showed some promise of success. Hoffstaedt's experience with the smoking problem led him to advocate for children the use of educational films on the subject, supplemented by the consistent use of impressive cartoons which repeatedly carried the message that smoking was utterly ridiculous, square, old-fashioned, filthy, anti-sex appealing, and just not done. (6)

IV. Some Implications and Recommendations for Remedial Action.

The results of anti-smoking campaigns brought to the writer's notice have been small and limited, even when pursued over a period of time with the use of several media and more than one technique. This indicates the necessity for a more intensive and sophisticated approach which will take into account the multiplicity and complexity of the factors associated with juvenile smoking and in which a wide range of media and teaching devices will be employed.

Because of the prime importance of home practices and attitudes in relation to smoking, any campaign among children should be supported by measures to acquaint parents fully of their decisive role in influencing their children in regard to smoking and how they can be most helpful.

The attitudes to smoking of the peer group are almost as vital. One of the most significant peer groups of any student will be the fellow students with whom he associates at school, and these will usually include some of his classmates. The teacher will be the best means of access to these peers. By using methods of pupil-participation in the formulation of anti-smoking policies at school and in utilizing permissive discussion techniques for a rational and frank examination of all relevant aspects of smoking, the teacher may best enlist the co-operation and commitment of the class group to anti-smoking attitudes and actions.

The various interrelating factors which induce smoking proneness in young people are reasonably well established - smoking parents or older siblings, poor academic achievement, unsatisfactory peer group relationships, and personal inadequacy and insecurity. The teacher could obtain any such information which was not already known about pupils. Therefore, although students may not be willing to admit in school that they smoke, these factors can give teachers a smoking-proneness index whereby the likely smokers could be identified. The teachers' anti-smoking efforts could then be concentrated, to some extent, on this smaller group of children, with consequent increased chances of success. Such an approach by teachers, however, would need to be subtle, in that considerable care would be required to ensure that the likely smokers were not isolated from their fellows or made conspicuous by an accentuation of their differences from the others in background or personal characteristics.

As an authority figure, the teacher's example is very important. Education Departments should be asked to require that no teachers in their schools should smoke within the sight of pupils while on school premises. Much-admired adults who are non-smokers are important witnesses in the sight of children. Attempts should be made to get them to speak out against the smoking habit, and these statements should be publicized by all possible means. Of particular significance here are sporting celebrities, for many Australian adolescents get intense satisfaction from achievement in sporting activities. There is some evidence that health considerations are most important in preventing adolescents from smoking, especially among boys, and this focuses attention on the importance of example and exhortation not to smoke by members of the medical profession.

In general, it appears likely that anti-smoking propaganda should stress the injurious effect of smoking on health and athletic prowess, while its objectionable features in relation to aesthetic considerations should also be accented, particularly with girls. In addition, if adolescents can be convinced that smoking is an anti-sex appealing habit, e.g. being dirty, smelly and causing bad breath, the impression is very likely to make a distinct impact. On the negative side, there is a great need to induce governmental action to restrict cigarette advertising, particularly on television. The present incessant and alluring television advertisements are aimed strongly at young people.

An anti-smoking campaign will be a long-term process, and on available evidence, it should start in the upper years of the primary school and be given special emphasis during the first two years of secondary education. The aim should be on preventing children from starting to smoke as, even with light, regular adolescent smokers, it appears difficult to break the habit. The multiple causative factors in smoking demand that this continuing campaign should also be fairly intensive. The only practicable way to do this is through the teachers in schools, though support should be sought from other youth organisations and from parents. At the secondary level, it is felt that the dangers of smoking should be studied as an important facet of the wider problem of cancer generally, as this will put the matter in a suitable context, and will tend to interest adolescents by virtue of the intellectual challenge presented by cancer. The study of cancer and of smoking should normally be included in health education syllabuses, or alternatively, in biology or general science

courses at the secondary level. The participation of teachers generally in an anti-smoking campaign means that they must be equipped to perform this task. This implies that the subject of cancer should be included in the health education syllabuses of teachers' training college courses, and that for teachers in the field, in-service training programmes should be provided. Furthermore, teachers should be regularly supplied with up-to-date information on cancer and on the incidence and effects of ing. This may be done by publishing articles on these topics in teachers' journals, or by issuing teachers with occasional bulletins of booklets. Instructional aids in the form of films, charts, diagrams, cartoons, and posters should also be made available to all teachers. Pamphlets on smok ing could also be distributed to individual pupils in schools.

