BIOMEDICINE

Legionnaire bacterium's many profiles

Ever since a mysterious pneumonia-type outbreak took the lives of 182 people at the 1976 American Legion convention in Philadelphia, and the cause of the outbreak was identified as a new bacterium in January 1977, Legionnaires' disease seems to be popping up more and more, not only in the United States but in Europe. And to complicate matters further, strains of the bacterium also seem to be multiplying.

The first strain identified came from victims at the Legionnaires' convention. A second strain was isolated from creek water in Bloomington, Ind. A third strain was taken from the lungs of a man who died from the disease in Maine. And now still a fourth strain has been found in a California victim, according to a report in the Dec. 2 Lancet by Paul H. Edelstein and co-workers at the Veterans Administration Hospital in Los Angeles.

The increasing number of strains, Edelstein and his colleagues conclude, highlights the risk of under-diagnosing Legionnaires' disease, because bacterial strains used as references in diagnosis may not match the strain causing disease.

Twins on command

Two Cambridge University researchers were injecting a commonly used leukemia drug into pregnant mice to see whether it could cause birth defects when they discovered something most unexpected. The drug, vincristine sulphate, caused quite a few pregnant mice to give birth to identical twins.

This is the first time that a method for producing identical twins on command has been found, the investigators, M.H. Kaufman and K.S. O'Shea, report in the Dec. 14 NATURE. The advantage of such a technique, they explain, is that researchers now have a means of examining identical twins' early stages of embryological development.

Might pregnant women use vincristine sulphate to give birth to identical twins? Probably not, because Kaufman and O'Shea have also found that it can produce birth defects.

Breast milk and growth

A powerful growth-stimulating substance has been discovered in mother's milk by Michael Klagsburn of Harvard Medical School. It is five times more potent in stimulating the growth and division of cells in the test-tube than are growth factors found in blood, he writes in the October Proceedings of the National Academy of Sciences, and it is found particularly in colostrum, the first breast milk produced after delivery. Although the value of the factor to newborns has not yet been determined, it may account for their resistance to certain gastrointestinal problems

Elective surgery: Cut it out

When the doctors went on strike in California the death rate dropped — due, some researchers claimed, to a decline in elective surgery (SN: 10/28/78, p. 293). Three years ago a congressional subcommittee came to a similar conclusion: 2.4 million persons in the United States had unnecessary operations in 1974 at a cost of \$4 billion with a loss of 11,900 lives. When the American Medical Association challenged these findings the subcommittee, headed by Rep. John E. Moss (D-Calif.), conducted another study. The estimate for 1977: 2 million unnecessary operations at a cost of \$4 billion with a loss of 10,000 lives. The subcommittee called on the Department of Health, Education and Welfare to require a second opinion in cases of highly elective surgery. The AMA supports a voluntary second-opinion program.

BEHAVIOR

The Goffman rule: A passing fancy?

The "Goffman rule of civil inattention," purports that passing pedestrians stare at one another at a distance, then avert their eyes when they get close to each other. For those wondering how they might have possibly been unaware of this rule since its birth in 1963: Take heart—you are now witness to its possible death in 1979.

Indiana University psychologist Mark S. Cary conducted a four-pronged study of passing pedestrians. The results, he reports in the November Journal of Personality and Social Psychology, suggest that the Goffman rule "does not exist." Cary filmed pedestrian intersections at the university from a third-story window in the psychology department; and then again from a second story window (a better level at which to determine if people were lowering their heads).

Regardless of the level, the results told the same story: "People do not lower their heads and eyelids or use a less direct gaze when passing another person," Cary says. These findings were confirmed in examinations of slide sequences and in live expeditions by researchers to the crosswalks of the campus.

At a more detailed level, Cary and his colleagues found:

- While passersby do not look and then look away, "they do not openly stare at everyone they pass." The alternative? They look straight ahead along the sidewalk.
- Females tend to look more at male pedestrians, and vice versa, than at members of the same sex. Analysis of this observation leads Cary to conclude: "College students may simply be more interested in members of the opposite sex."
- When the Goffman phenomenon occasionally does dip its bashful head, it is the female who most often lowers her head and averts her gaze, "whereas male subjects generally maintain a more direct gaze than female subjects."

Cary speculates that the results of the original 1963 work might be attributed to faulty observational methods, or that it may have been "describing a different population or that norms have changed since the initial formulation. Perhaps in small towns [the site of the 1963 work], persons who recognized one another but are not officially acquainted accord civil inattention in passing," Cary suggests. But while those are possibilities, he says, Cary's own studies make the civil inattention rule "considerably less plausible."

A (very) little help from my friends

Independence and the ability to stand on one's own two feet have long been considered part of the American ideal. It appears, however, as though a good many persons — particularly men — may be carrying those goals beyond the intent of the originators.

A University of Chicago survey of 348 adults in that city reports that only half of those questioned believe they have a "right" to turn to family members, friends and co-workers when in need. Working-class respondents were somewhat more reluctant than their more affluent counterparts to seek such help, according to social psychologists John C. Glidwell and Sharon T. Schreiber.

Moreover, 25 percent felt they could not expect such help even from paid professionals. This may be at least partially a result of past experiences — very few respondents reported they were able to establish a personal relationship with their doctors.

The investigators found that women were troubled most often by interpersonal or health problems and generally believed they had a right to either advice or support. Men, on the other hand, were bothered most by problems with work and finances, along with health, and expected advice, but not support. However, men felt they had a right to professional services more often than did women.

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