instructive. Employees' blood pressure rose at this time and fell only on re-employment or a few months later—the increases correlating closely with measures of depression, irritation, and loss of self-esteem, and serum urate concentrations following the same pattern.

Professor Linford Rees made four recommendations. Firstly, full-scale prospective longitudinal studies should be started to define the psychological and physical hazards of unemployment more precisely and find ways of obviating them and to identify high-risk groups. Secondly, counselling and guidance services should be provided for the unemployed and those due to be made redundant, to help them to use their time more effectively and maintain their morale. Thirdly, programmes of job creation and training are needed for all grades of work. Finally, doctors and social workers should be alert to the adverse effects of unemployment both on the unemployed person and on the family, and general practitioners in particular should be on the lookout for anxiety and depressive states. Now is the time for doing these things, not in some hoped-for, more affluent future. Though special programmes, services, and studies would be the ideal, it should not be beyond the ingenuity of doctors and others both to provide more informal help and to start collecting information as opportunity offers.


**Brucellosis**

Scotland was declared a brucellosis attested area in January 1980, signifying that the disease had been eradicated from its cattle. The success of this eradication scheme is shown by the drop in the number of human cases of brucellosis in Scotland, where it was once a common disease, from almost 400 in 1970 to 76 in 1979. Similar schemes are well under way in the rest of the United Kingdom; the disease should soon cease to be endemic, though occasional imported cases will continue to occur.

Brucellosis contracted in Britain is almost invariably due to infection by *Brucella abortus*. This organism causes disease in cattle and rarely in sheep, and man is infected by consumption of untreated milk or cream or by direct contact with an infected animal. Infection with *B melitensis* is seen occasionally in travellers from the Middle East or Mediterranean countries, where it is endemic in sheep and goats. Infection with *B melitensis* may rarely be acquired from imported food such as goats' cheese. *B suis*, present in pigs in America and sheep and goats in Africa, and *B canis*, the cause of canine brucellosis, are not seen in Britain.

Human brucellosis can present a variety of clinical pictures, and the diagnosis may readily be overlooked, especially if there is no clear history of contact with an infected animal or of ingestion of potentially infected dairy products. Acute infections start with fever, headache, sweating, and myalgia and can easily be misdiagnosed as influenza. Often no abnormal physical signs are found, though the spleen may become palpable as the disease progresses; there may be leucopenia though the white blood cell count can be normal. Treatment with antibiotics (if given early in the course of the illness) is usually successful; but a “missed” diagnosis or delay in starting treatment may lead to the development of subacute disease causing prolonged ill health with prostration and lassitude. In some patients the infecting organism may become localised in bone, causing osteomyelitis, especially of the spine, or in a heart valve. An example of both is provided by a recent report of *brucella* sacroiliac joint infection and possible endocarditis in an Iranian student in England.

*Brucella* hypersensitivity reactions can be extremely incapacitating. They usually occur in veterinary surgeons and farmworkers who have had repeated contact with infected cows and are manifested by rashes associated with fever.

Chronic brucellosis, with symptoms persisting for years after an acute infection, is rare, and the diagnosis should be made with caution. Symptoms of anxiety or depression can be misinterpreted as being due to chronic brucellosis, causing distress to the patient and sometimes also the physician. The same warning applies to the finding of a low titre of *brucella* antibodies during the investigation of a pyrexial illness; this may simply be residual from undiagnosed or subclinical infection in the past and may be unrelated to the present episode. The Public Health Laboratory Service has recently produced a *Benchbook on Brucella* which will be of value to microbiologists and clinicians concerned with the diagnosis and management of brucellosis. Advice is given on the selective media that may help in isolating *brucella* from blood. Though acute brucellosis is a septicaemic illness, blood cultures are commonly negative, even when the correct culture medium is used. The reported rates of isolation of the organism from blood culture are variable. Wesley Spink, who made a lifetime's study of the disease, reported a rate of almost 50% in a series of 244 patients, but in another study by the late Sir Weldon Dalrymple-Champneys the infecting organism was cultured from the blood of only 71 (16%) out of 439 patients. *B melitensis* is more readily isolated from the blood than *B abortus*. The PHLS monograph also gives detailed information on the serological techniques available for diagnosing brucellosis and discusses their interpretation, which may be difficult. Newer laboratory techniques such as radioimmunoassay and enzyme-linked immunosorbent assays may possibly prove more specific in diagnosing brucellosis.

One of the tetracycline antibiotics is the drug of choice for treatment; the alternative is co-trimoxazole. Three weeks of treatment is usually sufficient for acute infections, but longer courses are required for subacute disease. Some authorities suggest combining tetracycline with streptomycin, but this is not necessary in uncomplicated infections. A combination of tetracycline with gentamicin should, however, be used in *brucella* endocarditis. Subacute and chronic brucellosis can be difficult to treat, probably owing to the intracellular habitat of the organism; and the imminent disappearance of the disease from Britain is welcome.