A Survey of the Attitudes of Second, Third and Fourth Year Medical Students Toward the “Curability” of Breast Cancer

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The purpose of this study was to investigate the extent to which second, third and fourth year medical students believe that breast cancer is curable. The specific questions were: “Are there differences in medical students’ attitudes toward the curability of breast cancer?” “How extensive are these differences?” and “Do second, third and fourth year students differ in these attitudes?”

A three item questionnaire was designed and administered to 36 second year students, 43 third and 32 fourth year students. For item one, there were three possible answers: Yes, No, and I am not sure. For item two: Yes, No, and Uncertain. For item three: six time categories ranging from one week to one year and longer. Space was provided under each item for any additional comment a respondent might care to make.

Examination of the responses shows that one third of the second year class and one sixth of the third and fourth year classes were not at all sure that breast cancer is “curable.” This certainly should affect their learning about breast cancer and even more certainly affects their efforts as practicing physicians at early diagnosis and treatment of patients who may have breast cancer. In our opinion, these negative or uncertain attitudes about the curability of breast cancer held by such a significant percentage of our medical students are derived from contact with faculty holding similar attitudes.

We believe it is possible to predetermine that some attitudes are helpful and others detrimental in the student’s total approach to patients with certain diseases and that it is possible to inculcate the development of the “good” attitudes in students. Although difficult to prove, we feel certain preconceived attitudes may hinder students’ learning and that part of the initial objectives in a given field of learning should be to alter any attitudes which would decrease the student’s ability to learn the material. For example, it might be easy to alter a student’s attitude towards the possibility of cure in breast cancer by showing him a number of cases who had been successfully operated for breast cancer who lived 15-30 years without evidence of recurrence and who had no microscopic evidence of residual cancer at postmortem examination. While there might still be some slight doubt in the student’s mind, such evidence should alter his attitude at least a little bit and hopefully alter his approach to learning about the disease.

A healthy skepticism is good, but a
long-standing prejudice is bad. Often there is a grey line between the two, but the extremes can be identified and possibly altered with consequent improvement in learning. Academic skepticism should be tempered with common sense as students approach clinical medicine and are forced to take care of patients, often without absolute knowledge of whether or not any given therapy will prove to be the correct one.

From the analysis and interpretation of our data, it is evident that there does exist logically significant differences in medical student attitudes about the curability of breast cancer. It is suggested that there is some strong relationship between attitudes towards a subject area and the degree of achievement which one might attain. Further studies investigating this phenomenon would be helpful in producing guidelines for attitude change and maximum learning in medical education.

**Questionnaire Results**

Item One:

Do you think breast cancer may be “curable” in some patients in the sense that adequate treatment may completely eradicate all malignant cells from the patient so that the tumor never recurs?

|                | YES  | NO  | I AM NOT SURE |
|----------------|------|-----|---------------|
|                | No. | %   | No. | %     | No. | %   |
| **Second Year Students** | 22  | 61  | 4   | 11   | 10  | 28  |
| N = 36         |     |     |     |       |     |     |
| **Third Year Students** | 36  | 84  | 5   | 12   | 2   | 4   |
| N = 43         |     |     |     |       |     |     |
| **Fourth Year Students** | 27  | 84  | 3   | 9    | 2   | 6   |
| N = 32         |     |     |     |       |     |     |

**Comments**

| Category                                    | Frequency | Students |
|---------------------------------------------|-----------|----------|
| “Depends on Progression of Tumor”           | 0         | 2nd Year |
|                                             | 0         | 3rd Year |
|                                             | 2         | 4th Year |
| “Treatment only increases survival time—does not cure” | 6         | 2nd Year |
|                                             | 1         | 3rd Year |
|                                             | 1         | 4th Year |
| “Depends on causative agent”                | 1         | 2nd Year |
|                                             | 0         | 3rd Year |
|                                             | 0         | 4th Year |
| “Primary or secondary tumor may arise later”| 2         | 2nd Year |
|                                             | 0         | 3rd Year |
|                                             | 0         | 4th Year |
| “Theoretically impossible”                  | 1         | 2nd Year |
|                                             | 0         | 3rd Year |
|                                             | 0         | 4th Year |
Item Two:

If you believe that breast cancer can be cured in some patients, do you believe that the earlier a patient with breast cancer is diagnosed and treated, the greater is the chance for cure?

|                      | YES |      |      | NO  |      |      | UNCERTAIN |      |
|----------------------|-----|------|------|-----|------|------|-----------|------|
|                      | No. | %    | No.  | %   | No.  | %    | No.       | %    |
| Second Year Students | 36  | 100  | —    | —   | —    | —    | —         | —    |
| N = 36               |     |      |      |     |      |      |           |      |
| Third Year Students  | 36  | 90   | —    | —   | —    | —    | —         | —    |
| N = 39               |     |      |      |     |      |      |           |      |
| Fourth Year Students | 28  | 93   | 1    | 3   | 1    | 3    |           |      |
| N = 30               |     |      |      |     |      |      |           |      |

Comments

| Category                                         | Frequency | Students |
|-------------------------------------------------|-----------|----------|
| “Earlier diagnosed—best chance for survival”     | 6         | 2nd Year |
|                                                 | 1         | 3rd Year |
|                                                 | 0         | 4th Year |

Item Three:

If you think a delay period between the first appearance of a small breast tumor and treatment of that tumor is critical, how long a delay period do you consider significant?

|                | 1 week | 1 month | 3 months | 6 months | 1 year | longer | Total |
|----------------|--------|---------|----------|----------|--------|--------|-------|
| 2nd year       | 8      | 1       | 14       | 2        | 2      | 2      | 29    |
| 3rd year       | 13     | 0       | 15       | 5        | 3      | 1      | 37    |
| 4th year       | 9      | 1       | 8        | 5        | 11     | 0      | 34    |
| TOTAL          | 30     | 2       | 37       | 12       | 16     | 3      | 100   |

Comments

| Category                                         | Frequency | Students |
|-------------------------------------------------|-----------|----------|
| “Any delay is significant”                      | 10        | 2nd year |
|                                                 | 4         | 3rd year |
|                                                 | 6         | 4th year |
| “Depends on individual factors, such as tumor type, age, etc.” | 5         | 2nd year |
|                                                 | 1         | 3rd year |
|                                                 | 7         | 4th year |