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Readers' perceptions of the Journal of Emergency Primary Health Care: A cross-sectional study

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Objective

The Journal of Emergency Primary Health Care (JEPHC) is a subscription free, peer-reviewed online publication, intended to promote the publication of emergency primary health care research covering original studies, editorials and reviews. Data collected from annual surveys have been utilised since 2003 to provide the journal's Editorial Team and Management Committee with readers' preferences and perceptions of the journal in relation to planning and development of quality standards and content appropriate to the journal's readership. This study provides a comparative analysis of survey results from the 2004 and 2006 surveys. The objective of this study was to provide the journal's Editorial Team and Management Committee with results from the survey to assist future planning.

Methods

A cross-sectional methodology based on data collected from questionnaire surveys utilised in 2004 and 2006, was used to solicit the views and content requirements of visitors to JEPHC. Data collected from all survey responses (n=100 in 2006 and n=44 in 2004) was intended to provide a snapshot of the journal's readership in relation to professional status, content preferences and usefulness of editorial standards as means of supporting research needs, and encouraging future research content. As this article evaluates and reports the results of a quality audit, ethics approval was not required.

Results

The majority of respondents from both surveys were identified mainly as paramedics, while remaining respondents represented a cross section of other health professionals, educators and researchers. Reasons given by most respondents for visiting JEPHC were to locate peer-reviewed articles and case histories relevant to clinical practice. Most respondents rated JEPHC equally with other peer-reviewed journals. The majority of respondents (86%) indicated that they would consider writing for the journal, while 50% of those who indicated that they would not, expressed a lack of skills, motivation or knowledge as being the main reasons. Less than 50% of respondents in the 2006 survey indicated that they knew about the Journal Impact Factor or its usefulness to research.

Conclusion

As the majority of respondents in both surveys were identified mainly as paramedics, results from the study cannot be generalised to the wider population of emergency primary health care professionals. The large difference in sample sizes between the 2004 and 2006 surveys renders inferential statistics relating to quality, as problematic. Identification and consistency of content that is of most interest to readers is evident in both surveys. However, to more accurately determine relevance and quality of content, and the significance of publishing standards which are representative of the journal's wider readership, modification of the survey design and/or setting may be required to attract a higher response rate in future surveys.

Keywords: data collection; questionnaires; readers' survey; surveys

Introduction

The Journal of Emergency Primary Health Care (JEPHC) is administered and published by Monash University Department of Community Emergency Health and Paramedic Practice in partnership with the Australian College of Ambulance Professionals (ACAP). Launched in 2002, the journal is a subscription free, peer-reviewed online publication intended to promote active participation in emergency primary health care research for the publication of important studies, editorials and reviews which are often undisclosed due to limited publishing space in more established peer-reviewed medical journals.¹ In addition to JEPHC, ACAP also publishes *RESPONSE* magazine, which is a non peer-reviewed print publication, circulated to ACAP members on a quarterly basis.

As the mission of JEPHC is to provide a forum for the promotion of quality research in emergency primary health care, the development of publishing standards and quality content have been a priority of JEPHC management committee² since the journal's inception. The distribution and analysis of annual Readers' Surveys has assisted in setting the basis for change.

The objective of this study was to provide the journal's Editorial Team and Management Committee with results from the survey to assist future planning.

Methods

The 2006 online surveys ran for a period of twelve weeks on the journal's website, and inclusion criteria were all visitors who had access to the survey during the time that it was available. There were no exclusion criteria.

A survey consisting of 22 multiple selection and closed (yes/no) questions, was utilised to gain the required information. Participants were also invited to volunteer additional comments in selected areas if desired.

Descriptive data analysis was undertaken using SPSS (Statistical Package for the Social Sciences Version 14.0, SPSS Inc., Chicago, Illinois, U.S.A.). Additional statistics, including proportional differences were undertaken using EpiCalc 2000 (Version 1.02, Brixton Books, 1998).

Descriptive statistics were used to summarise the data, and differences in proportions were used to compare the 2004 and 2006 cohorts. The results are considered statistically

significance if the P value is < 0.05 , and all confidence intervals (CI) are 95%.

Results

One hundred respondents from national and international locations completed the 2006 online survey.

Profiles of Respondents

Thirty-nine percent ($n=42$) of respondents in both surveys were identified as ACAP members whose current primary involvement was as an Ambulance Professional (see Table 1). The only statistically significant difference between the two surveys was the “No Response”.