Finally, to give direction and foundation to anti-smoking campaigns among the juvenile population, as well as to provide a basis for the later evaluation of the effects of such programmes, there is an immediate and pressing need for a large-scale and representative sample survey of the smoking patterns of young Australians. Ideally, this enquir should be wide enough in scope and sufficiently sophisticated in technique to investigate the psychological and other factors which have persuaded children and adolescents in Australia to start smoking.

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ted from *The Medical Journal of Australia*, 1965, 2: 171 (July 24)

LAY EDUCATION IN CANCER CONTROL

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The Place of Public Education in Cancer Control

ation of the public is "an integral part in a cancer programme and an essential element in the success control measures" (W.H.O., 1963). There is a value in carrying out research on cancer, instructdical practitioners in its diagnosis and treatment, ing treatment facilities and organizing services for after-care of cancer patients, if individuals will not ly seek medical attention for suspicious symptoms. ermore, people should be induced to take pre-cary and preventive measures to minimize the ility of contracting the disease.

ideal cancer-control programme is one which ains a proper balance of activity and financial comt with regard to all aspects of control, without mphasis on any one activity. It is noteworthy that anadian Cancer Society was recently devoting 16% income to public education (Taylor, 1962), while nti-Cancer Council of Victoria spends 12½% of its ial resources on this work.

Basic Problems in Lay Education

substantial and fairly recent overseas opinion s of public attitudes to cancer (Phillips and Taylor, Paterson and Aitken-Swan, 1958) and a large-scale alian study (Richardson, 1965) indicated that from to 74% of the people surveyed regarded cancer as st alarming of several major diseases, even though rerseas investigations were made after public educacampaigns of several years' duration. This opinion associated with a predominantly pessimistic attitude cer, 30% to 40% of the population samples regarding incurable. These studies also generally revealed a widespread ignorance of cancer and a number of ken beliefs about it. Many thought that nothing d be done to prevent the disease, that early treatment not improve the chances of a cure, and that cancer infectious or could be caused by a knock, shock, y, uncleanness or even immorality.

blic ignorance of cancer presents difficulties, but the derable fear of the disease is the most perplexing em to be overcome by lay education. Fear, reinforced fatalistic attitude towards cancer, has resulted in idespread and undue delay in seeking treatment gst those suffering from this illness (Blackwell, Aitken-Swan and Paterson, 1955; Henderson *et alii*, La Pointe *et alii*, 1959). Prolonged delay, in turn, tantially reduces the prospects of a cure (Easson Wakefield, 1962). The seriousness of the problem led to a considerable study of people's responses to arousing situations. Research has demonstrated atedly that a high degree of fear and its associated of anxiety lead to a reaction to reduce anxiety and on. People tend to do this by means of psychological ce mechanisms of avoidance, denial and repression, h result in a conscious or unconscious minimizing or ting of the fear-arousing information (Henderson ii, 1958; La Pointe *et alii*, 1959). In such circumstances message of the health educator is rendered ineffectual.

of the factors associated with the fear of cancer other diseases) revealed in an American study ine, 1962) was a lack of confidence in available cal facilities and services. Lack of confidence in the cy of any treatment was also reported in a Manchester tigation (Aitken-Swan and Paterson, 1955), and was considered to be an important factor in the delay of patients who suspected cancer. Three factors were held to contribute considerably in Manchester to this attitude. One was the inadequacy of terminal care for the advanced cancer patient, whose discomfort tended to broadcast the view of cancer as an infinitely distressing and painful disease whose ravages could not be alleviated. Associated with this was the fact that lay people could not distinguish between palliative and curative treatments, so that hospitals appeared generally to be trying unsuccessfully to cure all cancer patients. There was also a disinclination for physicians to diagnose cancer in a patient unless the terminal stage had been reached, so that in the case of many patients who were cured of the disease, neither they nor their acquaintances knew that they had recovered from cancer. In this way, publicity tended to be confined to fatalities, whereas cures were unknown.

Henderson *et alii* (1958) concluded that the commonly held beliefs in the incurability of cancer and inevitable death from the disease often reflected the feelings of the physician "who hedges over the truth by euphemistic words and phrases. These express his own feelings of failure and inadequacy in the presence of malignancy. He consequently avoids frank discussion with the patient in an endeavour to escape from the emotional difficulties that would result in them both".

The Message of Lay Education

The message to the public concerning cancer has three main purposes: (i) to eliminate or reduce fear of the disease; (ii) to raise the level of public knowledge of cancer; (iii) to promote appropriate action in relation to suspicious symptoms and precautionary and preventive measures.

