

Referring to the analyses with regard to the occupational occurrence of gastric cancer in individuals connected with the alcohol trades (Young and Russell), Cramer pointed out that some of the trades with an excessive rate of gastric cancer had no considerable exposure to alcohol consumption and that therefore the evidence implicating alcoholism in the etiology of gastric cancer was far from convincing. More recent English statistical investigations conducted on this subject (Editorial) seemed to indicate that the excessive incidence of gastric cancer in the social Class V was not caused by occupational agents, but probably by some other environmental influences. Cancers of the intestine and rectum, on the other hand, were outstanding among those cancers which exhibited for both sexes and all five social groups no definite relationship between cancer mortality and social class for persons 35 to 65 years old.

For cancers in sites most exposed to external irritation (skin, larynx, alimentary tract above pylorus), on the other hand, the cancer incidence increased continuously among the male members from Class I to Class V, while the female members did not participate in this movement (Class I, upper and middle class; Class II, intermediate; Class III, skilled workers; Class IV, intermediate; Class V, unskilled workers). Similar conclusions were reached by Stocks in 1936 from statistical data dealing with the marked variations in general and organ cancer mortality observed among the inhabitants of various parts of Wales and England. The evidence obtained indicated, in this instance, that, in addition to occupational factors, other influences of endogenous (sex, race, etc.) and exogenous nature played a role in bringing about the marked variations in the incidence of certain tumors in different localities.

The fundamental objections which can be raised against the value of these studies are identical with those previously mentioned in connection with occupational neoplasms. Hoffman's comment, that cancer statistics related to the social and economic status must be dealt with in an extremely cautious manner if erroneous conclusions are to be avoided, must be heartily endorsed.

Variations in the incidence of cancer with regard to regions and social classes have been attributed to differences of a more general environmental nature. It has already been noted that Kennaway considered the excess of scrotal cancer among the members of the lower social classes to have been caused by a defective personal hygiene more common in the lower strata of society than among the higher ones, and to an exposure to the dust of towns.

Mention must here be made of two theories relating the higher incidence of cancer among the industrially occupied population to the production of substances released into the atmosphere, by many industrial establishments, in the form of gases or fumes, which exert their alleged specific carcinogenic influence upon the workers, as well as upon the civil population living within the fume zone of such plants. Meyers referred, in his discussion of cancer death rates, smoke, and topography, to the contention of Green, that sulfur dioxide fumes, generated in numerous industrial establishments, or resulting