Table 1: Current Primary Involvement as an Ambulance Professional

Respondents	2006 (n=100)	2004 (n=44)	Difference
Manager	9	6	4.64, CI -8.59 to 17.86, p=0.587
Educator	23	6	9.36, CI -5.34, 24.07, p=0.287
Researcher	17	2	12.45, CI 1.22 to 23.69, p=0.077
On-road Paramedic	37	Not included	Not Applicable
Prehospital Care Provider	Not included	22	Not Applicable
Private Patient Transport Officer	1	Not included	Not Applicable
No Response	3	8	15.18, CI 1.67 to 28.70, , p=0.004

The current level of practice of the respondents is listed in Table 2. The only statistically significant difference between the two surveys was the “No Response”.

Table 2: Current Level of Practice

Respondents	2006 (n=100)	2004 (n=44)	Difference
Intensive Care/MICA Paramedic	28	12	0.73, CI -16.74 to 18.19, p=0.911
Ambulance/ALS Paramedic	31	13	1.45, CI -16.43 to 19.34, p=0.982
Student Paramedic	16	5	4.64, CI -8.81 to 18.09, p=0.638
Casual/Volunteer	9	2	4.45, CI -5.51 to 14.42, p=0.557
First Responder	7	0	7.00, CI 0.36 to 13.64, p=0.168
Communications	1	1	1.27, CI -5.18 to 7.73, p=0.864
First Aider	4	0	4.00, CI -1.48 to 9.48, p=0.426
No Response	4	11	21.00, CI 6.00, 36.00, p=< 0.000

Table 3 identifies other visitors who are not ambulance professionals, but who undertook the survey. “Other professional role” and “not disclosed” were the only statistically significant responses. To obtain an overview of readers located in other professions, respondents in the 2006 survey who selected “other professional role” were invited to specify their roles. These included naval medical staff, fire fighters, student nurses and prehospital physicians. Given the broad range of professionals who may be representative of regular visitors to the journal, the provision of editorial content which is particularly relevant to those professionals, may be of value.

Table 3: Professional role other than ambulance profession

Respondents	2006 (n=37)	2004 (n=18)	Difference
Administrator	2	4	16.82, CI -7.85 to 41.49, p=0.157
Medical Officer	4	2	0.30, CI -21.46 to 22.06, p=0.669
Registered Nurse	11	2	18.62, CI -6.19 to 43.43, p=0.235
Other	19	2	40.24, CI 14.43 to 66.05, p=0.009
Not Disclosed	1	8	41.74, CI 14.07 to 69.41, p=<0.001

Reasons for visiting JEPHC

Forty-four percent (n=44) of the 2006 respondents claimed to have known about JEPHC for more than 3 years; 16% (n=16) for 2-3 years; 18% (n=18) for 1 to 2 years, and 22% (n=22) less than 1 year.

A comparison of results from the 2004 and 2006 surveys (Table 4) indicates an increase in those visiting JEPHC to find research articles. This result was statistically significant. Similar increases are seen in “Find information of interest”, “Check for new content”, and “Searching past issues”. “Check for new content” was statistically significant, while remaining results were not statistically significant.

Table 4: Main interest for visiting JEPHC

Respondents	2006 (n=203)	2004 (n=44)	Difference
Find research articles	62	5	18.91, CI 6.02 to 31.81, p=0.019
Find information of interest	60	6	15.60, CI 2.08 to 29.12, p=0.056
Check for new content	51	28	39.99, CI 23.14 to 56.85, p=< 0.000
Search past issues	22	1	8.51, CI 0.89 to 16.13, p= 0.146
Revisit a particular section	7	2	1.20, CI -6.98 to 9.39, p=0.948
Other	1	1	1.83, CI -4.18 to 7.85, p=0.778
No Response	0	1	Not Applicable

Responses in Table 5 further define content that is of most interest and relevance to respondents in the 2004 and 2006 surveys. However, none of these responses were statistically significant. As Table 5 shows, respondents have indicated in both surveys, Evidence-based Practice, Clinical Practice and Original Research continue to be of most interest and relevance, while non peer-reviewed content such as Profiles, ACAP Updates, Opinions/Consensus Papers and Editorials, continue to rate less favourably. While statistically significant results may have provided a rationale for introducing new content, any change decision would be compromised by the small sample size. Qualitative responses relating to why content is of most interest or relevance, may have produced more significant results.