First and foremost, the message must be "optimistic and reassuring . . . propaganda based on recovery is more likely to be successful than propaganda based on fear" (Henderson *et alii*, 1958). It should be a message of hope, which does not, however, sacrifice honesty. Recent advances in, and facilities for, treating the disease should be publicized, with an emphasis on the hopeful outlook for the early treatment of accessible cancer. Cancer must be reduced, in the opinion of the general public, to the emotional level of other serious but treatable diseases (Wakefield, 1962). People must be persuaded "to talk frankly and freely about the disease in order to bring their fear to the surface" (Donaldson, 1959). With many people, fear of cancer must be reduced before they can be expected to take action in response to likely symptoms of the disorder.

A policy of fear-reduction should be accompanied by an appeal to positive motives for action, such as the desirability of good health and concern for loved ones. Many people may react positively to an appeal to the desire to protect their children from the inherent dangers to health of smoking. They may respond to the argument that it is their duty to child or wife to seek treatment for suspected cancer.

This approach should then be followed up by a campaign instructing people to recognize and respond to the warning signs of ill health which could mean cancer, in order to minimize delay in seeking treatment. The public should be urged to take advantage of available screening tests. They should be informed of known preventive measures. The desirability of periodic precautionary medical check-ups for all women aged over 35 years and men aged over 40 years should be emphasized. Earlier fears that cancer education would increase cancerophobia and fill surgeries with neurotic patients have been shown overseas to be groundless (Donaldson, 1959; W.H.O., 1963).

By keeping themselves up to date with developments in the field and by adopting positive attitudes to cancer with their patients, medical practitioners can play a very influential part in any concerted effort to reduce public fears of the disease and to promote confidence in avail-

able treatment facilities. The success of any cancer-education programme depends largely on the ability and willingness of general practitioners to look carefully for early warning signs of the disease during routine examinations of patients and to recognize suspicious symptoms. Medical officers can also powerfully reinforce the work of health educators by advocating precautionary and preventive measures against the disease. In many instances, a strong case can be made out for letting a patient know he has cancer when the diagnosis is at all hopeful. Only in this way can there develop in the community a significant number of people who know that they have been cured of the ailment, and who, by their example, can give comfort and encouragement to others who develop disquieting symptoms (Wakefield, 1959). It is apparent that lay education is dependent on the cooperation of the medical prfession, and that a public education campaign should be paralleled by a programme of professional education.

Methods of Public Education

From what has been said, it is obvious that a far-reaching campaign is needed to educate the mass of the people about cancer. All possible means of reaching the population must be utilized. Lectures, group discussions, television, films, radio, newspapers, magazines, books, pamphlets, leaflets and posters are all suitable media in some respects. The use of so many channels reinforces the message through repetition. Different media, also, vary in the extent of their impact on, and contact with, different groups of people in the community. Major emphasis should be given to those media with the greatest spread (such as television and, to a lesser extent, local newspapers) and the generally more persuasive approach through person-to-person lectures and group discussions, which, however, can reach relatively few of the population at large (Gallup, 1957; W.H.O., 1954).

Undoubtedly the so-called mass media are very influential, because of the huge audience to which they give access. Television is particularly significant, because of its audio-visual appeal and the fact that many people who do not read much are regular viewers. Panel discussions, talks and advertisement-like "shorts" on television can to some extent simulate a personal approach to the viewer. Newspaper reporting on cancer can impress many people. Magazines are valuable in directing information to specific groups such as women or adolescents, but their circulation is limited. Pamphlets and other printed material should generally be used to supplement other educational measures. They tend to inform and promote action only among people already favourably disposed towards the message they contain.

A well-planned programme includes the organization of a large panel of speakers equipped to address meetings of people, and to answer their questions on cancer. This personal method can be very effective, and can create a valuable nucleus in the community of well-informed people who will spread the message of the health educator. Medical practitioners can render a valuable public service by making themselves available as occasional lecturers to their local anti-cancer organization.

Research studies show that attitudes reflecting deep-rooted fears and prejudices are not easily altered, but that the greatest hope for change is by means of small group discussions involving group decisions. For those whose strong fears of cancer are not removed or reduced by other educational means, this technique offers the best approach (Gallup, 1957; La Pointe *et alii*, 1959). Handling discussion groups, however, requires some considerable skill, and, here again, relatively few people can be reached by this method.

People are strongly influenced by the attitudes and opinions of those members of the community to whom they normally look for trustworthy guidance in various matters. In the case of cancer, these will usually be the family doctor, the chemist, and the nurses and ex-nurses of a person's acquaintance. Lay education must take into account the need to ensure as far as possib that these significant opinion leaders, particularly gener practitioners, give their support to the message of ho transmitted to the public at large. Of importance al are the publicized testimonies of cured patients, especial those who are well known.

