

Comments on Report on "Smoking and Health" by D. H. S. S.
(K 974) to be published on 8th August 1972

I

Introduction

1. This is an important report. It is the first official attempt to provide something of a cost-benefit analysis of a reduction in cigarette smoking. It is also likely to be most accurate analysis that can be made since estimates of the effects of giving up smoking on the costs of health care and social security expenditure are required, and D. H. S. S. is obviously in the best position to make accurate estimates of these.
2. The report is clearly an edited version of the report of the Working Group on the cost benefit analysis of smoking, set up by the Inter-departmental Committee, which Dr. E. R. Bransby told us about last February (K 196). We also reported in K 196 that "the Secretary of State is considering how far some of these analyses can be published but some of the results may appear rather cynical and would not necessarily give great comfort to the opponents of smoking". (In retrospect, the report in K 196 seems to have been pretty accurate).
3. This note summarises the main points in the new report and then adds some comments.

II

Main Points in the Report

4. The report presents, first, estimates of the number of deaths due to smoking, of the current health care costs due to smoking, of the sickness absence benefits paid on account of smoking and of the cost of pensions to widows of smokers. Next, on the alternative assumptions that cigarette smoking is reduced by 20% or 40% in the next five years, with no further reduction thereafter, the net effect of these changes on the number of deaths due to smoking, on health care costs, on social security payments and on the Gross Domestic Product is estimated.

Deaths attributable to cigarette smoking

5. The report starts with the proportions of deaths of men and women aged 35-64 from lung cancer (90% for men and 40% for women), chronic bronchitis (75% for men and 60% for women) and coronary heart disease (25% for men and 20% for women) attributed to cigarette smoking by the R. C. P. Committee in their report, "Smoking and Health Now" (Appendix B). I have given my views on these proportions (or "attributability factors") in my comments on Dr. J. W. Donovan's estimates of deaths due to smoking (K 361). Nevertheless, since the D. H. S. S. report implies, by the reference to Doll and Hill's study in paragraph 1, that the attributability factors adopted in the R. C. P. report are closely based on Doll and Hill's data, I should repeat something of the history behind the R. C. P. figures. The R. C. P. Committee appointed a sub-committee consisting of Dr. J. G. Scadding, Professor D. D. Reid and Dr. J. W. Donovan in September 1970 to revise Appendix B as it then stood. Dr. C. M. Fletcher was in the States at the time. The attributability factors recommended by Scadding, Reid and Donovan for men aged 35-64 were - lung cancer deaths 90%, chronic bronchitis 50% and coronary artery disease 20%, giving a total of about 21,000 male deaths of men aged 35 to 64 due to cigarettes. When he returned from the States, Dr. Fletcher flatly refused to accept these attributability factors for bronchitis and coronary artery disease, and would not accept anything lower than those listed in the first sentence of this paragraph. It was therefore on this "scientific" basis that the R. C. P. Committee arrived at the attributability factors adopted in its report.
6. As reported in K 196, the Chief Medical Officer had been anxious that the estimates of deaths due to smoking should go to as advanced an age as practicable. Representatives of D. H. S. S., the Office of Population Censuses and Surveys (Medical Statistics Division) and the Government Actuary's Department therefore accepted the R. C. P. proportions of deaths just quoted for ages 35-64 and added what they considered to be appropriate proportions for men and women aged 65 to 74. The resulting estimate of deaths from the three diseases for men and women aged 35 to 74 in England and Wales due to cigarette smoking is 45,500. If the proportions used in estimating the deaths of men and women aged 65 to 74 are applied to men and women aged 75 and over (for which purpose they are likely to be too high), the estimate of deaths is increased to 63,500. Since the Chief Medical Officer claimed in his report on the state of the public health for 1969 that this figure was "some 80,000 premature deaths" (page 9), the more precise calculation (which is still too high) must have been a

disappointment for the C.M.O. (It is interesting to note that in paragraph 8 of the new report it is stated that "It is reasonable to assume that lower tar cigarettes have some further effect in reducing the incidence of lung cancer but it is not known what allowance should be made for this").

Current health care costs due to smoking

7. "The total annual current health care costs incurred by the hospital, family doctor and general pharmaceutical services in the treatment of smoking-induced disease" is £36 m. (paragraph 17).

Current sickness absence and social security payments due to smoking

8. The estimates given in the report are that cigarette smoking is responsible annually for -

	<u>£ m.</u>
Sickness benefit for 26 m. days	30
National Insurance contributions consequently not paid	8
Pensions paid to widows of men who died as a result of smoking	<u>38</u>
	<u>76</u>

On the other hand, it is added that this sum of £76 m. is less than the saving to the Exchequer in retirement pensions of men who, over the last 30 years or so, died prematurely as a result of smoking - "It is not possible to estimate with any reliability the cost of retirement pensions to those who have already died, but it is likely that it would exceed the combined cost of sickness from work and the benefits paid to widows of smokers" (paragraph 29).

