

Venereal Disease Exhibit at Teenage Fair

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THE TEENAGE FAIR held at the Hollywood Palladium during the 1964 Easter season attracted 241,000 swirling, twisting, giggling teenagers who paid \$1.55 for admission. Milling in and out of the huge palladium and adjoining lot for 9 days from midmorning until midnight, teenagers squealed with delight as they viewed 150 exhibits containing more than \$3 million in teenage merchandise. Periodically, a central stage "jumped" when some well-known teenage idol beat a guitar and yelled in a bedlamlike performance. At night the stage was lit up as beautiful young girls vied for the honor of being selected for the finals of a "Miss Teenager" contest.

How did public health become a part of the fair? An alert health department sanitarian in his preliminary check of booths planning to serve food saw the opportunity for some kind of exhibit on public health.

What kind of health exhibit would be most likely to attract the attention of young persons attending a teenage fair? Or, stating it another way, can an exhibit on health successfully compete with commercial displays of merchandise associated with teenage culture? Can an exhibit be utilized to obtain data on teenage

knowledge of some health problem which specifically and significantly affects their age group? If such data are obtainable, can they be used in health education planning?

Affirmative answers to these questions were obtained from an exhibit on venereal disease developed cooperatively by staff from the Los Angeles City Health Department, Los Angeles County Health Department, and the Public Health Service. The exhibit was designed to inform teenagers about certain aspects of venereal disease, and, if possible, through administering a questionnaire, to obtain some data on their knowledge of syphilis and gonorrhoea.

The fair's producers agreed to donate exhibit space, but they became concerned when they learned the exhibit would focus on venereal disease. They were assured that if there were any complaints, the exhibit would be removed. Later, several parents accompanying their children stopped and complimented the exhibit staff for having such an informative exhibit at the fair, and the fair's management eventually indicated their pleasure at the response to the exhibit, stating that they were "glad to contribute to the health information of teenagers."

A number of investigators have commented on teenagers' lack of venereal disease information. Deschin (1), in particular, makes this observation in her study of 600 New York City teenagers. We did not intend to duplicate this aspect of the New York study in the Los Angeles exhibit; our purpose was to inform a specific population group and possibly assess their knowledge of venereal diseases.

The exhibit, amid displays of luminescent sneakers, surf boards, racing cars, stretch pants, and amplified guitars, was sought out by a stream of boys and girls because they had heard

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"a sex quiz was being given here." Manning the display were young representatives of the Venereal Disease Branch, Communicable Disease Center, Public Health Service. They had been assigned to local health departments for case contact investigation training. Assisting them on occasion were their young attractive wives and teenage volunteers recruited from Hollywood High School.

The back of the exhibit was a large photo mural of a clean-cut boy and an attractive teenage girl with large letters stating, "What you should know about venereal disease." A traveling lighted message sign stated "Untreated syphilis and gonorrhea can cause serious damage . . . a competent doctor can cure both of these diseases." Four questions were posed on the exhibit.

1. Do young adults get syphilis and gonorrhea?
2. Can you tell if a person has syphilis and gonorrhea by looking at him or her?
3. Can syphilis and gonorrhea be spread by means of food utensils, drinking glasses, or towels?
4. Can syphilis and gonorrhea be cured?

Two small flaps under each question were marked "yes" and "no." If the teenager picked up the wrong flap, he was referred to the proper one. Underneath was a backlighted correct answer. Following are the answers:

1. Yes. In 1963, there were 7,541 cases of syphilis and 14,672 cases of gonorrhea diagnosed and reported in Los Angeles County. Young adults (15-24) were responsible for more than 50 percent of the cases. Many of these young people did not know they were infected until the diagnosis was made.

2. No. Persons with syphilis and gonorrhea do not always have obvious signs or symptoms. The only way to know for sure is to have a qualified physician make a diagnosis. Gonorrhea is diagnosed by slides and cultures of the discharge present with the disease.

It is syphilis that is diagnosed by blood tests. Syphilis is also diagnosed by microscopic identification of the organism "spirochete," which is present in the lesions of most early cases of the disease.