A well-founded campaign reaches out to all levels the community, and makes use where possible of gro audiences brought together for work or other purpos For example, large industrial and commercial und takings and trade unions can often be induced cooperate in plans to reach workers.

The penetration and success of a lay-education sche depend to a considerable degree on the extent to wh it involves the active participation and commitment local communities. This emphasizes the need for decentra zation. State cancer councils should organize their ter tories into regions and districts, each under the cont of local committees. It then becomes the duty of t State body to feed the regional and district committe with information, equipment and encouragement in ord to maintain local effort. In Australia at present this ty of organization operates successfully in Queensland a Victoria.

Lay Education in Relation to Specific Cancer Sites

At present, the best objectives for lay education appe to be cancer of the skin, breast, uterus and lung. T possible symptoms of skin and breast cancer are easi recognized with a few simple directions for self-examin tion. Easily applied preventive measures can great reduce the risk of skin cancer in hotter regions. T Papanicolaou cervical smear test for the early detecti of uterine cancer, together with the development screening facilities, provides the background for a straigh forward and hopeful message to women. The State Canc Council of New South Wales in Australia is to be co gratulated on its initiative in obtaining from Denma a supply of simple self-administering smear-test kits, f distribution without charge to outback women in t State by means of the Royal Flying Doctor Service. I following simply-written directions, a smear can be tak and posted to the capital city for diagnosis.

In the case of lung cancer, education is concerned wi a single preventive measure, the combating of cigaret smoking; but this issue poses a challenging problem. T social and commercial pressures to indulge in cigaret smoking are so powerful, and once acquired, the addicti to tobacco is so difficult to overcome, that nothing sho of a sustained and many-sided anti-smoking campaig has any real chance of lasting success. Initially, Australia there are good reasons for concentrating efforts to persuade young people not to start smoking a on enlisting the cooperation of parents in support of su a campaign.

No fewer than two-fifths of Australia's present popul tion are aged under 21 years. The best hope for reduci the number of future smokers lies in persuading t younger generation not to start this tenacious hab Overseas evidence indicates that cigarette-smoking prevalent among the young, many starting to smoke the primary school, and that the crucial years in t establishment of the smoking habit appear to be the 12 14 years age range. It has also been demonstrated th the most influential of the causes of juvenile smoki is the example of parents who smoke themselves, and a lesser extent, parental acquiescence in their childr taking to cigarettes (Maclaine, 1964).

Most parents have frequent contacts with a fami doctor in connection with various childhood illnesses. T precept and example of medical practitioners in relati to smoking are likely to have a marked effect on paren attitudes to the habit. A recent survey embracing 43 Australian doctors indicated that 96% of them believ smoking to be a health hazard and almost 40% of advised all patients not to smoke. Furthermore,

of smokers among them had decreased from 43·5%. Only a little over half of these smokers, were addicted to cigarettes (*Mod. Med. Aust.*, hese facts show that a significant proportion of practitioners in Australia are already taking ction against smoking hazards. By making their n this matter known to parents, these doctors turn many parents against cigarettes. This, in indirectly have the effect of reducing the of juvenile smoking.

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Conclusion

Finally, with regard to all aspects of lay education, it is obvious that no limited "crash" programme can have any lasting effect. Education of the public, as far as cancer is concerned, will be a long-term and complex process, which ultimately, however, offers very rewarding benefits to the health and well-being of many people in the community. As pointed out by Wakefield (1959), the results of a successful programme of public education will also be of advantage to the doctors who have to treat cancer. As public fear of the disease is allayed, medical officers will feel increasingly able to tell a patient he has cancer, and a growing number of patients can be expected to accept treatment promptly and hopefully.

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AUSTRALASIAN MEDICAL PUBLISHING COMPANY LIMITED
Seamer and Arundel Streets, Glebe, Sydney, N.S.W.

