World Journal of Pediatric Surgery

Publishing trends in World Journal of Pediatric Surgery

Qi Qi, Robert Dorazio , Lili Yang, Yicheng Xie, Qiang Shu

To cite: Qi Q, Dorazio R, Yang L, *et al*. Publishing trends in World Journal of Pediatric Surgery. *World Jnl Ped Surgery* 2022;**5**:e000489. doi:10.1136/wjps-2022-000489

QQ and RD contributed equally.

Received 16 August 2022
Accepted 22 August 2022

National Clinical Research Center for Child Health, National Children's Regional Medical Center, Children's Hospital, Zhejiang University School of Medicine, Hangzhou, China

Correspondence to
Dr Qiang Shu; shuqiang@zju.edu.cn

In the era of evidence-based medicine, medical journals are the most respected sources of information for physicians and policymakers seeking and receiving evidence to guide clinical practice and decision-making.[1] Within the field of pediatric surgery, there are several journals with a long history: *Journal of Pediatric Surgery* (JPS), which was created in 1966, *Pediatric Surgery International* (PSI) in 1986 and the *European Journal of Pediatric Surgery* (EJPS) in 1991. *World Journal of Pediatric Surgery* (WJPS) was established in 2018, when the first editorial was published online written by the Editor-in-Chief Dr Qiang Shu. WJPS mainly reports on advanced theoretical techniques and frontier achievements of high-quality basic and clinical research in pediatric surgery.

ARTICLES PUBLISHED ON WJPS

WJPS is a quarterly issued journal. During the past 4 years (2018–2021), the journal has published 98 articles with increased yearly published items (3 articles in 2018, 26 in 2019, 33 in 2020 and 36 in 2021) (see table 1). Among them, most are original researches (n=56, 57.1%), followed by reviews (n=16, 16.3%), research letters (n=8, 8.2%), clinical images (n=7, 7.1%), editorials (n=7, 7.1%) and case reports (n=4, 4.1%). In the year of 2018, WJPS only published one issue with three articles. In 2019, the journal introduced a new category of research letter that includes concise, focused researches or descriptive studies that describe preliminary, but meaningful, findings. With the increasing volume of submissions, the journal published 9 review articles in 2020 and 23 original researches in 2021. Since 2020, WJPS no longer accepts case reports or case series.

COMPARISON OF ARTICLE CATEGORY AMONG JPS, PSI, EJPS AND WJPS

We compared the proportion of different categories of articles published in 2021 on JPS, PSI, EJPS and WJPS (figure 1). Only original researches that include clinical trial, cohort, case–control, cross-sectional, and quality improvement study, economic evaluation, protocol development and non-clinical experiment, and reviews that include systematic review, meta-analysis, scoping review and narrative review are included in the analysis.

The most published article category in all four journals were cross-sectional studies (30.0% for JPS, 27.8% for EJPS, 37.0% for PSI and 51.9% for WJPS). JPS, which is published monthly, published the most comprehensive categories of articles (n=10) in 2021. Besides cross-sectional studies (30.0%), articles in JPS included cohort studies (14.4%), comparative effectiveness studies (12.2%) and non-clinical experiments (11.1%). EJPS is a bimonthly journal and included nine categories of articles in 2021, among which the top three categories were cross-sectional studies (27.8%), reviews (20.8%) and comparative effectiveness studies (19.4%). PSI is a monthly published journal. PSI published nine categories of articles in 2021 with 37% cross-sectional, 17.5% comparative effectiveness studies, 14% reviews and 11% cohort studies and others. WJPS is published quarterly and published the fewest number of article categories (n=5). Besides cross-sectional studies (51.8%), the next three categories of articles published by WJPS have the same proportion (14.8% of each category: reviews, cohort and comparative effectiveness studies).

FUTURE PUBLISHING PLAN OF WJPS

By comparing the proportion of articles published in 2021 with three leading pediatric surgery journals, we found that WJPS published the fewest categories of articles and had similar proportion of articles with PSI. In 2021, WJPS published only one clinical trial and no articles in the categories of case–control, non-clinical experiment, protocol development, economic evaluation and quality improvement study.

Table 1 Articles published on WJPS from 2018 to 2021 with different article categories

Year	Review	Original research	Research letter	Clinical image	Case report	Editorial	Total publication
2018	1	0	0	0	1	1	3
2019	2	18	1	0	3	2	26
2020	9	15	3	6	0	0	33
2021	4	23	4	1	0	4	36
Total	16	56	8	7	4	7	98

WJPS, World Journal of Pediatric Surgery.

According to Instructions for Authors of JAMA,[2] clinical trials include randomized clinical trial (RCT), parallel-design double-blind trial, crossover trial, equivalence and non-inferiority trial, cluster trial and non-randomized controlled trial. Evidence from well-designed clinical trials is most used by clinicians and decision-makers to assess therapeutic efficacy,[3] among which RCT is considered as a gold standard.[4] Unlike a clinical trial, which is prospective, a case–control is designed to be retrospective and is the most common design for association analysis of disease traits in a population.[5] As reported, there are increasing reports of observational studies including case–control trials in the medical literature, including the pediatric surgery literature.[6 7] In the future, WJPS would like to publish more high-quality clinical trials and case–control studies related to all aspects of pediatric surgery. Non-clinical experiments usually use non-human subjects, such as animal models or inanimate materials. For animal preclinical studies, the ARRIVE guidelines[8] are recommended. WJPS published an article entitled 'Animal models of necrotizing enterocolitis'[9] in March 25, 2020, which is one of the top cited articles of the journal. Protocol development is a descriptive study of a new surgical protocol or method. Pediatric surgeon may be interested in novel procedures to address physiological and sociological challenges in the pediatric population that are different from those in adults. Economic evaluation includes cost-effectiveness, cost–benefit, and cost-minimization analyses that provide information about the value for money of different interventions in healthcare.[10] In clinical pediatric, the cost of a surgery may affect the descisions of patients or their parents. Economic evaluation can assist decision-making for allocating different resources to achieve the best effect by weighing the relative gains and losses. Quality improvement is a systematic review of outcomes that benefits decrease of medical error using data to define, measure, and evaluate a healthcare practice or service.[11] Surgical quality improvement is intended to ensure patient safety and high-quality surgical care.[12]

