

Do Paediatric Research Presentations at Local Meetings Get Published?

P W K Chan, MPAeds*, M Z Norzila, MMed.Paeds, A A Bilkis, MMed.Paeds***, A Mazidat, MMed.Paeds******

Departments of Paediatrics, *University Malaya Medical Center, 50603 Kuala Lumpur, **Institute Pediatrik, 53000 Kuala Lumpur, ***Hospital Universiti Kebangsaan Malaysia, Jalan Tenteram, Cheras, 56000 Kuala Lumpur, ****Universiti Sains Malaysia, Kubang Kerian, 16150 Kelantan

Summary

Accessibility of research done locally to clinicians remains limited unless it is in the published form. The publication rate of research presentations at the Annual Malaysian Paediatric Association, Perinatal Society of Malaysia and Academy of Medicine Malaysia in 1997 and 1998 was determined.

One hundred and five (95.5%) of 110 research presentations were carried out in Malaysia. Thirty-seven (35.2%) presentations were published. University-affiliated institutions were more likely to publish their research presentations as compared to Ministry of Health hospitals (OR 3.1 95% CI 1.4 - 6.8, $p < 0.01$).

There is a need to encourage publication of local research presentations. University-affiliated institutions performed better due to institution pressure for career advancement.

Key Words: Publication, Research presentation

Introduction

Research studies that are presented at a meeting remain inaccessible to the majority of clinicians unless it is available in the published form. Research studies done in Malaysia are important as they provide information that may confirm or contradict the current literature and evidence that predominantly originated in the more developed nations of the West. The increasing dependence of clinical practice and implementation of health policies on evidence based medicine will

certainly elevate the importance of local research studies and their results.

Paediatric research studies carried out in Malaysia are most likely presented at 3 local scientific meetings namely the Malaysian Paediatric Association (MPA) Annual Congress, the Perinatal Society of Malaysia (PSM) Annual Congress and the Academy of Medicine of Malaysia (AMM) Annual Scientific Congress of Medicine. All 3 meetings have a full session dedicated to presentations in

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Corresponding Author: Patrick Chan, Department of Paediatrics, University Malaya Medical Center, 59100 Kuala Lumpur

research studies carried out locally involving children as part of its scientific programme.

We determined the publication rate of paediatric research presentations at the 3 major annual medical scientific meetings of the MPA, PSM and AMM at 2 or more years after the event.

Materials and Methods

We selected abstracts of research presentations from proceedings of the annual medical scientific congress' of the MPA and PSM for 2 consecutive years namely 1997 and 1998. Only abstracts of research presentations at the annual AMM congress for the year 1997 were included as the annual meeting in 1998 was held in Singapore. Only research presentations that involved subjects aged 0 - 16 years and carried out in Malaysia were included.

A publication search was then performed using 2 established journal citation databases namely MEDLINE and OVID. The search was done by using any of the authors' surnames and institution where the research presentation originated from as search keywords; with time limits set at 1 January 1997 and 30 September 2001. A hand search of 3 local journals namely the Medical Journal of Malaysia, Malaysian Journal of Paediatrics and Child Health and Malaysian Journal of Pathology was carried out for available journal issues from January 1997 to September 2001. The published abstracts were then retrieved and compared with the index abstract presentations to avoid repetition or errors.

Statistical Analysis

Data collected was managed with statistical package SPSS version 7.5 (SPSS Inc, Chicago, Ill, USA). Continuous variables were compared with the students' t test. Dichotomous variables were

compared using the chi-square or Fishers exact test and described with univariate analysis using odd ratios (OR) and 95% confidence intervals (CI), where appropriate. A p value of less than 0.05 was considered as significant.

Results

One hundred and five (95.5%) of 110 research abstracts presented were carried out in Malaysia. Seventy-six (72.4%) of the research presentations were at the annual MPA meeting followed by 19 (18.1%) at the annual PSM meeting and 10 (9.5%) at the annual AMM congress. University-affiliated institutions contributed 63 (60.0%) of these research presentations as compared to 39 (37.1%) from the Ministry of Health (MOH) affiliated hospitals. Three (2.9%) research presentations were combined efforts of the Institute of Medical Research (IMR), university and MOH affiliated hospitals. Neonatology was the most common paediatric specialty represented followed by respiratory medicine, cardiology, infectious disease and haematology/oncology (Table I).

Thirty-seven abstracts were available in published form in a peer-reviewed journal resulting in a publication rate of 35.2 per 100 research presentations. Research presentations of university-affiliated institutions were more likely to be published than those from MOH hospitals (47.6 per 100 vs 15.4 per 100, $p < 0.01$). Therefore, authors from university affiliated institutions were 3.1 times more likely to publish their research findings than their counterparts from MOH hospitals (95% CI 1.4 - 6.8). There were 27 (73.0%) publications in international/regional journals compared to 10 (27.0%) publications in local medical journals. There was a similar preference to publish in an international/regional journal for both university affiliated institutions and MOH hospitals (22/30; 66.7% vs 4/6; 66.7%, $p = 0.781$).