...d from The Medical Journal of Australia, 1965, 2: 171 (July 24)

...AY EDUCATION IN CANCER CONTROL

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...ecturer in Education, University of Sydney, and ...ducation Officer of the Australian Cancer Society, ...partment of Education, University of Sydney

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...of the factors associated with the fear of cancer ...other diseases) revealed in an American study ...e, 1962) was a lack of confidence in available ...al facilities and services. Lack of confidence in the ...of any treatment was also reported in a Manchester ...igation (Aitken-Swan and Paterson, 1955), and was considered to be an important factor in the delay of patients who suspected cancer. Three factors were held to contribute considerably in Manchester to this attitude. One was the inadequacy of terminal care for the advanced cancer patient, whose discomfort tended to broadcast the view of cancer as an infinitely distressing and painful disease whose ravages could not be alleviated. Associated with this was the fact that lay people could not distinguish between palliative and curative treatments, so that hospitals appeared generally to be trying unsuccessfully to cure all cancer patients. There was also a disinclination for physicians to diagnose cancer in a patient unless the terminal stage had been reached, so that in the case of many patients who were cured of the disease, neither they nor their acquaintances knew that they had recovered from cancer. In this way, publicity tended to be confined to fatalities, whereas cures were unknown.

Henderson *et alii* (1958) concluded that the commonly held beliefs in the incurability of cancer and inevitable death from the disease often reflected the feelings of the physician "who hedges over the truth by euphemistic words and phrases. These express his own feelings of failure and inadequacy in the presence of malignancy. He consequently avoids frank discussion with the patient in an endeavour to escape from the emotional difficulties that would result in them both".

The Message of Lay Education

The message to the public concerning cancer has three main purposes: (i) to eliminate or reduce fear of the disease; (ii) to raise the level of public knowledge of cancer; (iii) to promote appropriate action in relation to suspicious symptoms and precautionary and preventive measures.

First and foremost, the message must be "optimistic and reassuring . . . propaganda based on recovery is more likely to be successful than propaganda based on fear" (Henderson *et alii*, 1958). It should be a message of hope, which does not, however, sacrifice honesty. Recent advances in, and facilities for, treating the disease should be publicized, with an emphasis on the hopeful outlook for the early treatment of accessible cancer. Cancer must be reduced, in the opinion of the general public, to the emotional level of other serious but treatable diseases (Wakefield, 1962). People must be persuaded "to talk frankly and freely about the disease in order to bring their fear to the surface" (Donaldson, 1959). With many people, fear of cancer must be reduced before they can be expected to take action in response to likely symptoms of the disorder.

A policy of fear-reduction should be accompanied by an appeal to positive motives for action, such as the desirability of good health and concern for loved ones. Many people may react positively to an appeal to the desire to protect their children from the inherent dangers to health of smoking. They may respond to the argument that it is their duty to child or wife to seek treatment for suspected cancer.

This approach should then be followed up by a campaign instructing people to recognize and respond to the warning signs of ill health which could mean cancer, in order to minimize delay in seeking treatment. The public should be urged to take advantage of available screening tests. They should be informed of known preventive measures. The desirability of periodic precautionary medical check-ups for all women aged over 35 years and men aged over 40 years should be emphasized. Earlier fears that cancer education would increase cancerophobia and fill surgeries with neurotic patients have been shown overseas to be groundless (Donaldson, 1959; W.H.O., 1963).

By keeping themselves up to date with developments in the field and by adopting positive attitudes to cancer with their patients, medical practitioners can play a very influential part in any concerted effort to reduce public fears of the disease and to promote confidence in avail-

able treatment facilities. The success of any cancer-education programme depends largely on the ability and willingness of general practitioners to look carefully for early warning signs of the disease during routine examinations of patients and to recognize suspicious symptoms. Medical officers can also powerfully reinforce the work of health educators by advocating precautionary and preventive measures against the disease. In many instances, a strong case can be made out for letting a patient know he has cancer when the diagnosis is at all hopeful. Only in this way can there develop in the community a significant number of people who know that they have been cured of the ailment, and who, by their example, can give comfort and encouragement to others who develop disquieting symptoms (Wakefield, 1959). It is apparent that lay education is dependent on the cooperation of the medical profession, and that a public education campaign should be paralleled by a programme of professional education.

Methods of Public Education

From what has been said, it is obvious that a far-reaching campaign is needed to educate the mass of the people about cancer. All possible means of reaching the population must be utilized. Lectures, group discussions, television, films, radio, newspapers, magazines, books, pamphlets, leaflets and posters are all suitable media in some respects. The use of so many channels reinforces the message through repetition. Different media, also, vary in the extent of their impact on, and contact with, different groups of people in the community. Major emphasis should be given to those media with the greatest spread (such as television and, to a lesser extent, local newspapers) and the generally more persuasive approach through person-to-person lectures and group discussions, which, however, can reach relatively few of the population at large (Gallup, 1957; W.H.O., 1954).