In the future, WJPS will strive to publish more articles in these categories, covering all levels of quality evidence, to guide decision-making in pediatric surgery clinical practice. Meanwhile, WJPS is actively taking steps to safeguard the quality of future articles. In June 2022, the journal updated Instructions for Authors with changes on article category and additional checklist as well. We add the Consolidated Standards of Reporting Trials[13] checklist for clinical trials and Strengthening the Reporting of Observational Studies in Epidemiology[14] checklist for observational studies (cohort, case–control, or cross-sectional study), the Preferred Reporting Items for Systematic Reviews and Meta-Analyses[15] checklist and flow diagram for systematic reviews to ensure the rationality, rigor and repeatability of the study design. WJPS will continue to report cutting-edge findings and to provide a forum to share scientific discovery and experiences in pediatric surgery for worldwide physicians, researchers and policymakers to advance the health and well-being of infants, children and adolescents.

Contributors QQ—writing (original draft). RD—data analysis. LY, YX and QS—writing (review and editing). All authors reviewed, revised, and approved the final manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests QQ and LY are medical editors of the journal. QS is Editor-in-Chief of the journal. All authors declare that they have no financial or non-financial conflict of interest related to this paper.

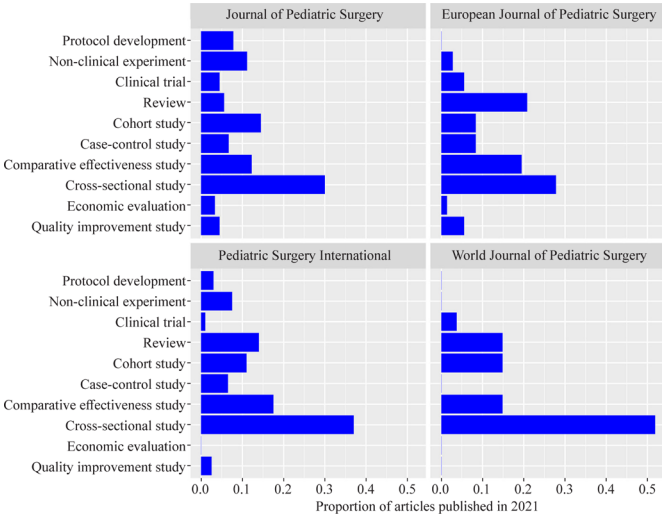

Figure 1 Proportion of articles published on JPS, EJPS, PSI and WJPS in 2021. Only articles of original researches and reviews are analyzed. EJPS, European Journal of Pediatric Surgery; JPS, Journal of Pediatric Surgery; PSI, Pediatric Surgery International; WJPS, World Journal of Pediatric Surgery.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Commissioned; internally peer reviewed.

ORCID iDs
Robert Dorazio http://orcid.org/0000-0003-2663-0468
Qiang Shu http://orcid.org/0000-0002-4106-6255

REFERENCES

1 Vere J, Gibson B. Evidence-based medicine as science. *J Eval Clin Pract* 2019;25:997–1002.
2 JAMA. Instructions for authors, 2022. American Medical Association. Available: https://jamanetwork.com/journals/jama/pages/for-authors [Accessed 10 Aug 2022].
3 Schultz A, Saville BR, Marsh JA, *et al*. An introduction to clinical trial design. *Paediatr Respir Rev* 2019;32:30–5.
4 Byar DP, Simon RM, Friedewald WT, *et al*. Randomized clinical trials. Perspectives on some recent ideas. *N Engl J Med* 1976;295:74–80.
5 Belbasis L, Bellou V. Introduction to epidemiological studies. *Methods Mol Biol* 1793;2018:1–6.
6 Hellems MA, Kramer MS, Hayden GF. Case-control confusion. *Ambul Pediatr* 2006;6:96–9.
7 Mihailovic A, Bell CM, Urbach DR. Users' guide to the surgical literature. *Can J Surg* 2005;48:148–51.
8 The ARRIVE guidelines 2.0: updated guidelines for reporting animal research. Available: https://openscience.bmj.com/content/bmjos/4/1/e100115.full.pdf [Accessed 10 Aug 2022].
9 Mendez YS, Khan FA, Perrier GV, *et al*. Animal models of necrotizing enterocolitis. *World Jnl Ped Surgery* 2020;3:e000109.
10 Wilson ECF. The use of economic evaluation in pediatric research. *J Pediatr* 2021;233:286–9.
11 JAMA pediatrics. Instructions for authors. American Medical Association, 2022. Available: https://jamanetwork.com/journals/jamapediatrics/pages/instructions-for-authors [Accessed 10 Aug 2022].
12 Yu J, Massarweh NN. Surgical quality improvement: working toward value or a work in progress? *J Surg Res* 2019;235:160–6.
13 Moher D, Schulz KF, Altman DG. The CONSORT statement: revised recommendations for improving the quality of reports of parallel-group randomised trials. *Lancet* 2001;357:1191–4.
14 von Elm E, Altman DG, Egger M, *et al*. The strengthening the reporting of observational studies in epidemiology (STROBE) statement: guidelines for reporting observational studies. *Lancet* 2007;370:1453–7.
15 Page MJ, McKenzie JE, Bossuyt PM, *et al*. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71.