

MEDICINE

Doctors Free to Choose

No U. S. doctor can be jailed for not answering a stranger's call, but once he accepts a patient he is liable to suits of alleged malpractice.

➤ **UNLIKE BELGIAN DOCTORS**, no United States physician can be jailed for refusing to answer a call from someone he has never treated.

Legally, no one can sue a doctor for refusing to accept him as a patient. But once accepted, a patient does have legal rights, and about one in seven American doctors has been sued by such patients for alleged malpractice.

The American Medical Association's Principles of Ethics contains this statement:

"A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability."

The AMA does not say what American physicians would do if faced with something like the national health law of Belgium, where two striking physicians were jailed in the death of a child who could find no medical help.

"It is not for us to judge the wisdom of their reaction," Dr. F. J. L. Blasingame, executive vice president of the AMA, said of the Belgian physicians, "but to appreciate that physicians, like all others, can be incited to revolt by politicians who take over the practice of medicine."

Malpractice suits by the thousands each year have made doctors wary of emergency service. But an AMA official told SCIENCE SERVICE that the organization knows of no case of accident care that has resulted in a suit.

Ten states have laws to protect the humanitarian doctor who stops to help an accident victim. The Governor of Illinois, however, vetoed such a law because no one in that state had ever been known to sue after emergency help.

Most physicians have malpractice insurance, nevertheless, because thousands of them every year are faced with legal action for alleged surgical or medical mistakes. Californians are said to be especially "suit happy," having brought legal action against one in four doctors.

Physicians themselves are not sure of their legal liability. Here is a typical question by a doctor asking advice in a recent questions and answers section of the Journal of the American Medical Association, 187:551, 1964.

"Is a physician, vacationing at a ski resort in a state in which he is not licensed, liable for any aid he may give to the victim of a skiing accident?"

The answer, by a Chicago lawyer, Richard P. Bergen, said that although a physician has status "equivalent to that of a layman in a state in which he is not licensed," in an emergency "any person can lawfully give whatever care is reasonably necessary and within the scope of his capabilities."

Mr. Bergen said the doctor is not obligated to give his services but that he can do so without any serious legal risk, "provided that he limits his activities to what is reasonably necessary under the circumstances and provided that he arranged for follow-up care or advises the accident victim that such care is necessary."

At least half of the county medical societies surveyed by the AMA in 1957 had round-the-clock emergency call plans, providing for rotation of available physicians. The emergency telephone numbers are usually well advertised, and police departments are alerted to the plan.

"Where are the doctors of old?" a Belgian placard carried by a demonstrator asked.

Punishment for doctors far enough back, about 2000 B.C., called for cutting off the physicians hands if a patient died or had his sight destroyed as a result of surgery.

This early Babylonian malpractice statute, displayed in the Louvre in Paris, might console the two arrested Belgian doctors.

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TOXICOLOGY

New Rat Poison Appears Safe for Other Animals

➤ A POISON that kills rats but appears to be safe for other animals has been found.

Cats, cows, a horse, rabbits, sheep, swine, chickens, ducks, geese and turkeys have been tested with 20 to 200 times more of the compound than required to kill rats without harmful effects.

Large doses of the poison also were given to rhesus monkeys and chimpanzees with no harm, which suggests that the chemical is not poisonous to humans.

The poison, known commercially as Raticate* Raticide, was synthesized chemically at the McNeil Laboratories, Inc., Fort Washington, Pa., and is known experimentally as McN-1025.

Dr. Adolph P. Roszowski of McNeil, reported on the poison at a meeting of the Federation of American Societies for Experimental Biology in Chicago.

For about five months, he said, dogs were given McN-1025 daily as 0.1% of their total diet, an amount sufficient to kill 50 to 100 rats, but the dogs showed no effect.

Another group of dogs given 10 times this amount daily up to a month had no deaths but showed loss of appetite and a generally weakened state.

Studies into the reasons the compound kills rats but no other animals are continuing. It is known the poison causes a series of heart and circulation abnormalities in rats.

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BIOTECHNOLOGY

Spider Webs Studied

➤ **SCIENTISTS ARE** unraveling the mystery of the spider web's intricate design to find out how humans weave their behavior patterns.

The orange and black garden spider expresses its disturbances with irregularities in its web that require a digital computer to help analyze.

Its tiny brain is being put under the intense light waves of the laser to probe its secrets.

Giving drugs to a spider can change the geometric pattern of its web, Drs. Charles F. Reed and Peter N. Witt of the State University of New York, Upstate Medical Center, Syracuse, reported.

About 400 points have to be studied in one web if useful information about the spider's bodily state during its daily web-building is to be obtained, the scientists have found. At least nine webs of a normal spider should be measured and evaluated statistically before disturbed behavior can be known.

The threads of the spider web cross each other at 750 points in the "catching" area, so the value of the computer in manipulating the enormous number of figures is easily seen.

Several thousand simple computations per second are not beyond the range of the

modern electronic computer. The machine prints out in a previously programmed table the final results of its calculations.

A biologist sets up special experiments to test his theories about the brain and body functions indicated by the figures. For example, when a front leg of a spider was removed, the computer verified that the oval shape of the web was not changed, which indicates a centrally located regulatory mechanism. Central angles became highly irregular, however, because of the spider's missing leg.

The laser helps in producing minute lesions, or changes in structure, in the spider's brain. Depending upon the position of the lesion, distinct changes in different web proportions can be detected.

The spider, an invertebrate animal, is only remotely related to higher animals and man, the scientists said.

However, because of the measurable behavior pattern of web-weaving, the spider study could help in understanding human behavior and disturbances in disease as well as drug effects and injuries.

The report was given at the annual meeting of the Federation of American Societies for Experimental Biology in Chicago.

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