Undoubtedly the so-called mass media are very influential, because of the huge audience to which they give access. Television is particularly significant, because of its audio-visual appeal and the fact that many people who do not read much are regular viewers. Panel discussions, talks and advertisement-like "shorts" on television can to some extent simulate a personal approach to the viewer. Newspaper reporting on cancer can impress many people. Magazines are valuable in directing information to specific groups such as women or adolescents, but their circulation is limited. Pamphlets and other printed material should generally be used to supplement other educational measures. They tend to inform and promote action only among people already favourably disposed towards the message they contain.

A well-planned programme includes the organization of a large panel of speakers equipped to address meetings of people, and to answer their questions on cancer. This personal method can be very effective, and can create a valuable nucleus in the community of well-informed people who will spread the message of the health educator. Medical practitioners can render a valuable public service by making themselves available as occasional lecturers to their local anti-cancer organization.

Research studies show that attitudes reflecting deep-rooted fears and prejudices are not easily altered, but that the greatest hope for change is by means of small group discussions involving group decisions. For those whose strong fears of cancer are not removed or reduced by other educational means, this technique offers the best approach (Gallup, 1957; La Pointe *et alii*, 1959). Handling discussion groups, however, requires some considerable skill, and, here again, relatively few people can be reached by this method.

People are strongly influenced by the attitudes and opinions of those members of the community to whom they normally look for trustworthy guidance in various matters. In the case of cancer, these will usually be the family doctor, the chemist, and the nurses and ex-nurses of a person's acquaintance. Lay education must take into account the need to ensure as far as possible that these significant opinion leaders, particularly general practitioners, give their support to the message of hope transmitted to the public at large. Of importance also are the publicized testimonies of cured patients, especially those who are well known.

A well-founded campaign reaches out to all levels of the community, and makes use where possible of group audiences brought together for work or other purposes. For example, large industrial and commercial undertakings and trade unions can often be induced to cooperate in plans to reach workers.

The penetration and success of a lay-education scheme depend to a considerable degree on the extent to which it involves the active participation and commitment of local communities. This emphasizes the need for decentralization. State cancer councils should organize their territories into regions and districts, each under the control of local committees. It then becomes the duty of the State body to feed the regional and district committees with information, equipment and encouragement in order to maintain local effort. In Australia at present this type of organization operates successfully in Queensland and Victoria.

Lay Education in Relation to Specific Cancer Sites

At present, the best objectives for lay education appear to be cancer of the skin, breast, uterus and lung. The possible symptoms of skin and breast cancer are easily recognized with a few simple directions for self-examination. Easily applied preventive measures can greatly reduce the risk of skin cancer in hotter regions. The Papanicolaou cervical smear test for the early detection of uterine cancer, together with the development of screening facilities, provides the background for a straightforward and hopeful message to women. The State Cancer Council of New South Wales in Australia is to be congratulated on its initiative in obtaining from Denmark a supply of simple self-administering smear-test kits, for distribution without charge to outback women in the State by means of the Royal Flying Doctor Service. By following simply-written directions, a smear can be taken and posted to the capital city for diagnosis.

In the case of lung cancer, education is concerned with a single preventive measure, the combating of cigarette smoking; but this issue poses a challenging problem. The social and commercial pressures to indulge in cigarette smoking are so powerful, and once acquired, the addiction to tobacco is so difficult to overcome, that nothing short of a sustained and many-sided anti-smoking campaign has any real chance of lasting success. Initially, in Australia there are good reasons for concentrating efforts to persuade young people not to start smoking and on enlisting the cooperation of parents in support of such a campaign.

No fewer than two-fifths of Australia's present population are aged under 21 years. The best hope for reducing the number of future smokers lies in persuading the younger generation not to start this tenacious habit. Overseas evidence indicates that cigarette-smoking is prevalent among the young, many starting to smoke in the primary school, and that the crucial years in the establishment of the smoking habit appear to be the 12 to 14 years age range. It has also been demonstrated that the most influential of the causes of juvenile smoking is the example of parents who smoke themselves, and to a lesser extent, parental acquiescence in their children taking to cigarettes (Maclaine, 1964).

Most parents have frequent contacts with a family doctor in connection with various childhood illnesses. The precept and example of medical practitioners in relation to smoking are likely to have a marked effect on parents' attitudes to the habit. A recent survey embracing 4 Australian doctors indicated that 96% of them believe smoking to be a health hazard and almost 40% of them advised all patients not to smoke. Furthermore,

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Methods of Public Education

From what has been said, it is obvious that a far-reaching campaign is needed to educate the mass of the people about cancer. All possible means of reaching the population must be utilized. Lectures, group discussions, television, films, radio, newspapers, magazines, books, pamphlets, leaflets and posters are all suitable media in some respects. The use of so many channels reinforces the message through repetition. Different media, also, vary in the extent of their impact on, and contact with, different groups of people in the community. Major emphasis should be given to those media with the greatest spread (such as television and, to a lesser extent, local newspapers) and the generally more persuasive approach through person-to-person lectures and group discussions, which, however, can reach relatively few of the population at large (Gallup, 1957; W.H.O., 1954).

