

Medical journalism in 19th century Madras

Anantanarayanan Raman

The first issue of *Lancet* edited by Thomas Wakley (1795–1862) appeared in London in 1823. The earliest professional Indian medical journal *Transactions of Medical and Physical Society of Calcutta* (*TMPS*C), appeared in 1825 and continued till 1845, although irregularly. *TMPS*C was the official journal of the Medical and Physical Society of Calcutta, which was established through the efforts of the British intelligentsia, mostly medical practitioners, in Calcutta in 1823 (ref. 1). Apart from many papers reporting useful findings, William Brooke O'Shaughnessy's paper on the usefulness of marijuana in medicine² published in *TMPS*C in 1839 is rated highly even today. Available records do not identify the editor of *TMPS*C, but they include a list of names, the modern equivalent of an editorial board, which, in high likelihood, ensured quality.

Nearly 50 professional English-language medical journals (including those committed to homeopathy) were issued in India in the 19th century and continued for either 3–5 or 15–20 years. Madras had its share of contribution to professional medical journals with the *Madras Quarterly Medical Journal* (*MQMJ*) launched in 1839 and continued till 1844 (Figure 1). The *Madras Journal of Medical Science* (1851–54), *Madras Quarterly Journal of Medical Science* (1860–69) (Figure 1), *Monthly Journal of Medical Science* (1870–73), *Transactions of the South Indian Branch of BMA* (the British Medical Association) (1887–1910), and *Madras Medical Record* (1890) were the other journals that succeeded *MQMJ* in Madras in 19th century³.

This article brings to light key details of the physical features of the *MQMJ*, as available in the first volume, a copy of which was secured through interlibrary loan. A digitized version of a later volume of *MQJMS* was accessed through the Internet. The other Madras journals (vide, previous paragraph) either could not be secured as hard copies or were unavailable as digitized Internet versions. The other caveat is, in this article, I have not attempted to either refer to or comment on the professional quality of the

published articles. Such an effort, I consider would be more appropriate for a professional medical practitioner or a medical scientist.

The Madras Quarterly Medical Journal

Besides the journal title, the cover page of the 1839 volume of *MQMJ* includes Samuel Rogers (Assistant Surgeon, Madras Establishment) the editor, a statement '*Nihil est aliud magnum quam multa minuta*' ('Many small elements make a great thing'), name of the printer and publisher J. B. Pharoah, and the year of publication MDCCCXXXIX. The following page includes a dedication, which reads:

'We place this work under its natural protectors, the medical officers of both services in the Madras Presidency; and solicit no other patronage for our undertaking.'

Pages iii–viii include the preface to the volume (by the editor?). The prefatory text outlines the objects (objectives) of the journal and cross-refers to them as detailed in the 'prospectus' included in the first number (January 1839). The prefatory paragraph dated 1 October 1839, in volume I is fascinating.

'Having concluded our first volume, we must leave it to our *Confrères* to decide whether the promises which were held out at the commencement have been fulfilled; and whether the work is likely to prove one of reference, or not. It is natural that we ourselves should entertain a favourable opinion of it; and we may be excused that we feel honoured by the confidence reposed in us by the Medical Board, the Deputy Inspector General of H.M. Hospitals, and those zealous and talented individuals who have favoured us with contributions: – to them, indeed, the sole credit is due for whatever merit it possesses; we only claiming commendation for a little industry in collecting and arranging the materials.'

The editor says in the preface 'the object (*sic* 'of the journal') is not for pecuniary profit, but to contribute professional information; the reports, monographs, cases, &c. published will serve in the advancement of medical art'. In page v, the editor adds: 'In the present time *Statistical* information is very much sought after and as all deductions in regard to this subject must be based on the accumulation of well authenticated facts, we recommend it to attention and earnestly request that it may be embraced.'

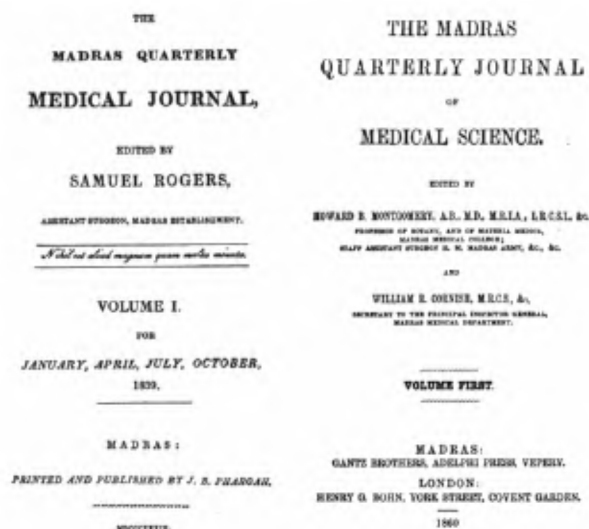


Figure 1. Cover pages of volumes 1 of *Madras Quarterly Medical Journal* and *Madras Quarterly Journal of Medical Science*.

