Kansas City, Missouri, said that 80% of death certificates in the United States cannot be held scientifically valid. This appears to be contrary to common experience in Canada. Dr. R. M. Taylor, Executive Director of the National Cancer Institute of Canada and Executive Vice-President of the Canadian Cancer Society advised the Committee that it is not very difficult for pathologists to determine whether the disease that one is seeing in the lung is primary or secondary. Dr. A. J. Phillips, Assistant Executive Director (Statistics), of the National Cancer Institute of Canada and Director of Public Education of the Canadian Cancer Society reported to the Committee on a study he had carried out in 1961. He ascertained that in 95 per cent of lung cancer deaths reported on death certificates in Canada, 4.8 per cent of diagnoses had to be determined on clinical evidence. The remainder, 95 per cent, of the death certificates were based upon the examination of tissues or on X-Ray evidence. He concluded that the reliability of the diagnosis of lung cancer in Canada is very high. The contract of the contract of the contract of the diagnosis of lung cancer in Canada is very high.

In any case, errors in diagnoses should occur equally among non-smokers and smokers and could therefore not account for the marked differences in lung cancer risks between the two. The disease known as cancer of the lung, whatever the diagnostic error might be, is many times more common among cigarette smokers than among pipe and cigar smokers or non-smokers and the risk of acquiring the disease increases with the daily cigarette consumption and decreases when cigarette smoking is discontinued. This is all that is important to the Committee since it is concerned about the effects of cigarette smoking not the niceties of medical diagnosis. Also, even if there were certain inaccuracies in the diagnosis of specific diseases, the critiques did not explain the close link between cigarette smoking and overall death rates which are independent of diagnosis.

Much of the evidence brought forward as possible explanations by witnesses appearing at the request of the tobacco industry was based on crude correlations between death rates and cigarette consumption and lacked the refinement of studies which compared disease rates in groups of smokers and non-smokers by amounts smoked and whether smoking had been discontinued. Attempts to rule out the cigarette smoking—lung cancer hypothesis because of inconsistencies between cigarette consumption and lung cancer rates in certain countries are not justified. Cigarette consumption may have increased more recently in one country than another with the result that the average smoker is younger than, and has not been smoking as long as the smoker in another country. Moreover, type of cigarette and manner of smoking can vary between countries. The real test of the cigarette smoking—disease hypothesis is comparisons between groups with different smoking habits within the same environment. This has been done in the important prospective studies and the possibility that death rates and cigarette smoking are

<sup>15</sup> Minutes-No. 36-Thursday, May 29, 1969, page 1434.

<sup>16</sup> Minutes-No. 44-Thursday, June 19, 1969, page 1979.

<sup>&</sup>lt;sup>17</sup> Minutes-No. 44-Thursday, June 19, 1969, page 1979.