



**Editor in Chief**  
Nick Brown

**Deputy Editors**  
Patrick Cartlidge (*Commissioning*)  
Ben Stenson (*Fetal & Neonatal*)  
Ian Wacogne (*Education & Practice*)

**Editorial Office**  
Archives of Disease in Childhood  
BMJ Publishing Group Ltd  
BMA House  
Tavistock Square  
London WC1H 9JR, UK  
E: [info.adc@bmj.com](mailto:info.adc@bmj.com)  
Twitter: @ADC\_BMJ

**Senior Production Editor**  
Malcolm Smith  
E: [production.adc@bmj.com](mailto:production.adc@bmj.com)  
ISSN: 0003-9888 (print)  
ISSN: 1468-2044 (online)

**Impact factor:** 3.258  
Journal of the Royal College of  
Paediatrics and Child Health

**Disclaimer:** *ADC* is published by BMJ Publishing Group Ltd (a wholly owned subsidiary of the British Medical Association) and the Royal College of Paediatrics and Child Health. The owners grant editorial freedom to the Editor of *ADC*. *ADC* follows guidelines on editorial independence produced by the World Association of Medical Editors and the code on good publication practice of the Committee on Publication Ethics.

*ADC* is intended for medical professionals and is provided without warranty, express or implied. Statements in the journal are the responsibility of their authors and advertisers and not authors' institutions, the BMJ Publishing Group Ltd, the Royal College of Paediatrics and Child Health or the BMA unless otherwise specified or determined by law. Acceptance of advertising does not imply endorsement.

To the fullest extent permitted by law, the BMJ Publishing Group Ltd shall not be liable for any loss, injury or damage resulting from the use of *ADC* or any information in it whether based on contract, tort, or otherwise. Readers are advised to verify any information they choose to rely on.

**Copyright** © 2019 BMJ Publishing Group Ltd and Royal College of Paediatrics and Child Health. All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without prior permission.

*ADC* is published by BMJ Publishing Group Ltd, typeset by Exeter Premedia Services Private Ltd, Chennai, India and printed in the UK on acid-free paper from sustainable forests.

*ADC* (ISSN No: 0003-9888) is published monthly by BMJ Publishing Group Ltd and is distributed in the USA by Air Business Ltd. Periodicals postage paid at Jamaica NY 11431 and additional mailing offices. POSTMASTER: send address changes to *Archives of Disease in Childhood*, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146<sup>th</sup> Avenue, 2nd Floor, Jamaica, NY 11434, USA

**Atoms**

**i** Highlights from this issue  
*Nick Brown*

**Editorials**

- 209** Fetal hydrops: diagnosis and prognosis  
*G J Waring, M Splitt, S C Robson*
- 210** 'Death is not the answer': the challenge of measuring the impact of early warning systems  
*S M Chapman, J Wray, K Oulton, M J Peters*
- 212** Biological therapeutic drug monitoring: a step towards precision medicine?  
*W D Renon, A V Ramanan*

**Leading article**

**214** Improving the quality of care delivered to adolescents in Europe: a time to invest  
*P-A Michaud, M W Weber, L Namazova-Baranova, A-E Ambresin*

**Global child health**

- 217** Early neonatal vitamin A supplementation and infant mortality: an individual participant data meta-analysis of randomised controlled trials  
*Neonatal Vitamin A Supplementation Evidence group*
- 227** Mass antibiotic distribution to reduce mortality among preschool children?  
*J A Berkeley*
- 229** Linear growth following complicated severe malnutrition: 1-year follow-up cohort of Kenyan children  
*M M Ngari, P O Iversen, J Thitiri, L Mwalekwa, M Timbwa, G W Fegan, J A Berkeley*

**Original articles**

**237** Research priorities for childhood chronic conditions: a workshop report  
*P Lopez-Vargas, A Tong, S Crowe, S I Alexander, P H Y Caldwell, D E Campbell, J Couper, A Davidson, S De, D A Fitzgerald, S Haddad, S Hill, M Howell, A Jaffe, L J James, A Ju, K E Manera, A McKenzie, A M Morrow, H L Odgers, R Pinkerton, A F Ralph, P Richmond, P J Shaw, D Singh-Grewal, A van Zwieten, M Wake, J C Craig, on behalf of The Kaleidoscope Project workshop investigators*

- 246** Drug monitoring in long-term treatment with adalimumab for juvenile idiopathic arthritis-associated uveitis  
*A Serabi-Baumgartner, G Seidel, B Langner-Wegscheider, A Schlagenhauf, J Jahnle*
- 251** Utility of proactive infliximab levels in paediatric Crohn's disease  
*C J Burgess, C Reilly, L Steward-Harrison, F Balouch, P J Lewindon*
- 256** Causes and characteristics of injury in paediatric major trauma and trends over time  
*B Beck, W Teague, P Cameron, B J Gabbe*
- 262** Predictive tool for intravenous immunoglobulin resistance of Kawasaki disease in Beijing  
*S Yang, R Song, J Zhang, X Li, C Li*
- 268** Maternal mental health and childhood injury: evidence from the UK Millennium Cohort Study  
*S Hope, J Deighton, N Micali, C Law*
- 275** Effect of a 1-week intense myofunctional training on obstructive sleep apnoea in children with Down syndrome  
*M von Lukowicz, N Herzog, S Ruthardt, M Quante, G Iven, C F Poets*
- 280** Fluid resuscitation in paediatric burns: how do we get it right? A systematic review of the evidence  
*C Stutchfield, A Davies, A Young*

**Drug therapy**

- 287** Clonidine exposures in children under 6 (2004–2017): a retrospective study  
*R Cairns, J A Brown, N A Buckley*
- 292** Physical compatibility of pentoxifylline and intravenous medications  
*S M D K G Senarathna, T Strunk, M Petrovski, K T Batty*

**MORE CONTENTS ►**

The content of *Archives of Disease in Childhood* is endorsed by the Royal College of Paediatrics and Child Health for Continued Professional Development in line with RCPCH CPD guidelines



This article has been chosen by the Editor to be of special interest or importance and is freely available online.



This article has been made freely available online under the BMJ Journals open access scheme. See <https://authors.bmj.com/open-access/>



This journal is a member of and subscribes to the principles of the Committee on Publication Ethics  
[www.publicationethics.org.uk](http://www.publicationethics.org.uk)



---

**Review**

- 297** Paediatrician's guide to epigenetics  
*L Byrne, A J Drake*
- 

**Archimedes**

- 303** Towards evidence-based medicine for paediatricians  
*B Phillips*
- 303** Which vasoactive drug should be first choice in paediatric septic shock?  
*S McVea, A Turner*
- 305** Can infant sleeping bags be recommended by medical professionals as protection against sudden infant death syndrome?  
*A Glover Williams, F Finlay*

---

**Miscellanea**

- 236** Archivist: Child mortality: how does the USA compare?
- 274** Archivist: Obesity and asthma
- 286** Images in paediatrics: Congenital perineal groove
- 296** Images in paediatrics: Inflammatory morphea presenting as a hemifacial acquired port-wine stain
- 302** Images in paediatrics: Gastric outlet obstruction due to pyloric mass in a 12-year-old girl
- 308** Lucina: Highlights from the literature