Editorial: The future of academic publishing in achieving Sustainable **Development Goal 6**

A TRACK RECORD IN BRIDGING THE GAP BETWEEN RESEARCH AND IMPLEMENTATION

Bridging the gap between the research that gets reported in the academic literature and realities of practice in delivery of services has long been a challenge in field of water, sanitation and hygiene. Delivering high quality services on the ground relies on the lessons from such research but this often remained inaccessible to practitioners or insufficiently focused on operational needs. Programmes and service delivery on the ground provide much of the platform upon which research is built, but practitioners often remain isolated from the findings of the research and their implications. This problem is particularly acute when considering the practice in low-resource settings, rapidly growing cities with low tax bases, and rural areas, where the needs are immense and resources constrained. Much academic research focuses on marginal improvements in high-performance technology and fails to address the real challenges of the majority of the worlds' population.

It is in this context that the Journal of Water, Sanitation and Hygiene for Development was launched by Professor Jamie Bartram in 2011. Jamie showed outstanding vision in identifying a specific need to bridge the gap between rigorous scientific evidence generation and implementation science. This year the mantle as Editors in Chief has passed to us. We are honoured to continue the work that Jamie started and to work on this journal, whose importance is now widely recognised. Ensuring we maintain a high quality and impactful journal is our priority and we will continue to work in partnership with all our authors and reviewers who make such an important contribution to the sector.

As the editorial team changes, we thought it would be a good moment to consider where the sector has got to and what we want to achieve in the coming 3 years of

This is an Open Access article distributed under the terms of the Creative Commons Attribution Licence (CC BY 4.0), which permits copying, adaptation and redistribution, provided the original work is properly cited (http://creativecommons.org/licenses/by/4.0/).

doi: 10.2166/washdev.2019.000

IWashDev. We do this in the context of a range of challenges and opportunities that currently face the sector.

THE CHALLENGES FACING THE WASH SECTOR

The first and most pressing challenge that we see is the need for a more coherent body of research to inform the Sustainable Development Goal (SDG) and climate targets. The needs are huge and at the same the world is changing rapidly. Old terminology which divided countries into 'developing and developed' is no longer adequate. Many low income countries are graduating into middle income status, and only a handful of countries are now aid-dependent to any significant degree. Countries are developing governance structures and political thinking around social equity and climate-conscious sustainability that are not dictated by the views of OECD countries but reflect their own cultural and social norms and expectations. It is no longer enough to say that the global 'north' is developed, and the global 'south' is not - nor is it acceptable that some technology is presented as 'low cost' and 'appropriate' while other technology is 'modern' or 'high tech'. A much more sophisticated framework is needed by which we can evaluate the best means to deliver the high quality water and sanitation services which are still urgently needed in places undergoing rapid transitions. The lost concept of 'appropriate use of technology' which was shortened to 'appropriate technology' in the Alma-Ata Declaration of 1978 needs to be revisited. We need to understand how water, sanitation and hygiene services can and should play a role in supporting sustainable and equitable development, and what can be done to ensure that particular groups of people do not get left behind. Our focus for JWASHDev remains strongly on those places where infrastructure endowments remain low and services fail to meet the highest standards. This is both a challenge and an opportunity for high quality research focused on such countries to support informed policy making and investment, generate new models of successful service delivery and a new concept of modern sustainable WASH services.

THE FUTURE FOCUS OF JWASHDEV

For this reason, *IWASHDev* will continue to focus on papers presenting research and practice from Africa, Asia, parts of Latin America, the Pacific, the Middle East and Eastern Europe. These are the places where the vast majority of the investment in WASH will occur in the coming 15 years. These are also the places where we see the most rapid growth of young researchers and practitioners. One of the core mandates of the Journal is to provide a platform for those young researchers to showcase their work, work which is embedded in a strong local understanding of context, while also being strongly linked to the global network of knowledge and experience. JWashDev will continue to seek for ways to support early career researchers, and authors from countries where practice and science urgently need to come together. Our commitment is to project their voices and knowledge on the world stage.

We also remain committed to supporting and showcasing research that transforms how people actually do things - or implementation science. This may be in the field of policy development or of project and programme delivery, developing our understanding of how large and small implementers from the public sector, the private sector and civil society organisations can most effectively deploy their skills and resources in order to design and deliver better services. We particularly want to actively encourage publication of rigorous evaluation of programmes, with a focus on understanding how effective they can be in improving the quality of people's lives. Full-blown rigorous health impact studies find a platform in the medical literature; at *JWashDev* we aim to champion the need for high quality studies that examine how we can best deliver high quality services. Such studies recognise that there are multiple outcomes from the provision of WASH services, of which improved health is only one, and that rigorous evaluations are required that use effective metrics of the range of outcomes and their impact on real peoples' lives. Our watchword is to showcase evaluations and research which is 'rigorous but embedded in the real world'.