3. No. The organisms which cause syphilis and gonorrhea die almost immediately when exposed to air. The venereal diseases are spread almost entirely by sexual contact, except the possible infection of the child by an infected mother before or during birth.

4. Yes. Penicillin is almost 100 percent effective in early cases of either gonorrhea or syphilis; hence, early diagnosis and treatment are important. If a person is allergic to penicillin, then there are other effective antibiotics now available.

While the teenagers waited to pick up the flaps, exhibit staff distributed questionnaires to them. The questionnaire had been pretested and refined. Teenagers were asked to mark 20 statements true or false. These were corrected on the spot and the answers explained to the participants (see box on page 4).

It was difficult to keep a supply of questionnaires on hand. Originally we planned to get responses from 1,000 teenagers, but this was accomplished in the first 4 days so we decided to obtain another 1,000 during the remaining 5 days of the fair. The questionnaires were randomly distributed to as many individuals whose responses could be corrected on the spot.

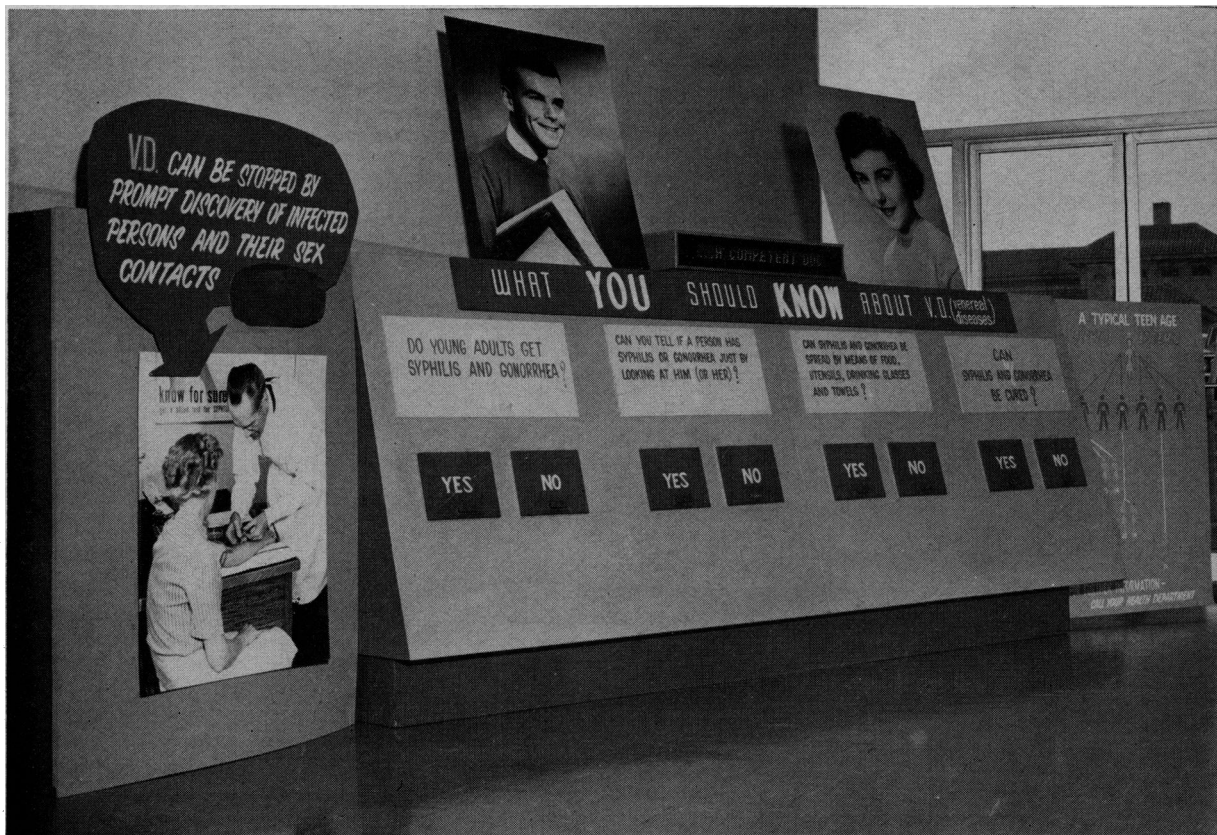
Approximately 1,800 questionnaires were satisfactorily completed. One and one-half times as many boys as girls responded. There was no significant difference between the responses of boys and girls. A few 13-year-olds and a few over 21 were in the sample, but 71.3 percent were in the 15- to 19-year age bracket where most of the increase in venereal disease has occurred.

