

Postgraduate Medical Journal

Editor

IAN GILLILAND M.D. F.R.C.P.

Advisory Editorial Board

A. G. Apley F.R.C.S.
D. Barltrop B.Sc. M.D. M.R.C.P. D.C.H.
E. M. M. Besterman M.A. M.D. F.R.C.P.
A. M. Breckenridge B.Sc. M.R.C.P.
E. H. Brown D.M. F.R.C.P. D.C.H.
A. E. R. Buckle F.R.C.S. F.R.C.O.G.
J. O. Craig F.R.C.S.I. D.M.R.D. F.F.R.
A. H. Crisp M.D. M.R.C.P. F.R.C.P.Ed. F.R.C.Psych.

D.P.M.

Sir Robert Drew K.C.B. C.B.E. F.R.C.P. F.R.A.C.P.
R. Eban M.A. M.R.C.P. F.F.R.
H. Ellis M.A. D.M. F.R.C.S.
R. Goulding B.Sc. M.D. F.R.C.P.
B. I. Hoffbrand M.A. D.M. M.R.C.P.

J. P. Hopewell F.R.C.S.
D. G. James M.A. M.D. F.R.C.P.
S. B. Karani D.P.H. F.R.C.P. F.A.C.C.P.
R. S. Kocen M.R.C.P.
D. M. Krikler M.D. F.R.C.P. F.R.C.P.Ed. F.A.C.C.
B. Lewis Ph.D. M.D., M.R.C.P. M.R.C.Path.
C. E. Newman C.B.E. M.D. F.R.C.P.
K. I. Nissen F.R.C.S.
J. W. Paulley M.D. F.R.C.P.
T. A. J. Pranker M.D. F.R.C.P.
D. A. Pyke M.D. F.R.C.P.
J. H. Swallow M.D. M.R.C.P.
P. Turner B.Sc. M.D. F.R.C.P.

Editorial Representative for North America

Charles G. Roland M.D.

Editorial Representative for Australia

Professor Thomas Stapleton M.A. D.M. M.R.C.P. D.C.H.

Editorial Assistant

Mrs M. E. Coops B.Sc.

Postgraduate Medical Journal is published monthly for the Fellowship of Postgraduate Medicine by Blackwell Scientific Publications Ltd. The annual subscription is £10.00 (\$34.00) post free, and the price of single issues £1.00 (\$3.00) postage extra. If payments are made by bank transfer, all charges shall be at the remitter's expense. Orders for back issues published up to December 1966 and correspondence from Fellows and Associates should be sent to The Secretary, The Fellowship of Postgraduate Medicine, Chandos House, 2 Queen Anne Street, London W1M 9LE; other orders and business correspondence should be addressed to Blackwell Scientific Publications Ltd, Osney Mead, Oxford OX2 0EL (tel: Oxford 40201).

All editorial correspondence should be addressed to The Editor, The Postgraduate Medical Journal, Chandos House, 2 Queen Anne Street, London W1M 9LE

Advertisement enquiries and bookings should be addressed to S. & H. Fretwell Ltd, 267 Portland Road, London, S.E.25 (tel: 01-654 8921).

The Fellowship of Postgraduate Medicine was founded by a group of London consultants after the First World War to assist postgraduates, particularly those coming to London from the Commonwealth, to pursue their studies. The Fellowship first published the *Postgraduate Medical Journal* to give informa-

tion about lectures, conferences and courses and to provide a monthly review of all branches of medicine.

Postgraduate Medical Journal publishes original papers on subjects of current clinical importance and welcomes review articles with extensive, up-to-date bibliographies as guides to further reading. Several symposia are published every year, each devoted to a single subject and written, by invitation, by specialists in different disciplines. Most issues include authoritative Current Surveys of clinical problems, as well as well-documented Reports of cases of particular interest, Correspondence and Book Reviews.

A 'Notice to Contributors' is published on the inside back cover of this issue. The Editor reserves the right to make changes which may clarify or condense papers where this is considered desirable.

© The contents of this Journal are copyright and, subject to the provisions of Section 7 of the Copyright Act, 1956, they may not be copied, adapted or reproduced without permission. Requests for permission to reproduce material elsewhere, either in whole or in part, should be addressed to the Editor, Postgraduate Medical Journal, Chandos House, 2 Queen Anne Street, London W1M 9LE. This Journal is covered by *Current Contents* and *Biological Abstracts*.

