August 23, 1957

Mr. Hugh M. Jackson, Manager
Industrial Health Program
Johns-Manville Corporation
22 East 40th Street
New York 16, New York

Dear Hugh:

Thank you for your letter of August 19 regarding the September meeting of the ATI.

As a matter of fact, having completed the literature search, it is apparent to us that the possibility of an association between lung cancer and asbestosis is much more likely to exist in asbestos factories than in mining operations. For example, of 99 cases which had been reported up to 1955, at least 60 appear to have occurred in asbestos workers other than miners. A number were women, and the occupations given were: weaver, carder, mattress maker, lagger, bagger, pipe coverer, spinner, etc.

Two specific articles which mention the type of exposure and the job is that by Doll (1) and that by Isselbacher, et. al. (2). Seventeen cases studied by Gloyne and 31 reported by Merewether, as well as three mentioned by Harrison and one each by Cureton and Owen occurred in England. If my information is correct, there is no mining of asbestos in England, and these must all have been workers in textile or similar jobs. In this country, the ten cases reported were apparently all in textile workers. The first case, reported in 1935 by Lynch and Smith was a weaver in an asbestos factory for 21 years. Isselbacher's cases involved a contractor's helper engaged in cutting and sawing asbestos board and sorter in an asbestos mill.

The QAMA study is in the final stages which are, of course, the slowest. All of the statistical analysis has been completed, and the report is 99% written. What remains is mainly minor revisions, typing the manuscript and proofing. It should go to the print shop by the end of this month.

I hope this supplies you with what you need for the meeting. If there is anything further, please let me know and I will try to get it to you in time.

Sincerely yours,

Daniel C. Braun, M.D.
Medical Director

DCB:la

Enclosure

References

1. Doll, R.: Mortality from Lung Cancer in Asbestos Workers. Brit. J. Indust. Med. 12, 81-86, 1955.

2. Isselbacher, K. J.; Klaus, H.; and Hardy, H. L.: Asbestosis and Bronchogenic Carcinoma. Am. J. Med. 15, 721-732, November 1953.

3. Doll, R.: Bronchial Carcinoma: Incidence and Aetiology (Milroy Lectures, abridged) Brit. M. J., 2, 521-527, Sept. 5, 1953; 585-590, Sept. 12, 1953.

JOHNS-MANVILLE CORPORATION
TWENTY-TWO EAST FORTIETH STREET
NEW YORK 16, N.Y.

EXECUTIVE OFFICES

December 30, 1957

Mr. Ivan Sabourin
St. Johns
Quebec

Re: I.H.F. Survey

Dear Ivan:

Hugh Jackson and I have reviewed the condensation of the survey which you sent us. We have noted deletion of all references to the association of asbestosis and lung cancer in this condensation. While we believe that this information is of great scientific value, we can understand the desire of the Q.A.M.A. to emphasize the exposure of the asbestos miner and not the cases of asbestosis. We also are in agreement with the deletion of the reference to smoking and lung cancer.

It must be recognized, however, that this report will be subjected to criticism when published because all other authors today correlate lung cancer and cases of asbestosis. If we are to restrict this condensation to asbestos miners, greater emphasis should be placed on the choice of words used in defining the cohort. The fact that all members of the cohort had 5 or more years of exposure to asbestos should be reiterated.

Following are comments on certain paragraphs of the condensation.

Page 9

We believe the first sentence in paragraph 2 should read "Perhaps no one has written so extensively - - - -".

Page 14

In the third sentence of paragraph 2 the definition of cohort should be expanded to emphasize that non-exposed personnel were not included in the sample. This might be done by adding a sentence similar to the following: "Office and other non-exposed personnel, regardless of length of employment were not included in the cohort".

Page 15

To further emphasize the exposure aspect of the miners the second sentence of paragraph 2 might read, "All workers with more than 5 years of exposure were placed in one of three categories".

It might be advisable to add another sentence at the end of this paragraph, "As previously noted workers with no exposure were not included in the data".

Page 23

In the fourth sentence reference is made to "the 95% level of significance". This phrase was explained clearly and thoroughly on Pages 23 to 25 in the section on Statistical Methods of the original survey. Because this whole section was deleted in the condensation we feel it might be advisable to explain by footnote the meaning of "the 95% level of significance".

We feel that the fifth sentence might be made stronger by the following change. "However, having found just 12 cases, we are not above this level, and therefore the hypothesis that asbestos miners do not have a higher mortality from lung cancer than does the general population cannot be rejected".

Page 41

The table in the center of the page shows a rate of 271 in the 45 - 54 age group. In the original survey this rate was 27.

Page 48

In the last sentence of the first paragraph we would like to suggest the substitution of the word "undertaken" for the word "commissioned".

In the second sentence of paragraph 3 we would like to suggest that the elements of the cohort definition be repeated. "A cohort was defined as a group of asbestos miners having at least 5 years of exposure in the indstry and who were in the industry during 1950. Only those workers who met these criteria were included in the study".

Page 49

In the last sentence of paragraph 1 we would like to suggest the deletion of the phrase "which have been explained in some detail" since such explanation was deleted in the condensation.

This publication should form the basis for future surveys and reports. Dr. Braun should be asked to establish the framework of reporting for Doctors Grainger and Cartier so that each year the status of every member of the original cohort could be reported to the Industrial Hygiene Foundation and the continuing study be analyzed by their experts. We cannot emphasize this point too strongly because nownere in the literature today is there reported a study which is so valuable and which approximates this magnitude.

We agree with Doctors Cartier and Braun that a certain number of workers probably have some asbestotic fibrosis which cannot be diagnosed by x-ray. Unfortunately, we cannot take lung biopsies on all workers and we have no other means of making a diagnosis before there are x-ray changes. Therefore the annual study of all exposed asbestos workers becomes increasingly important.

We feel that Dr. Braun and his staff are to be congratulated heartily for this very valuable contribution to our medical knowledge. We trust that their efforts will be rewarded in the near future by the publication of this work in a recognized journal.

Sincerely,

Kenneth W. Smith, M.D.
Medical Director