Discussion

Publication of a research presentation obviously increases the accessibility of important information to a wider medical audience. Clinicians do not always have the time to attend every scientific meeting and may not be able to afford the cost associated with attending all these meetings. The accessibility of research presentations in the published form is of course less costly and may be accessed at the convenience of the clinician or when the need arose. More importantly, the peer review process by an expert panel provides testimony to the quality and acceptability of the research results and conclusions, an aspect not addressed satisfactorily by presentation to a captive audience at a scientific meeting.

The publication rate of local paediatric research presentations is unfortunately dismal with less than 40% of these presentations available in the published form. Our publication rate fares poorly with the paediatric medical population of more developed nations of the West. An audit of research presentations at the British Paediatric Association Annual Meeting revealed a publication rate of 78%¹. A more dated audit showed that 53.9% of research presentations at the American Pediatric Society for Pediatric Research Meeting was eventually published². There is currently no data on the publication rate of paediatric research presentations for nations that more closely mirror Malaysia's socio-economic and medical service structure.

As expected, research presentations from university-affiliated institutions were more likely to be published than those from public hospitals of the MOH. The most important reason for this observation is the close association of research publications and career advancement in academic institutions. Paediatricians from the MOH will cite many factors that discourage performing research including a heavy clinical service load, persistent

lack of adequate manpower, administrative duties, lack of support infrastructure like a well equipped medical library and research grants. Research and publications do not appear to pose an essential component for career advancement in the MOH. It is therefore rather obvious that there is little to compel paediatricians in the MOH to publish research presentations, let alone perform research apart from individual interest and self-satisfaction. It is perhaps timely that the few individuals from the MOH who do, be given the due recognition by the relevant authorities; such as early consideration for career promotion or research be given greater emphasis in the annual MOH work performance assessment. This observation is however not reflected in the United Kingdom where there was no clear difference in the publication rate between research presentation by an author from an academic post compared to a non-academic post¹.

There was a marked preference for paediatric research presentations to be published in peer reviewed international/regional medical journals rather than local medical journals. It is obvious that publication in an international/regional journal provides affirmation to the quality of the research done and may be considered acceptance of the research on a more global level. There is also a desire for research to be published in journals considered to be of high impact and regarded as having the 'best evidence'³. For the young academic researcher, international/regional recognition of research clearly elevates the opportunities for not only career advancement but also success in future research grant applications. It may be argued that research work published in international/regional medical journals are less likely to be accessible to most clinicians in Malaysia therefore defeating the primary objective of making such information available for locally practicing clinicians. However, many international/regional journals now provide journal access on the internet with subject search programmes that are user friendly

and easily accessible to clinicians. More over, the number and annual volumes of local medical journals are limited resulting in a delay in the eventual publication of the research work, further discouraging submission to these journals.

A possible under-estimate of the publication rate of research presentations may be due to that only surnames were used as search key words. We hoped that this shortcoming was minimized by the additional search of the databases using the institution name where the research presentation originated from. The observations reported here also did not include research studies that may have been presented at other medical scientific

meetings especially those overseas or presentations that were published in journals not cited on the 2 databases used. However, this number is most likely small and most of the paediatric research studies carried out in Malaysia for the study period were captured.

This audit of research presentations demonstrates the overall need to promote and encourage paediatric research and publication of such research in Malaysia. The cultivation of a research culture and motivation for publishing research work should not only be confined to university affiliated institutions but include all health workers involved in the care of children.

Table 1: Research presentations, research publications and paediatric speciality (N = 105)

Paediatric speciality	n (%)	Number published	Publication rate (per 100)
Neonatology	27 (25.7)	9	33.3
Respiratory Medicine	14 (13.3)	8	57.1
Cardiology	12 (11.4)	1	8.3
Infectious Disease	10 (9.5)	2	20.0
Haematology/Oncology	8 (7.6)	5	62.5
Critical Care	7 (6.7)	4	57.1
Community Paediatrics	6 (5.7)	1	16.7
General Paediatrics	5 (4.8)	2	40.0
Paediatric Surgery	5 (4.8)	1	20.0
Gastroenterology	4 (3.8)	3	75.0
Neurology	2 (1.9)	0	0.0
Metabolic	2 (1.9)	0	0.0
Nephrology	1 (1.0)	1	100.0
Child psychiatry	1 (1.0)	0	0.0
Endocrinology	1 (1.0)	0	0.0

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