Table 5: Content which is of most interest or relevance in JEPHC

Respondents	2006 (n=538)	2004 (n=256)	Difference
Cochrane Corner	35	Not included	Not Applicable
Editorials	22	17	2.55, CI -1.22 to 6.32, p=0.168
Guest editorials	16	10	0.93, CI -2.13 to 3.99, p=0.634
Policy and Service Delivery	20	7	0.98, CI -1.86 to 3.83, p=0.614
Original Research	57	31	1.51, CI -3.54 to 6.57, p=0.607
Clinical practice	69	29	1.50, CI -3.59 to 6.59, p=0.628
Evidence-Based Practice	74	33	0.86, CI -4.46 to 6.18, p=0.824
Education	51	24	0.10, CI -4.53 to 4.74, p=0.934
Opinions/Consensus Papers	16	13	2.10, CI -1.23 to 5.44, p=0.202
Case histories	40	18	0.40, CI -3.72 to 4.53, p=0.953
Student papers	23	11	0.02, CI -3.28 to 3.33, p=0.862
Profiles	10	9	1.66, CI -1.16 to 4.47, p=0.238
Reviews	21	15	1.96, CI -1.64 to 5.55, p=0.291
ACAP Updates	17	15	2.70, CI -0.82 to 6.22, p=0.106
Conference Reports	20	10	0.19, CI -2.96 to 3.34, p=0.945
Conference Alerts	22	14	1.38, CI -2.16 to 4.92, p=0.489
Author Guidelines	14	Not included	Not Applicable
Reviewer Guidelines	11	Not included	Not Applicable

In comparison to JEPHC's rating against other peer-reviewed journals, respondents in the 2006 survey indicated an increase in the perceived rating of JEPHC as being better than other peer-reviewed journals. Similar results are shown for respondents who rated JEPHC as below the standard of other peer-reviewed journals. However, despite an increase in the 2006 survey in relation to "better" and "equal" responses, none of these results were statistically significant.

Table 6: JEPHC Rating compared to other peer-reviewed journals

Respondents	2006 (n=100)	2004 (n=44)	Difference
Better	27	5	14.64, CI 0.28 to 28.99, p=0.363
Equal	61	29	4.91, CI -13.69 to 23.5, p=0.709
Below	12	5	0.64, CI -12.34 to 13.61, p=0.964
No Response	Not included 2006	5	Not Applicable

The inclusion of open ended questions to define the perceived quality of JEPHC compared to other prehospital and scientific journals, may have rendered a more accurate representation of the respondents' definitions of quality in this part of the survey.

Differences between JEPHC and RESPONSE

To determine factors that could identify the presence of confusion between the peer-reviewed JEPHC and non peer-reviewed RESPONSE, the 2006 survey invited respondents to answer the question "Are you aware that RESPONSE is a separate ACAP publication to JEPHC?". Sixty-six percent (n=66) of respondents were familiar with RESPONSE magazine and the same percentage of respondents indicated that they were aware that the two publications were separate entities. Fifty-five percent (n=55) of respondents identified differences in content between JEPHC, and RESPONSE. Twenty-seven percent (n=15) of those respondents provided additional comments regarding observable differences and expressed that JEPHC was more "academic" "clinical" or "scientific" and RESPONSE was more of a "trade/general interest", "more practical magazine", "less academic" and "not peer-reviewed".

Potential Authors

To determine the interest of readers as potential authors, surveys in 2004 and 2006 asked respondents to indicate whether or not they would consider submitting an article to JEPHC. Results are shown in Table 7. There was no statistically significant difference between the two years.

Table 7: Would you consider submitting an article to JEPHC?

Respondents	2006 (n=100)	2004 (n=41)	Difference
Yes	86	32	7.95, CI -8.15 to 24.05, p=0.363
No	14	9	

Respondents were also invited in both surveys to indicate why they would not submit an article to the journal. Comments included:

2004 Survey

- *"Wouldn't know how."*
- *"Don't have the writing or research skills."*
- *"Too busy with other commitments."*
- *"The journal is not targeted at the non-emergency sector."*
- *"Don't have the knowledge to do this sort of thing, prefer to read than write."*
- *"If the opportunity arose to work with Paramedics in the delivery of education content, would be happy."*
- *"Not at this stage."*

2006 Survey

- *"Cos I'm not that smart!"*
- *"Volunteer Ambulance Officer's views don't mean much in this state."*
- *"I currently do not have the time to devote to compiling something suitable for submission."*
- *"I have a philosophical objection to purely online journals. Whilst JEPHC is peer-reviewed and indexed, I believe that as professionals we should publish in a format that is not only easily available to researchers, but a format that also quickly disseminates information to the casual reader in an effort to foster a culture of inquiry in those not currently pursuing an academic career."*
- *"Too academic. Too interested in academic writing than content."*

Journal Impact Factor

Journal Impact Factor - a tool for ranking, evaluating, and comparing journals by measurement of the frequency with which the average article in a journal has been cited over a particular period of time³ was perceived to be useful by 56% (n=56) of respondents. Fifty-one percent 51% (n=51) of respondents believed that the Journal Impact Factor is useful to their research and 49% were either unsure or did not believe it was useful to their research.