Acute respiratory virus diseases

A symposium held at the University of Sheffield on 8 April 1973
to report the results of a collaborative study by the Public Health
Laboratory Service and the Medical Research Council

Edited by PROFESSOR D. L. MILLER

CONTENTS

List of participants and acknowledgements	748
<i>Session 1:</i>	
<i>Chairman:</i> SIR JAMES HOWIE	
Collaborative studies of acute respiratory disease in patients seen in general practice and in children admitted to hospital. Aims, field methods and morbidity rates	749
D. L. MILLER	
<i>Discussion</i>	761
The definition of acute respiratory illnesses in general practice	763
R. E. HOPE-SIMPSON and D. L. MILLER	
<i>Discussion</i>	770
The definitions of acute respiratory illnesses in children	771
S. D. M. COURT	
<i>Discussion</i>	777
<i>Session 2:</i>	
<i>Chairman:</i> SIR CHARLES STUART-HARRIS	
Viral and epidemiological findings in MRC/PHLS surveys of respiratory disease in hospital and general practice	778
PAULINE M. POOLE and J. O'H. TOBIN	
Respiratory syncytial virus infections	788
P. S. GARDNER	
Parainfluenza virus infections	792
SUZANNE K. R. CLARKE	
Adenovirus infections	798
MARGUERITE S. PEREIRA	
Rhinovirus infections	802
P. G. HIGGINS	
Influenza virus infections	807
N. R. GRIST	
The management and outcome in children admitted to hospital	812
S. D. M. COURT	
<i>Discussion</i>	818
<i>Concluding Remarks:</i>	
Patterns of respiratory virus infection	820
D. A. J. TYRRELL	

Participants

THE studies whose results were reported in the papers given at this symposium were organized by two Working Parties set up by the Public Health Laboratory Service and the Medical Research Council's Committee on Acute Respiratory Virus Infections (Chairman, Sir Charles Stuart-Harris). The work was supported by a grant from the Medical Research Council.

The members of the Working Parties were as follows:

Study in General Practice

General practitioners

Dr D. M. Gambier (Bristol), Dr B. Reiss (Cambridge), Drs R. E. Hope-Simpson (Secretary) and E. J. Guest (Cirencester), Dr E. J. C. Kendall (Epsom), Dr P. West (Guildford), Drs G. Watt and J. H. Smith (Langholm), Dr G. I. Watson (Peaslake), Drs G. K. H. Hodgkin, C. Gillie and P. Edmundson (Redcar), Dr P. M. Higgins (Rugeley), Drs P. and Margaret E. Binks (Ruislip), Drs J. L. Galbraith, K. Whittle, E. Richards and P. G. Cope (Worcester).

Microbiologists

Dr Suzanne K. R. Clarke (Bristol), Dr J. Nagington (Cambridge), Dr D. G. Davies (Carlisle), Dr P. G. Higgins (Cirencester) (Chairman), Drs B. E. Andrews and C. E. D. Taylor (Colindale), Dr D. R. Gamble (Epsom), Dr G. T. Cook (Guildford), Dr R. Blowers (Middlesbrough), Drs E. M. MacKay-Scollay and W. L. Hooper (Stafford), Dr R. J. Henderson (Worcester).

Study in children admitted to hospital

Physicians

Dr A. W. Ferguson (Bedford), Drs M. E. Disney and J. S. Oldham (Birmingham), Dr T. E. D. Beavan (Chester), Drs J. H. Lawson and I. W. Pinkerton (Glasgow), Dr R. M. Mayon-White (Ipswich), Dr J. G. Lancaster (Kettering), Dr K.

Simpson (Leicester), Drs E. C. Allibone and J. Stevenson (Leeds), Drs B. Epstein, G. V. Feldman and D. Macaulay (Manchester), Professor S. D. M. Court (Newcastle) (Chairman), Drs B. D. Bower and H. L. Ellis (Oxford), Dr O. D. Fisher (Medway), Dr R. R. Gordon (Sheffield), Dr J. B. Heycock (Sunderland), Drs J. L. Greaves and T. H. Hughes-Davies (Winchester) and Dr A. G. Aldridge (Worcester).

Microbiologists

Dr W. F. Lane (Bedford), Drs T. H. Flewett and J. D. Williams (Birmingham), Dr Pauline M. Poole (Chester) (Secretary), Professor N. R. Grist (Glasgow), Dr J. M. S. Dixon (Ipswich), Dr Hélène Mair (Leicester), Dr M. H. Hambling (Leeds), Dr A. L. Furniss (Maidstone), Dr J. O'H. Tobin (Manchester) (Chairman), Dr P. S. Gardner (Newcastle), Dr F. O. MacCallum (Oxford), Dr Margaret A. Wilson (Sheffield), Dr P. B. Crone (Sunderland), Dr M. H. Hughes (Winchester) and Dr R. J. Henderson (Worcester).

The study was co-ordinated and the results were analysed in the Epidemiological Research Laboratory, Colindale, by Dr D. L. Miller, Dr D. Reid and Miss Marian Davey. The computer programming and data processing were carried out by Miss Margaret Devine in the Medical Research Council Computer Services Centre.

The Working Parties wish to acknowledge the valuable contributions made to the studies by many members of their staffs.