Respondents' listing of their school location on the questionnaire indicated that they came from every section of Los Angeles County and, in fact, many came from surrounding counties as well as other parts of the State and country.

Analysis of Data

In analyzing the data derived from the questionnaires one must remember that true-false answers give guessers a 50-50 chance of being correct. As a result, one might suspect that a greater percentage of the young adults did not know the answers than was indicated by the scores. The respondents can be divided into three categories: those who knew the correct answer to a question and so marked it, those who thought they knew and marked the wrong answer, and the guessers who marked either the right or wrong answer. These possibilities should be kept in mind in examining the questions missed by a large percentage of the young adults.

Forty-two percent of the participants (50 percent of those 14 and under) thought these two statements were true:



Venereal disease exhibit for teenagers

1. Since syphilis germs can live a long time outside the body, it is then possible to acquire the disease in a variety of ways.

2. Both syphilis and gonorrhea are frequently acquired by contact with any object an infected person has used, such as toilet seat, lipsticks, and towels.

The response to these questions suggests that many young people may still cling to misconceptions regarding the transmission of syphilis and gonorrhea. If the observation is correct, education needs to emphasize that these diseases are spread by sexual contact.

Sixty-three percent of the participants missed questions (76 percent of those 15 years old missed the first one) relating to symptoms.

1. The symptoms of syphilis will go away even if a person does not have the proper medical treatment for the disease.

2. The symptoms of gonorrhea will go away even though the person is not cured of the disease.

It would seem that the lack of knowledge regarding the disappearance of symptoms without treatment might have implication for case-finding. If a person believes that his body can overcome the diseases without medical assistance, he will be lost to diagnosis, treatment, and eventually, contact interviewing.

Education, it seems, should stress that symptoms may disappear even without treatment and the need to seek medical advice quickly if a person notices symptoms or suspects that he might be infected. In addition, the responses by age group suggest that this information is particularly needed by younger age groups.

Another misconception was evident in the fact that 74 percent marked this question true: A blood test can be used to diagnose both gonorrhea and syphilis. This response indicates that individuals receiving blood tests may have a false sense of security. Females, in particular, may feel that adequate diagnosis has taken place for both diseases. Also, the entire con-

Questionnaire Used at Exhibit and Percentages of Wrong Answers

How much do you know about venereal diseases?

<p>1. Since syphilis germs can live a long time outside of the body, it is possible to acquire the disease in a variety of ways..... 42</p> <p>2. Sores and rashes can always be found on people who have syphilis, therefore people usually know when they are infected..... 21</p> <p>3. The symptoms of syphilis will go away even if a person does not have proper medical treatment for the disease..... 64</p> <p>4. If a pregnant woman has syphilis, she can transmit the disease to her unborn child if she does not receive treatment soon enough..... 14</p> <p>5. Syphilis can be inherited and passed on for generations..... 41</p> <p>6. Once a person has syphilis and the disease is cured in the early stage he can never get the disease again..... 8</p> <p>7. Some people have syphilis yet may never have any outward signs of the disease..... 16</p> <p>8. If syphilis is not found and treated, it may cause blindness, insanity, cripple, or even cause death..... 9</p> <p>9. Gonorrhea is often caused by lifting a heavy object (strain)..... 16</p> <p>10. If gonorrhea in the female is not found and treated, it may cause sterility (prevent the woman from ever having a baby)..... 18</p>	<p>11. The symptoms of gonorrhea will go away even though the person is not cured of the disease... 62</p> <p>12. If a person has gonorrhea once and is cured, he will never get it again because he has become immune..... 15</p> <p>13. It is possible for a female to have gonorrhea and not know it..... 19</p> <p>14. If gonorrhea is not treated, it will turn into syphilis..... 25</p> <p>15. Syphilis and gonorrhea are almost always acquired by sexual contact with an infected person..... 14</p> <p>16. It is possible for a person to have both syphilis and gonorrhea at the same time..... 36</p> <p>17. A blood test can be used to diagnose both gonorrhea and syphilis..... 74</p> <p>18. Both syphilis and gonorrhea are frequently acquired by contact with any object an infected person has used such as toilet seats, lipsticks, and towels..... 42</p> <p>19. People with syphilis or gonorrhea have a distinctive appearance so that it is possible to tell an infected person just by looking at him.... 11</p> <p>20. Both syphilis and gonorrhea can be cured by proper medical treatment..... 5</p>
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cept of what young people think a blood test means should be examined. Questioning indicated that some teenagers thought every blood sample taken for testing is automatically checked for venereal disease. Many may be unaware of the wide variety of laboratory tests for blood.

