

Many family disasters may result from this if, as in cases Dr. Lindemann cited, the soldier returns and complains his wife does not love him any longer and demands an immediate divorce.

In such cases the wife has done her "grief work" so effectively that she has emancipated herself from the departed husband and must readjust herself to his presence again.

The "grief work" which the bereaved must do consists in emancipating herself from bondage to the deceased and finding new patterns of rewarding interactions, forming new relationships and readjusting to an environment in which the deceased is missing. Comfort alone will not give enough help in this job of grief work. The severe cases, especially when the person develops great

and often frightening feeling of hostility, will need the help of a psychiatrist.

Since there are not enough psychiatrists to aid all the war-bereaved, ministers and social workers will have to acquire enough psychiatric knowledge to help the persons with normal grief reactions and to recognize the signs of more ominous trouble and refer such patients to psychiatrists for aid.

Persons who try to escape the discomfort of grief reaction by refusing to talk or think about their loss or by imagining the deceased is still with them are only storing up trouble for themselves. Much better, Dr. Lindemann says, is to express their sorrow and sense of loss and any guilt they feel and then work through to new feelings and patterns of conduct.

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MEDICINE

Preventing Rh Deaths

➤ HOPE that vitamin C, the anti-scurvy vitamin of orange and tomato juice, might save the babies and their mothers who die because of the Rh factor in the baby's blood appears in a report by Dr. Lyman Burnham, of Englewood, N. J., at the New York meeting of the New York State Medical Society.

The Rh factor was first discovered in the blood of the Rhesus monkey, hence its name Rhesus factor, or Rh for short. Harmless in itself, it causes tragedy when blood containing it is mixed with blood not containing it, just as the mixing in the veins of any incompatible bloods may cause death. (See *SNL*, Nov. 27, 1943 and April 1)

When the baby has inherited the Rh factor from its father and the mother has non-Rh blood, the blood of the two cannot mix safely. Sometimes, however, the two bloods do mix before the child's birth and then the baby is likely to be still-born or to die soon after birth, though the first-born child in such a situation may survive.

How the mother's and baby's blood mixes before birth has not been understood. Dr. Burnham suggests that it is due to deficiency of vitamin C in the mother which results in a break in the blood vessels of the developing infant. This would permit its Rh blood to escape into the mother's blood. Capillary blood vessels are known to be fragile and likely to break when there is a deficiency of vitamin C.

The mother might not be so deficient

in vitamin C as to show signs of scurvy and yet might not be getting enough for her own needs plus the amount needed to give strength to the developing capillary blood vessels of her unborn infant.

In support of his theory, Dr. Burnham points out that in normal pregnancy the amount of vitamin C in the blood plasma decreases almost to deficiency levels and is only about one-third that of non-pregnancy. Food habits and tastes of the mother, seasonal variations in the amount of the vitamin in foods, and nausea and vomiting may keep the mother from getting enough vitamin C.

In 12 out of 13 mothers of babies with erythroblastosis, the condition resulting from the mixing of the baby's Rh blood with the mother's non-Rh blood, Dr. Burnham found from their histories that the mothers had apparently not been getting enough vitamin C in their diets during pregnancy.

Even when the mothers are eating enough vitamin C foods, they may have some condition that prevents absorption of the vitamin or increases its elimination by the kidneys. The latter occurs in dogs in the presence of increased female sex hormone. Large amounts of this hormone are normally found in human mothers in early pregnancy.

If Dr. Burnham's theory proves correct, it may be possible to prevent Rh deaths of mothers and babies by vitamin C treatment if the father's blood shows the Rh factor.

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PSYCHIATRY

First Aid to Save Minds Taught in New Courses

➤ A NEW KIND of first aid course, designed to teach people how to save minds threatened by battle or other war strain, just as the Red Cross first aid courses teach them to save lives threatened by hemorrhage and physical injury, was announced by Dr. Daniel Blain, of the U. S. Public Health Service, at the Philadelphia meeting of the American Psychiatric Association.

Experience at a rest home for men of the Merchant Marine who have broken mentally and emotionally led Dr. Blain and his associates, Dr. Paul Hoch of New York and Dr. V. Gerard Ryan of New Orleans, to develop this course in psychological first aid. Actually, there are three such courses, one elementary, one for lay persons, and two more advanced ones for teachers, medical personnel and physicians without special knowledge of psychiatry.

The elementary course teaches what the nerves are, how they affect the body, how the body responds to feelings of hunger, fear, anger, and the like, and how to keep both mind and body healthy.

There is a set of directions for psychological first aid in mild cases of mental or emotional disturbance which the patient can apply to himself, and another set of directions for first aid in acute cases to be applied by someone else.

Merchant seamen trained in these courses will be able, Dr. Blain believes, to help themselves and their mates in time of stress. Since civilians are also subject to war strains, he thinks they, too, should take courses in psychological first aid to learn how to apply a splint, as it were, to a mind threatening to crack if not helped through the emergency before the psychiatrist can arrive to take over.

