

Mott

# Journal of Biosocial Science

VOLUME 6, NO. 4

OCTOBER 1974

EXECUTIVE EDITOR

Alan S. Parkes

ADVISORY PANEL

D. R. Brothwell

P. R. Cox

Alan E. H. Emery

P. Sargant Florence

E. Grebenik

G. A. Harrison

Geoffrey Hawthorn

Hilary Hill

Hans Kalmus

James Maxwell

John Peel

D. M. Potts

D. F. Roberts

Fred T. Sai

E. T. O. Slater

R. Snowden

A. C. Stevenson

Barbara Thompson

Published for

THE GALTON FOUNDATION

by

BLACKWELL SCIENTIFIC PUBLICATIONS

Oxford London Edinburgh Melbourne

# JOURNAL OF BIOSOCIAL SCIENCE

Supplement No. 3

## BIOSOCIAL ASPECTS OF HUMAN FERTILITY

Proceedings of the seventh annual symposium of the Eugenics Society  
London, September 1970

P. R. COX

General introduction

### Physiological and environmental aspects

G. W. HARRIS

Coordination of the reproductive processes

ALAN S. PARKES

Environmental influences on human fertility

P. P. S. NYLANDER

Biosocial aspects of multiple births

### Fertility in different populations

D. M. POTTS

Human fertility in global perspective

J. CLYDE MITCHELL

Cultural explanations of fertility differences

JOAN BUSFIELD and

GEOFFREY HAWTHORN

Some social determinants of recent trends in British fertility

### Sociological aspects

D. J. OLDMAN, W. R.

Family structure and educational achievement

BYTHEWAY and GORDON

HOROBIN

DUGALD BAIRD

**The Galton Lecture 1970: The Obstetrician and Society**

### Problems of fertility control

P. F. SELMAN

Domiciliary family planning services: a reappraisal

PETER DIGGORY

The unwanted pregnancy

K. JOHN DENNIS

Sex education in schools—why and how?

*Price* £3.00; *US* \$8.50

Published for the Galton Foundation by  
**Blackwell Scientific Publications Ltd**  
Osney Mead, Oxford, England

# JOURNAL OF BIOSOCIAL SCIENCE

## Symposium Report No. 5

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF  
SCIENCE

*Sections E and I. Geography and Biomedical Sciences*

### ASPECTS OF MEDICAL GEOGRAPHY

Proceedings of a Symposium

held 23rd August during

the Canterbury Meeting 1973

Edited by SHEILA M. BAIN and MARGARET HERBERTSON

<b>G. M. Howe</b>	Introduction
<b>Jacques M. May</b>	Medical geography: a theory of medicine
<b>Sheila M. Bain</b>	A geographer's approach in the epidemiology of psychiatric disorder
<b>Harry V. Warren</b>	Environmental lead: a survey of its possible physiological significance
<b>L. J. Bruce-Chwatt</b>	Air transport and disease
<b>W. B. Fisher</b>	Geography and the organization of medical services
<b>H. J. Jusatz</b>	Changes in the state of infectious diseases in South and South-East Asia
<b>D. A. Robinson, A. J. Radford and N. R. E. Fendall</b>	Fallacies in comparing international disease trends

Price £1.75. Obtainable from *Journal of Biosocial Science* Business Office,  
69 Eccleston Square, London SW1V 1PJ.

# JOURNAL OF BIOSOCIAL SCIENCE

## Notice to Contributors

The *Journal of Biosocial Science* publishes original papers, reviews, lectures, proceedings and major book reviews dealing with social aspects of human biology, including reproduction and its control, gerontology, ecology, genetics and applied psychology; with biological aspects of the social sciences, including sociology, social anthropology, education and criminology; and with biosocial aspects of demography. Preference will be given to material which is clearly interdisciplinary.

Papers are considered for publication on the understanding that they have not been, and will not be, published elsewhere in whole or in part, and that, where customary, they have been approved for publication by the relevant Head of Department. The Editor is not responsible for any loss of or damage to manuscripts or illustrations and his decision on all editorial matters is final. This journal is covered by *Current Contents* and *Biological Abstracts*.