Discussion

While others have reported on how a health fair may be made more effective and evaluated (2, 3), few investigators have considered fairs for specific age groups as a means of imparting and obtaining information. A cross-section of teenage knowledge of venereal disease was easily obtained by a questionnaire administered at an informational exhibit. Gathering such data at the fair was certainly simpler than administering the quiz at schools, which would have necessitated obtaining clearances from more than 100 school districts.

The results of the quiz raise many questions

regarding young adults' knowledge of syphilis and gonorrhea. Misconceptions regarding the transmission of these diseases, meaning of symptoms, and diagnosis are evident. The results also suggest that certain information is needed by all age groups, but particularly by younger teenagers.

When schools are interested in venereal disease education and information, the study suggests that consideration be given to adding such material to curriculums of the sixth or seventh grade with followup at higher grade levels. Such pragmatic considerations were emphasized by Schwartz (4).

The data obtained through the questionnaires will be used in planning the content of teacher training institutes, workshops, and seminars to be developed in various school districts in Los Angeles County. It will also be used in the implementation of a new junior and senior high school teaching guide just developed for the Los Angeles City District. The information will be shared with school administrators, school

physicians and nurses, as well as counselors, curriculum specialists, and parent-teacher associations. It will be included in presentations made by public health personnel to various community clubs, groups, and organizations.

Of some encouragement is the fact that 9 out of 10 teenagers correctly responded that they thought syphilis infection did not confer immunity against second attacks of the disease; if untreated, syphilis could lead to serious complications; one could not tell by looking whether a person was infected; and syphilis and gonorrhea can be cured by medical treatment.

We had not anticipated that many boys and girls would seek personal advice from the persons staffing the exhibit. Girls were understandably more reticent about seeking advice from male staff members, but more girls than boys asked questions. It would have been helpful to have knowledgeable female public health personnel on duty at the exhibit to answer the girls' questions.

Summary

Teenagers who paid to be amused and entertained enthusiastically responded to a health exhibit on venereal diseases set up at a commercial teenage fair in Los Angeles County, Calif. They took the time to view the exhibit and ask many pertinent questions.

A knowledge inventory of 20 questions ad-

ministered to a sample of 1,800 exhibit viewers was helpful in gaining an understanding of what teenagers in southern California know about venereal diseases. Forty-two percent of the participants answered incorrectly questions relating to how syphilis and gonorrhea are acquired; 63 percent missed questions on symptoms; and 74 percent missed questions on methods of diagnosing.

There was no significant difference between the responses of girls and boys. Ages ranged from 13 to 21, but 71.3 percent were in the 15- to 19-year bracket where most of the increase in venereal disease occurred.

REFERENCES

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Human Development Study Center

The Human Development Study Center, first direct research facility of the National Institute of Child Health and Human Development, Public Health Service, has been established in St. Petersburg, Fla.

Initially the study center will try to determine changes in physiological and psychological capacities of older persons. Future research will be broadened to include study of other aspects of the life cycle. Subjects participating in the center studies will be volunteers from the St. Petersburg area.

Dr. Alfred H. Lawton who directed prior Public Health Service research in St. Petersburg, the Study Group on Accidents and Aging, is the director of the new center.