Effects of 20% and 40% reductions in cigarette smoking

9. The financial effects, when fully realised, of reductions in cigarette consumption of 20% and 40% respectively in the next five years are summarised in terms of changes in costs per annum as follows:

	<u>- 20%</u>	<u>- 40%</u>
	£ m.	£ m.
1. Reduction in health care costs due to smoking	- 10	- 17
2. Increase in health care costs due to larger population	+ 12	+ 22
3. Reduction in sickness benefits and widows pensions.	- 11	- 18
4. Increase in retirement benefits due to larger population	+ 21	+ 42
Net changes in costs per annum	<u>+ 12</u>	<u>+ 29</u>

Effects of reduction in cigarette smoking on productive potential

10. The report tries to offset the sad economic fact that premature death saves the Exchequer money on balance, by estimating the increases in the Gross Domestic Product that would result from reductions of 20% and 40% in cigarette consumption. It is estimated that the resulting increased population, suffering from less sickness absence, would in 1991 increase the G.D.P. (at 1970 factor costs) by 0.2% or £84 m. per annum if the reduction is 20%, and by twice these figures if the reduction is 40%. Equal and quicker increases in the G.D.P. could, of course, be obtained, if this was the only objective, by allowing 10,000 or 20,000 Uganda Asians holding British passports to enter the country.

III

Comments

11. Paragraph 9.51 of the R.C.P. report on "Smoking and Health Now" stated: "An official enquiry should be carried out into the economic consequences of a decrease in cigarette smoking and a full, public account of the balance of benefit and loss should be published. Official estimates of this balance in the U.S.A. and Canada, both of which countries have large investments in tobacco production and manufacture, show that the elimination of cigarette smoking would result in greater savings than losses. It is very likely that in this country there would be a large credit balance (Appendix A)". Appendix A of the R.C.P. report contained a few disconnected comments on the social costs of smoking, based on a paper by Professor J.N. Morris, Mr. J.C. Beresford and Miss J. Cooper, described as "in preparation". We obtained the comments on this paper of Professor R.J. Ball of the London Graduate School of Business Studies. Professor Ball reported that "the authors of this report on the cost to the community of these different diseases appear to me to be hopelessly confused about what is to be meant by social cost". A copy of Professor Ball's report (but without his name) was sent to the R.C.P. Committee, together with another critique of Professor Morris' paper by Mr. D.A. Clark of Imperial. These criticisms did not deter Dr. Fletcher from making his unwarranted claims in the R.C.P. report about the social costs of smoking, but the paper said to be "in preparation" has apparently disappeared without trace.

12. The official account for which the R. C. P. Committee asked has now been published, and disregarding the effect on the Gross Domestic Product (for the reasons mentioned below), the result is the reverse of what the R. C. P. Committee had confidently asserted. Apparently, they had overlooked the effect of the British system of social security.
13. The critique (H 574) which Mr. D. A. Clark made in 1970 of the paper by Professor Morris and his colleagues correctly anticipated some of the points that are now published. For example, Mr. Clark pointed out that "the plain fact is that diseases which kill off older people are very likely to be advantageous to the community - on purely economic grounds. This is not, of course, to say that no effort should be made to eradicate them; there are more important considerations than the purely economic ones". But back in 1970, Dr. C. M. Fletcher was not ready to listen to this warning about the economic facts of life.
14. As stated above, the representatives of the three Departments who decided on the proportions of deaths from lung cancer, chronic bronchitis and coronary heart disease fixed some of the proportions too high. Consequently the number of deaths attributed to smoking is too high, but correspondingly, so are the estimates of changes in social security and health costs that would follow from reductions of 20% and 40% in the level of cigarette smoking.
15. The report is not well written. For example:
- (a) The year 1971 is referred to in paragraphs 10 and 12 as if it still lies in the future.
 - (b) It is stated in table 1, last column, that no man or woman aged 75 or over died from cigarette smoking (which is certainly untrue).
 - (c) The heading of table 1 and various sentences fail to make it clear that the figures of "deaths attributable to cigarette smoking" are estimates.
 - (d) In table 1, coronary heart disease deaths are based on ICD 410 to 414, not ICD 410 and 414.
 - (e) "The excess mortality of smokers" referred to in paragraph 2 represents deaths "statistically associated with smoking", which exceeds deaths "due caused by smoking". Yet the next sentence refers to deaths "caused by smoking" as if these were the same as "excess deaths".

(f) The letters G.D.P. in paragraph 35-41 are never explained. They almost certainly mean Gross Domestic Product (presumably at factor cost) but it is doubtful if this will mean much to the average general practitioner.

16. I shall look forward to learning the comments of Dr. C.M. Fletcher on this "official" report for which he, Dr. Jeremy Morris and other colleagues so strongly pressed. I hope that the press will not fail to point out that the new report shows that the claim in the R.C.P. report had no real foundation. A draft letter to the press, which could be written by anybody who has read the three documents mentioned, is attached.

17. Mr. D.H. Beese and Mr. M.J. Wilson helped me greatly in preparing this paper.

G.F.T.
5.8.72.