**Manuscripts** should be sent in duplicate to the Executive Editor, *Journal of Biosocial Science*, 69 Eccleston Square, London, S.W.1. They should be clearly typewritten, on one side of the paper only, with a 1¼ inch margin, and be double-spaced and in the English language. Spelling should follow that of the *Concise Oxford Dictionary*. Where English is not the language of the country of origin, a translation of the English summary into that language may additionally be provided for publication.

Papers must be written clearly, simply and concisely. They should be checked very carefully before being submitted. The author is responsible for the accuracy of quotations, tabular matter and references.

An original paper should not include an extensive review of the literature, but only sufficient references to indicate the purpose and relevance of the investigation. Methods which have been recorded previously should be described only briefly and in general terms, but the author's modifications, if any, may be given in detail. Text, tables and figures must be internally consistent and not repetitious. Results should be described concisely and discussion limited to the significant new findings. Theoretical exercises should be such as to lead to conclusions of general interest. Reviews should be authoritative and well documented.

The Editor reserves the right to make minor literary emendations in the final editing, but manuscripts will not be altered substantially without consultation with the author or marked unless the paper is thought provisionally to be acceptable.

Manuscripts should bear the title of the paper, name of the Institution where the work was done and, as a footnote, the present postal address of the author if different from that of the Institution. Titles should be brief, but informative, and should indicate the nature of the contents, not their import. A short title, to serve as a running head and consisting of not more than 50 letters (including spaces), should also be given on the title page. A summary not exceeding 5% of the length of the paper should precede the text. Section headings may be of four orders which in print will appear as: centre bold, centre italics, side raised italics and side inset italics; of these, the first and third are normally sufficient. Acknowledgments should be made at the end of the text in a separate section, so headed, and not placed in the body of the text. Footnotes should be avoided except as indicated above.

**Diagrams** should be in Indian ink on plain white paper, tracing paper, Bristol Board or faint lined paper. They should be larger than the intended published size, but should not exceed 30 × 20 cm. Letters and numbers should be written lightly in pencil. Duplicates may be rough copies. Diagrams must be numbered as Text-figures and should bear the author's name, short title of the paper and figure number on the back. Descriptions of Text-figures should be typed on a separate sheet. Visual aids of this kind should be used where possible to replace or supplement tabular matter.

**Tables** should be typed on separate sheets, be given Arabic numbers and be headed by adequate captions. Their approximate position in the text should be indicated by a note in the margin. They should not exceed in size the equivalent of one page of print. Weights and measurements should be given in metric units, with standard abbreviations ( $\mu\text{g}$ , mg, g, kg; ml, l; mm, cm, m, km, °C). Other abbreviations which should be used include %, <, >, hr, min. The 24-hr clock should be used to indicate the time of day. Abbreviations as such, should not be followed by, and initials need not be separated by, full points (e.g. FPA). Mean values should, where possible, be accompanied by standard errors or similar statistical indications of variance.

**References** in the text should be given thus: Smith (1964) or (Smith, 1964), according to context. When reference is made to a work by more than two authors, all names should be given when cited for the first time but thereafter only the first name followed by *et al.*, e.g. Brown *et al.* (1962). If several papers by the same author(s) and of the same year are cited, a, b, c, etc., should be put after the year of publication, e.g. Jones (1952b) or Jones (1952a, b). All references should be brought together at the end of the paper in alphabetical order of authors. References to articles and papers should mention: (1) name(s) followed by the initials of the author(s); (2) year of publication in parentheses; (3) title of the paper; (4) title of the journal abbreviated according to the *World List of Scientific Periodicals*, 4th edn (1964) and its supplements, and as also given in *World Medical Periodicals*; (5) volume; (6) number of the first page of the article. Thus: LAUGHLIN, H.H. (1919) The relation of eugenics to other sciences. *Eugen. Rev.* **11**, 53. References to books and monographs should include: (1) author(s) or editor(s); (2) year of publication; (3) title; (4) edition if more than one; (5) publisher and place of publication. Thus: PEARL, R. (1939) *The Natural History of Population*. Humphrey Milford, London. When both authors and editors are involved, the form should be as follows: MEAD, M. & NEWTON, N. (1967) Cultural patterning of perinatal behaviour. In: *Child-bearing—its Social and Psychological Aspects*. Edited by S.A. Richardson & A.F. Guttmacher. Williams & Wilkins, Baltimore.