The dictates stipulated for authors submitting medical reports insist on the inclusion of background details under the following heads: (i) topography of the station and nature of climate, (ii) locality of the cantonment, barracks, hospitals: nature of accommodation, details of ventilation, (iii) nature of diet, drinking water and vegetables, (iv) clothing, bedding and employment of soldiers, (v) internal economy (messing, cleanliness, modes used for suppressing intemperance), (vi) average strength of the troops, (vii) remarks on ordinarily prevailing diseases, their causes, peculiarity, degree of prevalence compared with earlier records, (viii) details of representations made to military or medical authorities on the health of troops and the outcomes, (ix) detailed history of any unusual epidemic/ endemic infectious, contagious disease that may have occurred in the station that year; description of their progress and subsidence under the atmospheric conditions and electrical phenomena, (x) sickness and mortality rates among the young, middle aged and old, in those who arrived recently or in those who have been long-time residents in that station, (xi) details of vaccination and the degree of prevalence of variolae, and (xii) condensed histories of specific cases noted against the age, constitution and temperament of the patients, cause and mode of attack of the disease, symptoms during prognosis and the mode of treatment suggested (dietetic and therapeutic) with remarks on fatal cases.

The preface concludes as follows: 'We anticipate one great good will result from publishing official reports, which is that knowing *those only are selected* which have merit, or contain information of importance, Medical Officers will be induced to *think*, and to study well the subjects they write upon, for their own credit; and it is to be hoped that a meritorious emulation will thus be excited among them, comfortable with the honourable spirit so conspicuous in the profession at present, in Europe.'

Pages ix–xii include the names and addresses of subscribers to the journal, which include medical practitioners, civil servants, para-medical personnel such as pharmacists (referred as 'apothecary'), and companies (medical?), in addition to a few doctors from Ceylon (Sri Lanka),

French (Pondichéry), Danish and Dutch territories in southern India. Pages xiii–xvii include an alphabetically arranged keyword index, which lists authors, subject and other items of general interest.

The first issue of *MQMJ* dated 1 January 1839 includes a preface and a prospectus. The prospectus dated 17 September 1838 was circulated in advance to ensure sufficient publicity for the new journal and also to secure subscriptions. I could see that the prospectus was notified as a 'notice' in the *Madras Journal of Literature and Science* (1838, vol. 8: page 403) published by the Madras Literary Society. This notice is reprinted in the first issue of *MQMJ* as such under the title prospectus, except for the note advising prospective subscribers in Madras to contact J. B. Pharoah, Athenaeum Library, those in Calcutta Messrs Oetell & Company, and those in Bombay J. J. Malveey. The mast head of the prospectus page in *MQMJ* bears the name of the journal in ornate fonts, with the following text: 'It is proposed to publish a Quarterly Medical Journal at Madras, commencing on the 1 January 1839...', which is followed by 1-page information outlining the objectives (referred as 'objects'), justification for the need for a professional medical journal, the support secured from government departments (e.g. Medical Board, and Hospital Administrator), and the proposed number of pages (100/issue) and price (Rs 2 for subscribers and Rs 3 for non-subscribers). The prospectus elaborates that *MQMJ* aims to publish hospital reports and original papers on principal diseases of India, reports on particular epidemics that may have occurred or predicted to occur, clinical remarks that may outline new treatment strategies that have been trialled, reports on interesting cases in medicine and surgery, information on medicinal plants or any remedial agents used by native medical practitioners not generally known to 'professional men' (means practitioners of western medicine?), and original papers from other branches of science, but related to medicine, occasional notices of new publications, other medical information of interest.

From vol. III (1841) onwards, Samuel Rogers and Alexander Lorimer (Assistant Surgeons, Madras Establishment; 'Madras Establishment' changed to 'Madras Medical Establishment') edit *MQMJ*. From vol. III, the publisher and

printer changed to the Union Press, 22 Armenian Street, Madras.

