

Does the South African Physiotherapy Journal fulfill the needs of its constituency? A retrospective article review

ABSTRACT: Professional journals are used to disseminate the knowledge of scholars in the profession and to provide clinicians with guidance for best practice. This article aimed to retrospectively review the role of the South African Journal of Physiotherapy and its contribution to the profession. An archival research design was used to collect information from the archives of the South African Society of Physiotherapy website. The information was retrieved using a data capture sheet and descriptive statistics were used throughout to establish frequencies for the relevant information. During the identified period, 170 articles were published. The greatest number of papers originated in South Africa (81%), 8% from the rest of Africa and 11% written by international authors. Authors with a Masters degree contributed almost 50% of the papers and those with doctorates were responsible for at least 25% of the papers. Most of the papers presented original research (81%) with secondary research such as reviews and scholarly papers accounting for 19% of the total. The most common speciality area addressed through research was linked to musculoskeletal conditions. The journal appears to have provided an important platform for South African academics and emerging researchers to publish their findings. It is suggested that the journal should give preference to papers that deal with issues that are unique to South Africa and sub-Saharan Africa, as these are the least likely to be published elsewhere. In addition, the journal should emphasise papers that will advance the profession.

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INTRODUCTION

More than two decades ago, Corcoran and Kirk (1990), indicated that journal articles offer accessibility to researchers and this was further emphasised when the importance of professional journals was highlighted by professions such as social work (Green, 1996). Professional journals are thus used to disseminate knowledge of scholars in the profession. With regards to the profession, there is a need to educate clinicians about research and ensure that research published is "robust and relevant to clinical practice" (Grimmer-Somers et al. 2007). The authors also propose that it is important to ensure that research is reported in terms of clinical relevance. This is confirmed by Beaulieu et al (2008), who stated that in the interests of fostering better dissemination of new knowledge, links should be created between knowledge 'producers' and potential users. Clinicians are to a large extent dependent on quality research in professional journals in order to provide the guidance for best practice and

usually lack the research skills needed to produce new clinical knowledge. On the other hand, researchers may be removed from clinical application and focus primarily on statistical significance rather than clinical relevance. The journal can be used as the vehicle to bridge the gap between academic research and at the same time ensure that the research, is relevant to those who are dealing with the issues on a day-to-day basis.

Brauer et al (2007:143) points out that "as evidence-based practice gains momentum in physiotherapy, clinicians are increasingly exposed to research related to clinical practice. Along with this increasing exposure comes greater questioning of both the literature and current practice." The journal can allow a platform for this debate to occur between academics and clinicians. In addition, it is essential for journals to ensure that editorial boards are represented by both academics and clinicians in order to objectively bridge the gap between academic research and clinical research.

The stated mission of the South African Society of Physiotherapy (SASP) includes the commitment to strive "to ensure the quality of physiotherapy services to all peoples throughout South Africa." The South African Journal of Physiotherapy (SAJP) is clearly an important resource that assists the SASP in living up to its mission statement. An important issue arising from the SASP's mission is that the quality of physiotherapy services be maintained and improved. In other words, while physiotherapy education is largely focussed on training competent clinicians who are able to assess and manage a wide variety of conditions (Crosbie et al 2002), professional journals aim to

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ensure that therapists keep up to date with developments in the profession and clinical application in order to continue to provide appropriate services. It is reasonable to expect that the SAJP should be meeting the needs of the members of the society in terms of providing a platform upon which to showcase their research as well as providing opportunities to obtain evidence based information. As a professional journal, it may play a role in fostering this process. In addition, as it is well known that the work of researchers from low to mid-income countries represents a small minority of published literature (Patel and Kim 2007) it would be desirable if authors from other African countries were also published.

South Africa has what has been called a 'quadruple' burden of disease, namely a "high rate of infectious diseases (specifically, HIV), high levels of injury, diseases and conditions related to poverty and under-development, and chronic diseases of life" (Bradshaw et al. 2006). As the SASP statement includes the commitment to provide appropriate service to all the people of South Africa, it would appear important that the publications in the journal reflect the health conditions that are experienced by South Africans and not only with conditions that are common and well researched in higher income countries. The South African Journal of Physiotherapy thus currently aims to assist in making research data publicly available primarily in South Africa but also in Africa and internationally.

Through a review of publications in the SAJP over the past nine years, this paper aimed to answer the following questions:

- Does the country of origin of the first author indicate that the South African Journal of Physiotherapy is showcasing the work of South African and African authors?
- Do the papers address the prevalent health conditions of the people of SA, and do the papers include a focus on treatment, rehabilitation, as well as prevention of these conditions?

- Are the published papers contributing to the development of EBP in terms of an increase in the number of experimental studies that were reported?