Table 8 shows closed question responses to the question "Are you familiar with Journal Impact Factor?" and is followed in Table 9 with the question "Do you believe that the Journal Impact Factor is useful to your research?" Both questions not only have a bearing on the rationale for obtaining a Journal Impact Factor for JEPHC, but also indicate whether potential authors perceive such standards to be of value to their research in the context of academic productivity.

Table 8:

Respondents	2006 (n=100)
Yes	56
No	44

Table 9:

Respondents	2006 (n=100)
Yes	51
No	7
Not sure	41

Journal Impact Factor is of significant importance to the JEPHC Management Committee, both in terms of identifying future standards and priorities of JEPHC, and in particular, the growing relationship of the Journal Impact Factor with academic merit. This marker may be important to academics in light of the Higher Education Research Data Collection, which uses the Journal Impact Factor as one of the key criteria (in addition to peer review) to measure the quality of journal publications, and to which Lundberg⁴ interestingly attests as an approach which “does not deal with the broader question of academic productivity and merit in context”.

Discussion

Response to the 2006 survey was considered poor, compared to the annual growth rate and overall visits to the journal between 2004 and 2006 (2004 n=50,000 and 2006 n=500,000).

The results of the survey assist the JEPHC Editorial Team and Management Committee in determining the future direction of the journal. However, the study did not demonstrate any significant increase in the non-paramedic cohort, nor was there any change to the type of content retrieved from journal. In percentage terms the 2006 survey cohort indicated that JEPHC was better than other peer-reviewed journals, whilst the other responses showed little or no difference.

Journal Impact Factor was not well understood by respondents and was of little importance to those respondents who were aware of it. This may change through time and influence if Australian academics and researchers select only those journals, which have a Journal Impact Factor, to enhance their academic standing.

The percentage increase of respondents in the 2006 survey, who would consider submitting an article to JEPHC for publication, may indicate that authors who are considering publishing in the scientific literature, may find it less daunting to submit an article to JEPHC than to other more established or ‘better known’ peer-reviewed scientific journals. However, further qualitative data is necessary to support this. Some of the open ended comments relating to reasons that respondents would not publish in JEPHC, may warrant consideration by the journal’s Management Committee to commission articles of a tutorial nature or particular themes, which will encourage potential authors.

This study is potentially limited by lack of numbers and possible bias by those who volunteered to undertake the survey. The lack of numbers indicates that results are not a true representation of all readers of JEPHC and additionally, that some respondents may have chosen to participate in the survey for other reasons. For example, as an opportunity to voice opinions in other matters relating JEPHC, and not directly related to the survey questions.

Conclusion

As with the JEPHC visitors’ survey of 2004, the 2006 respondents were predominantly paramedics who are still interested in peer-reviewed articles and case histories relevant to clinical practice in the prehospital setting. Further promotion of JEPHC to a wider area of emergency primary health professionals may be necessary to encourage new readers and participants in future surveys.

There is still the desire of many respondents to write for the journal but many suggest they do not know how. To meet this need, the journal may benefit from publishing a set of commissioned articles on how to write for a scientific journal.

While the study indicates that readers are aware of the peer review status and differences in content between JEPHC and RESPONSE magazine, there is no evidence to compare JEPHC with other prehospital journals in general. The inclusion of questions to identify this may be useful in future surveys.

Regular encouragement of feedback and participation from visitors to the JEPHC website may assist in identifying areas that are of most interest and value to readers, in support of future publications and to encourage potential authors. The use of short polls on the journal's website may also assist the Editorial Team in determining readers' views and opinions in consideration of current trends and future planning.

As the survey design and/or setting may have contributed to the low response rate, it may be advisable to consider alternative strategies to obtain a higher response rate in future. This may be assisted by piloting the survey in a variety of test settings, to identify strengths and weaknesses, and to provide a more objective indication of the most appropriate type of survey and setting.

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