A sample list of articles from vol. VI (no. XXI, January 1844) is provided here:

J. E. Porteus: Medical transactions of the C. Troop of horse artillery, whilst serving in China. pp. 1–12.

J. Wm. Watson: Annual report of sick in H. M. 63d Regt. for the years 1837–38 and 39. pp. 13–49.

E. A. Parkes: Remarks on cholera with dissection reports. pp. 50–84.

Anderson*: Case of hepatitis, terminating in abscess, with operation. pp. 85–95.

Gamble*: Extracts from the quarterly reports of H. M. 4th (King's own) Regt: 1. Dissection reports of hepatitis; 2. Remarks on dysentery. pp. 96–100. (*Neither initials nor full names available.)

The Madras Quarterly Journal of Medical Science

Volume 4 edited by Howard B. Montgomery (Garrison Assistant Surgeon, Fort St George, and Professor of Botany and Materia Medica, Madras Medical College) dated 1862 includes 'Gantz Brothers, Adelphi Press', Vepery, Madras, the printers and publishers of the journal. The cover page also includes the names of distributors (?) in UK. Categories of pieces included are grouped as parts: (I) Original Essays, (II) Reviews and Notices of Books, (III) Medical Miscellany, (IV) Medical Intelligence followed by an Appendix. An index listing subject and general terms, and author names occurs in pp. xxiv–xxxi at the end of Appendix. The first volume includes 'William Cornish' and a later volume includes 'Henry King' as second editors.

A sample of titles from Original Essays:

1. Notes on some indigenous plants of India – Edward John Waring, Esq., Physician to His Highness the Rajah of Travancore, p. 1.
2. Medical topography of Cochin – Francis Day, Esq., F.L.S., Civil Surgeon, Cochin, p. 19.
3. Remarks upon beriberi – Edward D'Arcy Eveyard, Esq., Zillah Surgeon, Masulipatam, p. 44.
4. Annual medical report of the Madras lying-in hospital from 1 January to

31 December 1860 – W. Aitken, M.D., Superintendent, p. 66.

5. Remarks on a case of variole, supposed to have arisen from vaccination – Assistant Surgeon M. C. Furnell, Madras Medical Service, p. 78.

A sample of titles from Reviews & Notices of Books:

1. The Hyderabad Medical School, its past and present condition – George Smith, M.D., Residency Surgeon and Superintendent, p. 146.
2. The fungus disease of India – H. Vandyke Carter, M.D., London: Professor of Anatomy and Physiology, Grant Medical College, Bombay, p. 150.

A sample of titles from Medical Miscellany:

1. Cases of coroner's inquest – Native surgeon Moodeen Sheriff, Triplicane, Madras, p. 184.
2. Iodide of potassium in fungus testis – J. W. Mudge, Esq., M.D., Surgeon, 2nd District, Presidency.
3. Another case of fungus testis successfully treated with the iodide of potassium. W. J. van-Someren, Esq., M.D., Surgeon, 1st District, Presidency, p. 188.

A sample of titles from Medical Intelligence:

1. Appeals regarding pay and accounts allowances how to be submitted, p. 216.
2. Regulations concerning the grant of privilege leave by Heads of Departments, p. 216.

A sample of titles from Appendix:

1. Medical directory for southern India for the half-year commencing 1 May 1862: Civil department – p. i; Military department – p. v.
2. H. M. British forces under the Presidency of Madras, p. xiv.
3. Veterinary officers: H. M. Indian forces, British forces, p. xvi.

Remarks

Among the several points noted by Samuel Roger (editor, 1839 volume *MQMJ*), the following are impressive: (i) on using statistics and (ii) on incorporating climate and other environmental data in

medical reports and papers submitted to *MQMJ*.

Before I proceed to discuss the context for Samuel Roger's point on the relevance of statistics in medical journalism, a quote from the editorial in a recent issue of *Indian Journal of Anaesthesia*⁴ appears relevant.

'Interestingly, evaluation of statistical methods used in articles published in 3 Indian journals (viz. *Indian Journal of Medical Research (IJMR)*, *Indian Journal of Medical Science (IJMS)* and *Indian Journal of Preventive and Social Medicine (IJPS)*) has shown that errors of omission and commission were found in 35–95% of the articles published in them. Out of these, in 78% of the articles, at least one serious error of methodology was detected; in 41% of the articles at the stage of planning and in 49% later during data collection procedure. It is quite essential to note that majority of Indian editors are part time editors with insufficient or no research methodology and statistical training.'

