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FUNCTIONS OF HOSPITAL LABORATORIES AS RELATED TO PUBLIC HEALTH
DEVELOPMENT OF HOSPITAL LABORATORIES: RESEARCH

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Hospital laboratories are primarily required to provide a diagnostic service and may not possess either the staff or the apparatus for research work. However, hospital laboratories are well placed to carry out applied research in the fields of methodology, clinical work and laboratory organization. Sometimes research may be initiated in the service laboratory and then referred to research centres or, conversely, projects may be defined in research centres and passed on to hospital laboratories.

Methodology

- (1) Clinical relevance: Laboratory methods should be relevant to patient care (1). In microbiology, for instance, it has been suggested that routine throat swabs need no longer be examined for diphtheria.
- (2) Cost-effectiveness: Hospital laboratories may be prepared to undertake evaluation of their techniques in order to reduce costs (5).
- (3) Techniques: Service laboratories are able to research techniques which improve clinical relevance, and to cost or enlarge the diagnostic repertoire (4).

Clinical work

Hospital laboratories should be prepared to investigate local problems relevant to their own hospitals. At the author's hospital a sharp increase in the incidence of infection with haemolytic streptococci Group B has led to an investigation of their ecology and immunology.

In the wider field, hospital laboratories are often in a position to investigate clinical disease. For example, about 50% of patients with gastroenteritis fail to yield an organism with present procedures. Recently it has been shown that 5%-7% of such patients yield Campylobacter sp. (6).

Organization

Hospital laboratories should be prepared to investigate computer methods (3), automation (2) and rationalization in order to define accurately their cost-benefit to the hospital and community.

The foundation for research in hospital laboratories is the attitude towards research by staff; links with research institutions and universities provide support.

REFERENCES

1. Bartlett, R.C. Amer. J. Clin. Path., 61: 867 (1973)
2. Editorial. Lancet, 2: 1306 (1973)
3. Goodwin, C.S. & Smith, B. Clare J. Clin. Path., 29: 543 (1976)
4. Holland, W.W. & Whitehead, T.P. Lancet, 2: 391 (1974)
5. Porter, J.A. , Brodie, J. & Macpherson, E. Brit. Med. J. , 2: 877 (1976)
6. Skirrow, M.B. Brit. Med. J. 2: 9 (1977)