MEDICINE

Cancer Forecast For 1975

Figures for numbers of future victims based on population forecasts, but could be upset by discovery of ways to prevent cancer or better treatment methods.

By JANE STAFFORD

(Last of a series of five articles on what can be done about cancer)

➤ HERE IS the cancer forecast for the year 1975:

One million patients will be under treatment for cancer. Of these, 780,000 will be patients newly diagnosed that year. And there will be 330,000 cancer deaths during the year.

This 25-year cancer forecast comes from statisticians of the National Cancer Institute who have been making a survey of cancer in 10 representative cities. Reports on the first five cities, Atlanta, Ga., San Francisco, New Orleans, Denver and Pittsburgh, have now been completed.

The forecast for the 1975 cancer situation is based on the Census Bureau's population forecast and the National Cancer Institute's own figures for the number of cancer cases and deaths in different age groups.

Discovery of ways to prevent cancer or of better ways to treat it or both could upset this forecast. So could better application of present known methods of fighting cancer.

Here is the current cancer picture: 700,000 patients under treatment in the United States; of these, 525,000 newly diagnosed; 210,000 cancer deaths. These round number figures are estimates for one year, 1950, latest on which even estimated figures can be given.

The 1975 figures are expected to be much higher for two reasons: 1. increase in the total population of the United States; 2. increase in the proportion of older people in the nation.

These figures all include the leukemias and Hodgkin's disease.

In a typical community of 100,000 population in the United States, you could expect 350 cancer cases to be discovered each year and 140 persons to die of cancer. In this size community 450 persons each year will be under treatment for cancer.

About an equal number of men and women die of cancer each year. In 1948, latest on which accurate figures are available, the difference between male and female cancer deaths was less than 100. The 1950 estimates show about the same difference.

Although the deaths are about evenly divided between the sexes, there is a difference in the kinds of cancer attacking men and women. In men, 29% of cancer cases are cancers of the digestive organs. For

women this figure is 21%. Cancer of the respiratory system, including the lungs, accounts for 11% of cancers in men but only two and one-half percent of cancers in women. Cancer of the genital organs accounts for 11% of the cases in men but for 24% of the cases in women. In women, 21% of the cancers are cancers of the breast, but this site is rarely attacked by cancer in men. Cancer of the skin accounts for 21% of cancers in men, 14% in women.

Cancer of the digestive system is the leading form of cancer when figures for men and women are taken together. This kind of cancer accounts for 25% of all cancers. Next comes skin cancer, at 17%, although this form of cancer is not important from the standpoint of cancer deaths. The figures for all cancers in both sexes show cancer of the female genital organs at 13%, cancer of the breast 11%, cancer of the respiratory system six and one-half per cent and cancer of the male genital organs five per cent.

At the present time, one-half of cancer cases are being diagnosed while the cancer is still localized at the site of origin, the other half being diagnosed after the cancer has spread. This means that one-half the patients are having their cancers found while they are still in the most favorable condition for cure.

This picture could be very much better, however. Cancer of the lungs is diagnosed while localized in 27% of the cases, and cancer of the stomach in 21%. These figures are unfortunately low, part of the reason being that these cancers located inside the body are not easy to detect. But the breast cancer figure is even worse from the standpoint of preventing cancer deaths. Cancer of the breast is being diagnosed while still localized in 51% of the cases. This is considered far too low, considering that the breast and changes in it can be seen and felt by both the patient and the doctor without need for X-rays or other special techniques.

Some of the 330,000 persons now seen as doomed to die of cancer in the year 1975 perhaps will be saved from cancer death, maybe even from cancer itself, through research now going on in laboratories all over the country. With that hope, the American Cancer Society has since 1946 devoted \$20,500,000 of the funds contributed to it to research. During the same period the National Cancer Institute has used some \$15,500,000 of tax money for research and about \$16,300,000 for buildings to house research.

Science News Letter, April 26, 1952

RADIO

Saturday, May 3, 1952, 3:15-3:30 p.m. EDT
"Adventures in Science," with Watson Davis,
director of Science Service, over Columbia Broadcasting System.

Dr. Lewis Webster Jones, president, Rutgers University, New Brunswick, N. J., discusses "Science in the Modern University."

BIOCHEMISTRY

New Anti-Rheumatism Chemical from Switzerland

➤ A NEW anti-rheumatism chemical was announced by Dr. R. Domenjoz of J. R. Geigy, Ltd., Basle, Switzerland, at the meeting of the Federation of American Societies for Experimental Biology in New York.

The chemical is phenylbutazone, with the tradename Butazolidin.

When tried in human patients with rheumatism and associated disorders, it gave marked relief of pain, reduced fever and inflammation, Dr. Domenjoz reported.

In animal experiments Dr. Domenjoz found that this new drug slowed the elimination of sulfa drugs and PAS. This, he believes, may be of additional importance in its healing effect.

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ANIMAL NUTRITION

Feed Spuds to Sheep for More and Thicker Wool

MORE WOOL from the approximately 31,000,000 sheep in the United States is foreseen if American ranchers adopt feeding practices being studied at the University of Adelaide in Adelaide, Austl.

Up to nearly one-fourth as much more wool as is now obtained can be taken from sheep fed a urea supplement and potatoes. The urea supplies nitrogen to an otherwise low-protein diet. Sheep make much better use of urea when their ration also contains adequate carbohydrate, Dr. A. W. Peirce of the University of Adelaide has found.

Not only was more wool obtained from sheep fed the urea-potato diet, but the diameter of the wool fiber from such sheep was increased about six percent.

U. S. sheep growers normally let the animals forage for themselves, but with such large increases in wool production possible, they might work out some method of supplemental feeding.

The minimum amount of starch found to be good in the pen studies was a little over three ounces per day. Dr. Peirce now proposes to find out whether this amount of starch, when fed as cereal grain, will bring about an increase in the wool production of sheep grazing on pasture which is extremely deficient in protein.

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