Undoubtedly the so-called mass media are very influential, because of the huge audience to which they give access. Television is particularly significant, because of its audio-visual appeal and the fact that many people who do not read much are regular viewers. Panel discussions, talks and advertisement-like "shorts" on television can to some extent simulate a personal approach to the viewer. Newspaper reporting on cancer can impress many people. Magazines are valuable in directing information to specific groups such as women or adolescents, but their circulation is limited. Pamphlets and other printed material should generally be used to supplement other educational measures. They tend to inform and promote action only among people already favourably disposed towards the message they contain.

A well-planned programme includes the organization of a large panel of speakers equipped to address meetings of people, and to answer their questions on cancer. This personal method can be very effective, and can create a valuable nucleus in the community of well-informed people who will spread the message of the health educator. Medical practitioners can render a valuable public service by making themselves available as occasional lecturers to their local anti-cancer organization.

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Conclusion

Finally, with regard to all aspects of lay education, it is obvious that no limited "crash" programme can have any lasting effect. Education of the public, as far as cancer is concerned, will be a long-term and complex process, which ultimately, however, offers very rewarding benefits to the health and well-being of many people in the community. As pointed out by Wakefield (1959), the results of a successful programme of public education will also be of advantage to the doctors who have to treat cancer. As public fear of the disease is allayed, medical officers will feel increasingly able to tell a patient he has cancer, and a growing number of patients can be expected to accept treatment promptly and hopefully.

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AUSTRALASIAN MEDICAL PUBLISHING COMPANY LIMITED
Seamer and Arundel Streets, Glebe, Sydney, N.S.W.

...ted from *The Medical Journal of Australia*, 1965, 2: 171 (July 24)

LAY EDUCATION IN CANCER CONTROL

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Lecturer in Education, University of Sydney, and Education Officer of the Australian Cancer Society, Department of Education, University of Sydney

The Place of Public Education in Cancer Control

...ation of the public is "an integral part in a cancer ...programme and an essential element in the success ...control measures" (W.H.O., 1963). There is a ...value in carrying out research on cancer, instruct... ...ical practitioners in its diagnosis and treatment, ...s treatment facilities and organizing services for ...care of cancer patients, if individuals will not ...y seek medical attention for suspicious symptoms. ...more, people should be induced to take pro... ...ry and preventive measures to minimize the ...y of contracting the disease.

...ideal cancer-control programme is one which ...es a proper balance of activity and financial com... ...with regard to all aspects of control, without ...phasis on any one activity. It is noteworthy that ...adian Cancer Society was recently devoting 16% ...come to public education (Taylor, 1962), while ...-Cancer Council of Victoria spends 12½% of its ...resources on this work.

Basic Problems in Lay Education

...substantial and fairly recent overseas opinion ...of public attitudes to cancer (Phillips and Taylor, ...terson and Aitken-Swan, 1958) and a large-scale ...an study (Richardson, 1965) indicated that from ...74% of the people surveyed regarded cancer as ...st alarming of several major diseases, even though ...seas investigations were made after public educa... ...paigns of several years' duration. This opinion ...iated with a predominantly pessimistic attitude ...30% to 40% of the population samples regarding ...urable. These studies also generally revealed a ...despread ignorance of cancer and a number of ...beliefs about it. Many thought that nothing ...done to prevent the disease, that early treatment ...improve the chances of a cure, and that cancer ...ctious or could be caused by a knock, shock, ...ncleanness or even immorality.

...ignorance of cancer presents difficulties, but the ...able fear of the disease is the most perplexing ...to be overcome by lay education. Fear, reinforced ...talistic attitude towards cancer, has resulted in ...pread and undue delay in seeking treatment ...those suffering from this illness (Blackwell, ...ken-Swan and Paterson, 1955; Henderson *et alii*, ...Pointe *et alii*, 1959). Prolonged delay, in turn, ...ially reduces the prospects of a cure (Easson, ...akefield, 1962). The seriousness of the problem ...to a considerable study of people's responses to ...sing situations. Research has demonstrated ...y that a high degree of fear and its associated ...anxiety lead to a reaction to reduce anxiety and ...People tend to do this by means of psychological ...mechanisms of avoidance, denial and repression, ...sult in a conscious or unconscious minimizing or ...of the fear-arousing information (Henderson ...958; La Pointe *et alii*, 1959). In such circumstances ...age of the health educator is rendered ineffectual.