METHODS

An archival research design was used to collect information for this paper. All articles published in the South African Journal of Physiotherapy (SAJP) for the period 2002 -2010 were accessed and retrieved from the archives of the South African Society of Physiotherapy (SASP) website. Data were captured on an Excel spreadsheet based on the information needed that would address the aim of this current paper. The data captured included author name, qualification, affiliation, type of article (review, original research, scholarly), speciality area addressed by the article (education, neurology, orthopaedics, etc.) and the research methods used. The information was retrieved and organised by the first author and was then checked by the other authors and accuracy of data captured was decided upon by consensus. Descriptive statistics were used throughout to establish frequencies. Stata V9 was used for analysis.

RESULTS

During the period of 2002-2010, 170 articles were published. Of the total publications, there were 119 publications by once-only authors, with 30 authors having published two or more papers in the journal during this period. By far the greatest number of papers originated from South Africa (81%), 8% being written by authors from the rest of Africa and 11% from international authors.

Authors with a Masters degree contributed almost 50% of the papers and those with doctorates were responsible for 25% of the papers. Most of the papers presented original research (81%) with secondary research such as reviews and scholarly papers accounting for 19% of the total. Papers were drawn from 33 different tertiary institutions with the greatest contributors from the South African institutions (University of the Witwatersrand (15%); followed by

the Universities of Stellenbosch (14%), Kwazulu Natal (13%), Pretoria (11%), Western Cape (11%) and Cape Town (8%).

Of the papers published, 92 dealt with specific clinical conditions either as a scholarly paper or prevalence and intervention study. The most common conditions addressed by the articles included low back pain (21%), HIV/AIDS (13%), cardiopulmonary (12%), stroke (9%), cervical spine (7%) and diabetes mellitus (5%). Other less frequently reported conditions were shoulder, ankle and knee injuries (12%). When analysing the papers according to specific clinical specialities highlighted in Table 1, the musculoskeletal system was best represented with 28% of all papers published in this area (n=170). Education topics were the next most commonly published (10%), followed by papers on chronic diseases of lifestyle (9%).

In terms of speciality areas, as defined by three or more publications in a specific speciality, musculo-skeletal research is the most common. Linking the speciality areas to university, the University of Stellenbosch has published extensively in the area of musculo-skeletal physiotherapy and the University of the Witwatersrand has developed a niche area in cardio-pulmonary physiotherapy. The University of Kwa-Zulu Natal has published the most in the area of communicable diseases, whereas Pretoria University has published four papers in the field of professional practice.

The most common research field was clinical practice, which included case studies, randomised control trials and descriptive studies. Epidemiological studies included prevalence surveys and surveys determining the impact of conditions on functioning. At least 10 studies were conducted in the field of research methodology with validation of outcome measures and discussion of the role and teaching of research within the physiotherapy context. A total of 20 (12%) papers addressed educational issues including problems of access to universities for disadvantaged students, experiences of clinical exposure, and the role of student mentoring.

Table 1: Specific clinical specialities reported (N=170)

Speciality areas	Count	%
Musculo-skeletal conditions	47	27.6
Physiotherapy Education	17	10.0
Chronic lifestyle diseases (excluding cardio-pulmonary and stroke) (CDL)	15	8.8
Neurology	15	8.8
Cardio-pulmonary	13	7.6
Communicable disease (CD)	11	6.5
Research methodology and outcome measures	9	5.3
Professional practice	8	4.7
Paediatrics	7	4.1
Basic techniques	6	3.5
Community Based Rehabilitation	5	2.9
Pain	4	2.4
Pharmacology	3	1.8
Womens health	3	1.8
Geriatrics, Disability and rehabilitation, Animal Physiotherapy	3	1.8
Dermatology	2	1.2
Health Promotion	2	1.2
Total	170	100.0

Table 2: University and areas commonly published in

University	Education	Pharmacology	Musculo-skeletal	Cardio-pulmonary	Professional practice	CDL	CD	Neuro
University of Cape Town			4					
University of Kwazulu Natal	3		4				4	
University of Pretoria			4		4	3		
University of Stellenbosch	3	3	13					
University of the Western Cape	3		3			3		3
University of the Witwatersrand	3		3	7		3		

DISCUSSION

The first objective of this paper was to determine whether the journal showcased the work of local South African and of Africa scholars. The vast majority

of papers were from South Africa (80%) and the bulk of the articles published (60%) originated in South African universities, many of which were authored by magisterial students or graduates.

Submission to the Journal may not accurately reflect the research output of the different institutions as many academics might prefer to submit to international journals with a higher impact factor.

For example, in a study on trends in biomedical publications, it was reported that 18% of authors from South Africa published their articles in the 7 MEDLINE-indexed South African journals, but the majority of South African authors published in European (46%) or North American journals (29%) (Hofman et al 2006). However, as the SASP Journal is accredited by the South African Department of Education as a subsidy earning publication, publication here can serve as an important step along the road to international recognition.