Water supply, sanitation and hygiene are all extremely important in their own right, but they are materially different institutionally, technically and in terms of their social and financial characteristics. There has not been enough work done to understand what integration of these complex interventions means and how we can do that well, without creating excessive transactions costs or unclear outcomes that reduce accountability. Three decades after WATSAN was coined as a term to encompass water supply and sanitation, we lack a real understanding how both water supply and sanitation fit together with other foundational service sectors such as health, urban development, housing, nutrition and education.

Economics and financing are at the heart and centre of solving SDG challenges. We need more research in this area. To this end we are kicking off a series of special issues with a focus on this neglected area and have recruited new members of the editorial team to drive this forward. Mainstreaming an understanding of finance within the sector will help build knowledge and capacity within the sector to work with experts in financing more effectively and to develop new and rigorous research.

Value for money matters more than ever before, both in the WASH sector and in academic publishing. But this has been neglected in water supply, sanitation and hygiene programming. Much more work is needed to develop strong indicators of value, particularly beyond financial or monetisable value. Development is not a zero-sum game, so we need to support new thinking that creates frameworks for understanding the value of bundled improvements in services, and outcomes that extend beyond diarrhoeal disease. We need to better understand the wider impacts of WASH on health and wellbeing - including benefits of time savings, education, dignity and ethics. We need to understand wider social benefits from water and sanitation and consider more the inter-generational benefits that may accrue from improved services. More research is needed in this space, which is fundamentally about our human values.

To address these immense challenges the Journal is supported by an editorial team with a wide range of skills and experience, covering the full breadth of what we are interested in and facing towards both practice and academia.

vii

THE ROLE OF RESEARCHERS, AUTHORS AND **IMPLEMENTERS**

In this new period for the Journal we are particularly encouraging contributions that deal with:

- Programmatic/practice evaluations: rigorous evaluations of programmes using well-articulated frames and appropriate indicators. Our interest extends beyond Randomised Control Trials (RCTs) and we are particularly keen to see evaluations that generate lessons for effective implementation.
- Technologies and processes: with a focus on those that operate at community/population level for water supply and research that examines how these can be embedded in sustainable programming at scale. We anticipate less focus than previously on household-level interventions.
- Economics and finance: particularly value for money and assessments of the real full costs and benefits of interventions.
- Sanitation: safely managed rural sanitation, sanitation within the context of urban utility services, links to planning, housing and equity, innovations in wastewater and faecal sludge management in terms of how we efficiently recover resources and embed sanitation within wider ecosystems and economies.
- Water quality: with a focus on how long-standing problems of microbial and chemical contamination of water can be prevented at a community supply level, and to encourage understanding of emerging threats that remain under-researched.

We will particularly value papers that demonstrate an understanding of the complex challenges inherent in WASH and development. This includes but is not limited to:

- · Papers that report research from more than one discipline, which are genuinely a result of interdisciplinary work and which apply a range of research methods to complex problems.
- Papers which reflect on the implications of the changing climate, demographic shifts and economic growth on results and ideas that are being reported.
- Papers that address the challenges of service delivery to individuals, communities, regions and countries that are structurally disadvantaged in terms of access to modern, high quality WASH services.

In recent years there has been much talk about how academic publishing works and how it sometimes fails. At *[WashDev* we are committed to maximising access. In this regard IWA Publishing provides free online access to users of IWashDev from low-income countries, and we have developed a handy guide on how to use this facility which is available on our website. We are also working hard to increase the proportion of our papers which are open access. We encourage all authors to approach as many funders/colleagues as possible explore options to publish with open access. IWA Publishing further supports open access by providing fee waivers and discounts for authors from low-income countries. We also ask you to recognise that the work of your editorial team, reviewers and all other academic inputs to the publishing process are done on a voluntary basis; please consider becoming an active reviewer or editor. Participation in the publishing process is an honour and a privilege and we welcome any new contributions. Please contact the Journal Office for more information.

A PARTNERSHIP BETWEEN RESEARCH AND IMPLEMENTATION

JWASHDev has become an important bridge between rigorous research and implementation. It is a bridge with a strong foundation in fundamental science and evidence but with a commitment to interpreting this for the use of practitioners. Its characteristics can be summed up as high academic quality and high relevance to the needs of those who remain excluded from effective modern WASH services. It is our honour and privilege to be the current Editors in Chief of the journal and we look forward to another 3 years of supporting you all as your report on your diverse, high quality and important work.

Editors in Chief Barbara Evans

The University of Leeds, UK

Guy Howard

University of Bristol, UK

December 2019