Monkey kidney and W138 cells were supplied by Dr F. T. Perkins, National Institute of Medical Research, and diagnostic reagents by Dr C. M. P. Bradstreet, Standards Laboratory, Colindale.

Copies of the detailed analyses and commentaries on each of the two studies may be obtained on application to The Publications Department, The Medical Research Council, 20 Park Crescent, London W1N 4AL (please specify which of the two reports is required when ordering).

Postgraduate Medical Journal: Notice to Contributors

Typescripts (two complete copies) should be sent to the Editor, Dr I. Gilliland, Postgraduate Medical Journal, Chandos House, 2 Queen Anne Street, London W1M 9LE. Papers should be typewritten on one side of the paper only, with a 1½ inch margin, and the lines should be double-spaced. In addition to the title of the paper there should be a 'running title' (for page headings) of not more than 45 letters (including spaces). The paper should bear the name of the author(s) with their degrees and descriptions and of the laboratory or research institute where the work has been carried out. The full postal address of the principal author should be given as a footnote. (The proofs will be sent to this author and address unless otherwise indicated.)

Arrangement. Papers should normally be divided into:

(a) Summary, brief, self-contained and embodying the main conclusions; (b) Introduction; (c) Materials and methods; (d) Results, as concise as possible (both tables and figures illustrating the same data will rarely be permitted); (e) Discussion and conclusion; (f) Acknowledgments; (g) References.

References. Only papers closely related to the author's work should be included, exhaustive lists should be avoided. References should be made by giving the author's surname, with the year of publication in parentheses. When reference is made to a work by three authors all names should be given when cited for the first time, and thereafter only the first name, adding *et al.*, e.g. Smith *et al.* (1958). The '*et al.*' form should always be used for works by four or more authors. If several papers by the same author and from the same year are cited, a, b, c, etc., should be put after the year of publication, e.g. Smith *et al.* (1958a). All references should be brought together at the end of the paper in alphabetical order. References to articles and papers should mention (a) name(s) of the author(s); (b) year of publication in parentheses; (c) title of paper; (d) title of journal in full, underlined; (e) volume number; number of first page of article. References to books and monographs should include (a) name(s) and initials of author(s) or editor(s); year of publication in parentheses; (b) title, underlined; (c) edition; (d) page referred to; (e) publisher; (f) place.

Standard usage. The *Concise Oxford English Dictionary* is used as a reference for all spelling and hyphenation. Verbs which contain the suffix *ize* (*ise*) and their derivatives should be spelt with the *z*. Statistics and measurements should always be given in figures, i.e. 10 min, 20 hr, 5 ml, except where the number begins the sentence. When the number does *not*

refer to a unit of measurement, it is spelt out except where the number is greater than one hundred.

Abbreviations. Abbreviations for some of the commoner units are given below. The abbreviation for the plural of a unit is the same as that for the singular unless confusion is likely to arise.

gram(s)	g	second(s)	sec
kilogram(s)	kg	cubic millimetre(s)	mm ³
milligram(s)		millimetre(s)	mm
(10 ⁻³ g)	mg	centimetre(s)	cm
microgram(s)		millicurie(s)	mCi
(10 ⁻⁶ g)	µg	millilitre(s)	ml
nanogram(s)		pound(s)	lb
(10 ⁻⁹ g)	ng	milliequivalent	mEq
picogram(s)			
(10 ⁻¹² g)	pg	R _F values	R _F
hour(s)	hr		
minute(s)	min	gravitational acceleration	g
micron(s)	µ	percent	%

Example: mg/100 ml, for biochemical values; mEq/l

Figures. In the text these should be given Arabic numbers, e.g. Fig. 3. They should be marked on the backs with the name(s) of the author(s) and the title of the paper. Where there is any possible doubt as to the orientation of a figure the top should be marked with an arrow. Each figure must bear a reference corresponding to a similar number in the text. Photographs and photomicrographs should be unmounted glossy prints and should not be retouched. Line diagrams should be on separate sheets; they should be drawn with black Indian ink on white paper and should be about four times the area of the final reproduction. Lines and lettering should be of sufficient thickness and size to stand reduction to one-half or one-third. Letters and numbers must be written lightly in pencil. Whenever possible, the originals of line diagrams, prepared as described above, should be submitted and not photographs. The legends of all the figures should be typed together on a single sheet of paper headed 'Legends to Figures'.

Tables. There should be as few tables as possible and these should include only essential data; the data should not be crowded together. The main heading should be in capitals with an Arabic number, e.g. TABLE 2. Each table must have a caption in small letters. Vertical lines should not be used.

Page proofs will be submitted to the contributors for minor corrections and should be returned to the Editor within 3 days. Major alterations to the text cannot be accepted.

Offprints. These may be purchased if ordered on the form which will be sent to the senior author with the proofs.