The presence of and access to a professional journal should be an incentive for physiotherapists to publish in their own journal. A study conducted among physiotherapy academics found that the presence of an in-house journal at an institution facilitated research productivity in the form of publications among the academics at the institution (Frantz et al 2010). This idea was supported by other studies indicating that professional journals did not commonly publish articles from other professions (Mula 2007) and thus provided an opportunity for the development of discipline specific clinicians and academics as researchers. The current results therefore indicate that the existence of the journal has created opportunities for physiotherapists in South Africa to show case their work in a peer reviewed journal.

Unfortunately, there were few articles from the rest of Africa and this is of concern as it may appear that the journal is following a trend in which African contribution to scholarship is limited. However, the 8% contribution found in this study compares favourably with the 0.5% of papers cited in PubMed in 2004 that originated in Africa, including South Africa (Calculated from published data Schoonbaert 2009). Peer review plays an important role in developing skills in both those who submit articles and those who review these articles. This is enhanced by the journal who currently has both national and international reviewers thus enhancing the development role through feedback to authors.

The next question was whether the Journal published articles are of relevance to the South African population.

As expected, musculo-skeletal injuries and their management featured largely and accounted for almost a third of all papers published. There is evidence from South Africa that non-traumatic pain of the spine and peripheral joints are prevalent including amongst those reliant on public care (Parker and Jelsma 2010). Thus emphasis in research in this area is not necessarily inappropriate for a low-resourced country.

In 2008, it was estimated that just over 5 million people out of a population of 46 million were living with HIV, resulting in a total population prevalence rate of 18% (Department of Health 2008). It was heartening to note that researchers responded to this pandemic as evidenced by the large number of papers dealing with HIV (10% of the condition specific papers). Conversely, there was very little research done on TB (1 paper) and trauma (six papers on traumatic brain injury and on spinal cord injuries) as not only is the incidence and prevalence of these two conditions very high in South Africa (Bradshaw et al 2006) but the associated impairments are most amenable to physiotherapy intervention. Given the population structure of South Africa in which nearly one-third (31,0%) of the population is aged younger than 15 years (StatsSA 2010) the few papers dealing with paediatrics is disappointing. However, in general, it would appear that a large spectrum of conditions was dealt with in the publications in the South African Journal of Physiotherapy.

Evidence-based practice should form a cornerstone of clinical practice. This concept has been recognised as a successful method of promoting quality of teaching and has been accepted by the education leaders of the profession (Frantz and Diener 2009). Evidence-based practice is accepted to be best-practice (Jones et al 2006; Bialocerkowski et al 2004; Sackett et al 2000), and the clinician is in the ideal position to gather evidence for effectiveness of a certain intervention. From the results in the current study, it was not clear how many of the authors who published in the journal were clinicians, but evidence gathered by clinicians and academics is likewise dependent on sound methodological studies. In order

to gather the necessary evidence for physiotherapy practice, there is a need for experimental studies of high quality, where the inclusion criteria are realistic, patients are randomised to experimental groups and measurement is blinded.

We must however, also keep in mind that evidence in EBP should include knowledge from qualitative as well as quantitative research (Wiert and Burwash 2007; Jones et al 2006). Secondly, gathering evidence for an intervention needs to be informed by data on the research population. Despite the presence of some epidemiological studies on African populations in the published articles, African researchers often have to rely on European and American data to inform their research. Lastly, gathering evidence needs applicable and validated outcome measures (Maher and Williams 2005; Chesson et al, 1996). Although several studies were conducted in this field of psychometric properties and outcome measures, we need many more studies validating outcome measures and questionnaires in the indigenous populations of the country.

Bernardht and Tang-Shin-Li (2008) emphasised that in Australia, the output of researchers assist in driving change in physiotherapy practice. This is probably a statement that could be applied all over the world including South Africa. Thus, for the future development of the profession, continuing reporting on clinical research by clinicians and academics is both a necessary and achievable ideal. Importantly for the profession, a partnership in research between academics and clinicians can allow the integration of research and best practice into standard patient care.

CONCLUSION

This paper presents a retrospective view of the 170 papers published in the South African Journal of Physiotherapy over the last ten years. The journal appears to have provided an important platform for South African academics and emerging researchers to publish their findings. Unfortunately the contributions from other African countries were few and reflect a need to engage with researchers from the region to a greater extent. It is suggested that the journal

should find a balance between papers on internationally relevant conditions and papers that deal with conditions and problems that are unique to South Africa and sub-Saharan Africa, as these are the papers that will be less likely to be published elsewhere. Finally, the journal could be seen as an important resource for South African physiotherapists and all efforts to improve the relevance and quality of papers presented for review should be encouraged.

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