In this editorial, Kotur⁴ argues how statistical illiteracy plagues Indian medical research and how such a weakness can be unproductive in the advancement of medical science. However, what surprised me is the following fragment⁴: 'Ever since the introduction of statistical probability in the medical literature in the 1930s...'. I establish that the quoted fragment is incorrect in the succeeding paragraph: test and application of probability and scientific objectivity were introduced into medical science and research long before the 1930s.

Gradual reduction in dependence on single case reports and a growth in the publication of larger series, some of which were even analysed by proto-statistical methods, occur as a general pattern in the medical journals published from Britain in 1733–1829 (ref. 5). At least by the second half of the 18th century, a majority of British medical practitioners recognized the need for empirical evaluation of remedies by comparative trials with results expressed in numbers. To these British practitioners, arithmetic calculation was a way out of the maze of contradictory observations⁶. Consequently, in the early 19th century, an acknowledgment of the usefulness of numerical

observations in clinical medicine arose in the British⁷ and French medical practice; the latter influenced by the thoughts of Pierre Charles Alexandre Louis (1787–1872) (ref. 8). Probability theory and statistics came to be used in medical practice to replace the 'arbitrary', 'idiosyncratic' and 'subjective' medical practice⁹. Application of statistics in therapeutics was seen as a measure of objectification, through which science entered medicine in a big way⁹. In the 1830s, statistics also contributed enormously in public-health management^{10–12}.

Therefore, Samuel Roger's prefatory remark in *MQMJ* (1839) on the criticality of using statistics in medical research is not surprising. It would be pertinent to refer to the scientific papers published in professional statistical journals (and not medical journals) by Edward Green Balfour (Surgeon-General, 1871–1876, Madras Medical Department), who extensively applied correct statistical methods to arrive at meaningful inferences to health issues of Madras army in mid-19th century^{13,14}.

A general consensus prevails today that weather has an impact on human health, although disagreement also exists on the precise mechanisms involved. For instance, extreme weather events are considered to have the greatest influence on human health^{15,16}. Morbidity attributed to infections of the upper respiratory tract (e.g. pneumonia, influenza, bronchitis) is weather-related¹⁷. However, the context for recognizing and correlating climate and meteorological factors to human health in the 18th and 19th centuries has an appealing dimension.

A high level of predilection towards meteorology and climatology controlled the 18th and 19th century science. Two key branches of science of that time were agriculture and public health. Prior to emergence of germ theory of disease in the late 19th century, physicians followed the Hippocratic doctrine that the environment (viz. climate, topography, and living conditions) was the principal cause of disease. Although the specific content and context of the doctrine varied, the Hippocratic doctrine proposed that seasons influence the balance of body 'humours' by virtue of the 'constitution' of air (the constitution of summer being hot and dry; that of autumn, cold and dry; that of winter, cold and wet; and that of spring, a balanced mixture of all); these constitutions favoured the spread

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of certain types of diseases; an abnormal season or sudden changes in weather also cause outbreaks of disease. Winds blowing in different directions, the orientation of towns (places) facing the winds, and water supplies similarly affect disease patterns¹⁸. The 17th and 18th century medical science favoured and subscribed to the notion that air, water and dwelling places influence the epidemic constitution, although it rejected the theory of humours. Such a notion led physicians to keep weather observations in the expectation of correlating weather patterns with diseases¹⁹. In the context of agriculture, no corpus of a theory relating the weather to disease existed, but the premise was that regular observations would succeed in correlating the weather with successful performance of crops²⁰.

Therefore, Samuel Roger's remark in *MQMJ* (1839) on the need and inclusion of baseline data on weather and climate in medical research papers does not surprise either.

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3. Chaudhuri, K. C., *Indian J. Pediat.*, 1958, **25**, 299–301.
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5. Magnello, E., In *The Road to Medical Statistics* (eds Magnello, E. and Hardy, A.), Rodopi, Amsterdam, The Netherlands, 2002, pp. 95–123.
6. Schlich, T., *Topoi*, 2004, **23**, 211–219.
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20. Duhamel du Manceau, H.-L., *La physique des arbres: ou il est traité de l'anatomie des plantes et l'économie des végétale*, H. L. Guerin and L. F. Delatour, Paris, France, 1758.

Anantanarayanan Raman is with Charles Sturt University, PO Box 883, Orange, NSW 2800, Australia.
e-mail: araman@csu.edu.au