An unpublished paper should not be cited among the references unless it has specifically been accepted for publication by a particular Journal, in which case the words (in press) should be used in place of the volume and page number of the journal.

**Proofs** will be sent to contributors for minor corrections, and should be returned to the Editor within one week. Special attention should be given to the checking of tables, mathematical formulae and Text-figures. Major alterations to the text will be accepted only at the author's expense. Overseas contributors are advised to arrange for a proof-reader in Great Britain. The date of receipt given at the head of the paper is that on which the script as published was received or agreed.

**Offprints.** 25 offprints together with a copy of the issue of the Journal in which the paper appears will be supplied free to the author, or, where there are two or more, to the author responsible for ordering offprints. Additional offprints up to the limit of 500 may be purchased if ordered on the form sent out with the proofs.

© Galton Foundation. No part of this publication may be reproduced or stored in a retrieval system in any form or by any means without the permission of both the Galton Foundation and the author.

# JOURNAL OF BIOSOCIAL SCIENCE

Vol. 6, No. 4

October 1974

## Contributors

<b>Agnete Braestrup</b>	President, Danish FPA	p. 471
<b>Mary E. Brennan</b>	Lecturer in Social Medicine, Department of Social Medicine, Medical School, University of Birmingham	p. 407
<b>Alasdair J. Campbell</b>	Lecturer in Mathematics, Robert Gordon's Institute of Technology, Aberdeen	p. 463
<b>Doris M. Campbell</b>	Research Fellow, Department of Obstetrics and Gynaecology, University of Aberdeen	p. 463
<b>Paul A. Compton</b>	Lecturer, Department of Geography, Queen's University, Belfast	p. 493
<b>Sue Craig</b>	Research Senior House Officer, King's College Hospital, London	p. 477
<b>Henry P. David</b>	Director, Transnational Family Research Institute, Washington, DC	p. 417
<b>K. C. Dube</b>	Formerly Professor of Psychiatry and Medical Superintendent, Mental Hospital, Agra, India	p. 401
<b>J. M. Goldstrom</b>	Lecturer, Department of Economic and Social History, Queen's University, Belfast	p. 493
<b>Lorna Goldstrom</b>	Secretary, Ulster Pregnancy Advisory Association, Belfast	p. 493
<b>Richard W. Hornabrook</b>	Director, Papua New Guinea Institute of Medical Research	p. 439
<b>David Joyce</b>	Lecturer, Department of Obstetrics and Gynaecology, King's College Hospital, London	p. 477
<b>N. Kumar</b>	Statistician, WHO Field Research Centre, Mental Hospital, Agra, India	p. 401
<b>Ian MacGillivray</b>	Regius Professor of Obstetrics and Gynaecology, University of Aberdeen	p. 463
<b>Kenneth Mellanby</b>	Director, Monks Wood Experimental Station, Huntingdon	p. 503
<b>John Newton</b>	Senior Lecturer and Director, WHO Clinical Research Centre, King's College Hospital, London	p. 477
<b>L. J. Opit</b>	Senior Research Fellow, Health Services Research Centre, Medical School, University of Birmingham	p. 407
<b>A. T. Sandison</b>	Senior Lecturer and Honorary Consultant, University Pathology Department, Western Infirmary, Glasgow	p. 501
<b>Zohair Sebai</b>	Director of Planning, Programming and Budgeting, Ministry of Health, Saudi Arabia	p. 453
<b>John M. Stanhope</b>	Senior Epidemiologist, Epidemiology Unit, Wellington Hospital, New Zealand	p. 439
<b>Keith Wilson-Davis</b>	Head, Social Statistics Laboratory and Lecturer in Population Studies, Strathclyde University, Glasgow	p. 483
<b>Christabel M. Young</b>	Research Fellow, Department of Demography, Australian National University, Canberra	p. 427