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PHYSIOLOGY

New Three-Minute Test For Night Vision Used

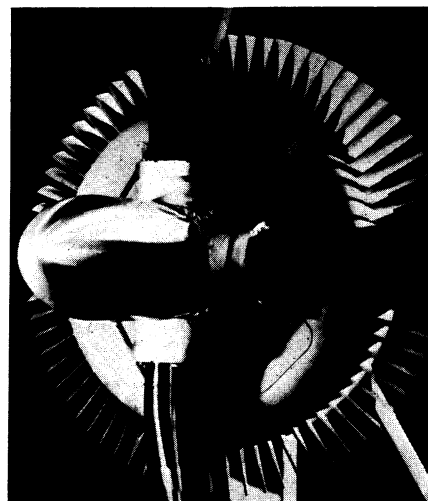
➤ A NEW three-minute test of night vision is being installed in Navy ships and training centers to help in checking the fitness of men for duty as night flyers, night lookouts and other work requiring "cat's eye" vision, it is announced by the American Optical Company.

Apparatus for the test is portable and consists of a luminous dial made of radioactive material sandwiched between two disks of glass. The dial has a very faint glow and this illumination can be cut down still further by the use of filters. It is necessary for the man taking the test to distinguish a letter T, showing up very faintly in silhouette against the glowing dial. He must tell the position of the letter as it is rotated by the examiner. The test is taken after the men have gotten their eyes used to darkness by wearing the Navy's special dark-adaptation goggles for 25 minutes

and then staying in a dark room for another five minutes.

The new test has resulted from several years' investigation by scientists of the Navy's Bureau of Medicine and Surgery. The idea of using the luminous dial was largely the result of recommendations by Dr. Walter R. Miles, of Yale University. Assistance in the research was also given by the Research Section of the Navy School of Aviation Medicine at Pensacola, Fla., and by the Research Laboratory at the New London, Conn., Submarine Base.

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MAKES AIRPLANES FASTER—*This many-bladed, engine-cooling fan shown here mounted on the propeller shaft of a Cyclone engine has been developed by the Wright Aeronautical Corp. to improve the rate of climb of a plane up to 20 per cent and add as much as 10,000 pounds pay load, as well as to improve the cruising speed and altitude performance.*

PSYCHIATRY

Drug for War Neurosis

"Battle reaction" type of emotional breakdowns has been treated successfully with special nerve medicine. Scientists suggest its use as a prophylactic.

➤ **SUCCESS** with a new medical treatment for emotional breakdowns in fighting men following overwhelming battle experience is reported by Dr. Robert G. Heath and Dr. Florence Powdermaker, of the U. S. Public Health Service. (*Journal, American Medical Association, May 13*).

Ergotamine tartrate, a drug acting on the autonomic nervous system and which has been used in treatment of migraine, was the medicine used. Its use as a preventive is also suggested. Merchant seamen at the Gladstone, N. J., Rest Center, were the patients.

These men suffered from what the doctors call "battle reaction." They believe this is a more correct name than war neurosis for the breakdowns in men who previously were apparently normal emotionally and mentally, who faced previous action with only normal transient anxiety, and did not break down until subjected to an overwhelming battle experience.

Battle reaction, the scientists point out, also differs from neurosis in being primarily a physiological reaction. It is an exaggerated expression of fear of a real situation, whereas in neurosis the fear is real but the situation may not be really dangerous.

In the battle reaction cases, the scientists believe, the original threat to life results in an increased production of adrenalin. This is the body's normal reaction to danger. The extra adrenalin in the body causes the physical symptoms

of which the men complain, such as jitteriness, trembling, pounding heart, thumping in the head, empty feeling in the stomach and so on. The symptoms themselves increase the fear that started the reaction, more adrenalin is produced, and a cycle results.

Believing the condition was fundamentally physiological, the doctors decided, instead of using sedatives, to try medicines that would act on the autonomic nervous system which influences the output of adrenalin in the body. Of several drugs tried, ergotamine tartrate proved the most effective.

In 20 men suffering from battle reaction relatively large doses of the drug every three hours for 10 days restored the men to health. They could see movies of battle scenes and talk over their own experiences without being upset. Some have already returned to sea duty. The drug was not effective when given to 20 psychoneurotic patients, many mildly colored by war experience.

No adverse effects of the drug have been noted, although it should not be given if the patient has signs of liver trouble, advanced hardening of the arteries or certain circulatory diseases. Because it did not interfere with mental coordination nor slow down mental processes, it might, the doctors suggest, be used as a prophylactic to lessen anxiety in combat.

They hope doctors working with similar types of patients will continue the trials of the drug.

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PSYCHIATRY

Insulin Shock Doubles Mental Illness Recoveries

➤ **RECOVERIES** of patients suffering with the mental disease, schizophrenia, are almost twice as numerous since insulin shock treatment has been introduced; it appears from figures which Dr. John H. Taylor, Jr., of the New Jersey State Hospital at Trenton, reported at the Philadelphia meeting of the American Psychiatric Association.

Almost two-thirds, 316 of the 568 schizophrenics treated at this hospital over a period of five years have shown definite signs of improvement, the records show.

Of patients admitted to the hospital in 1935, before insulin shock treatment was instituted, 35% returned to the community, a survey after two years showed. In the group admitted since the treatment was instituted in 1939, 60% improvement is recorded.

The results of the treatment, in the opinion of Dr. Taylor and associates, are directly related to the depth of the coma, or unconsciousness, produced by insulin and the severity of the convulsion produced with metrazol or electric shock treatment.

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