...the factors associated with the fear of cancer ...r diseases) revealed in an American study ...1962) was a lack of confidence in available ...facilities and services. Lack of confidence in the ...of any treatment was also reported in a Manchester ...on (Aitken-Swan and Paterson, 1955), and was considered to be an important factor in the delay of patients who suspected cancer. Three factors were held to contribute considerably in Manchester to this attitude. One was the inadequacy of terminal care for the advanced cancer patient, whose discomfort tended to broadcast the view of cancer as an infinitely distressing and painful disease whose ravages could not be alleviated. Associated with this was the fact that lay people could not distinguish between palliative and curative treatments, so that hospitals appeared generally to be trying unsuccessfully to cure all cancer patients. There was also a disinclination for physicians to diagnose cancer in a patient unless the terminal stage had been reached, so that in the case of many patients who were cured of the disease, neither they nor their acquaintances knew that they had recovered from cancer. In this way, publicity tended to be confined to fatalities, whereas cures were unknown.

Henderson *et alii* (1958) concluded that the commonly held beliefs in the incurability of cancer and inevitable death from the disease often reflected the feelings of the physician "who hedges over the truth by euphemistic words and phrases. These express his own feelings of failure and inadequacy in the presence of malignancy. He consequently avoids frank discussion with the patient in an endeavour to escape from the emotional difficulties that would result in them both".

The Message of Lay Education

The message to the public concerning cancer has three main purposes: (i) to eliminate or reduce fear of the disease; (ii) to raise the level of public knowledge of cancer; (iii) to promote appropriate action in relation to suspicious symptoms and precautionary and preventive measures.

First and foremost, the message must be "optimistic and reassuring . . . propaganda based on recovery is more likely to be successful than propaganda based on fear" (Henderson *et alii*, 1958). It should be a message of hope, which does not, however, sacrifice honesty. Recent advances in, and facilities for, treating the disease should be publicized, with an emphasis on the hopeful outlook for the early treatment of accessible cancer. Cancer must be reduced, in the opinion of the general public, to the emotional level of other serious but treatable diseases (Wakefield, 1962). People must be persuaded "to talk frankly and freely about the disease in order to bring their fear to the surface" (Donaldson, 1959). With many people, fear of cancer must be reduced before they can be expected to take action in response to likely symptoms of the disorder.

A policy of fear-reduction should be accompanied by an appeal to positive motives for action, such as the desirability of good health and concern for loved ones. Many people may react positively to an appeal to the desire to protect their children from the inherent dangers to health of smoking. They may respond to the argument that it is their duty to child or wife to seek treatment for suspected cancer.

This approach should then be followed up by a campaign instructing people to recognize and respond to the warning signs of ill health which could mean cancer, in order to minimize delay in seeking treatment. The public should be urged to take advantage of available screening tests. They should be informed of known preventive measures. The desirability of periodic precautionary medical check-ups for all women aged over 35 years and men aged over 40 years should be emphasized. Earlier fears that cancer education would increase cancerophobia and fill surgeries with neurotic patients have been shown overseas to be groundless (Donaldson, 1959; W.H.O., 1963).

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Methods of Public Education

From what has been said, it is obvious that a far-reaching campaign is needed to educate the mass of the people about cancer. All possible means of reaching the population must be utilized. Lectures, group discussions, television, films, radio, newspapers, magazines, books, pamphlets, leaflets and posters are all suitable media in some respects. The use of so many channels reinforces the message through repetition. Different media, also, vary in the extent of their impact on, and contact with, different groups of people in the community. Major emphasis should be given to those media with the greatest spread (such as television and, to a lesser extent, local newspapers) and the generally more persuasive approach through person-to-person lectures and group discussions, which, however, can reach relatively few of the population at large (Gallup, 1957; W.H.O., 1954).

Undoubtedly the so-called mass media are very influential, because of the huge audience to which they give access. Television is particularly significant, because of its audio-visual appeal and the fact that many people who do not read much are regular viewers. Panel discussions, talks and advertisement-like "shorts" on television can to some extent simulate a personal approach to the viewer. Newspaper reporting on cancer can impress many people. Magazines are valuable in directing information to specific groups such as women or adolescents, but their circulation is limited. Pamphlets and other printed material should generally be used to supplement other educational measures. They tend to inform and promote action only among people already favourably disposed towards the message they contain.

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