Current opinions and implementation rates of Canadian prosthetic and orthotic clinicians on evidence based practice

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Background/Rationale

A thorough search of current literature produced few journal articles about EBP in the field of prosthetics and orthotics (P&O) [1,2]. To date there is no evidence of an attempt to document the sources of information that clinicians access in their daily practices, and more specifically the extent to which they access information that is derived from research. Moreover, there has been no attempt to assess the barriers to EBP that affect the P&O industries, as has been done in other healthcare professions [3-5].

Research Question

What sources of information do P&O clinicians access to facilitate an evidence-based practice in their clinics? What are the perceived barriers and beliefs of P&O clinicians on implementing an evidence based practice?

Methods and Analyses

A survey tool was developed by compiling questions from a review of similar surveys across multiple healthcare industries, and by including additional questions that pertained specifically to the P&O industries. An exploratory factor analysis was performed to produce a list of factors that either inhibited or facilitated the implementation of EBP. A correlation statistical analysis was performed to examine associations amongst demographic data, information sources and the list of factors.

Results

The exploratory factor analysis produced a list of ten factors. Ranked from most inhibitive to least inhibitive (or most facilitative) these factors were; time; limitations in the research; relevance of research to practice; presentation of research; knowledge level of the clinician; EBP related skills; access to journals; facility support of EBP; perceived value of EBP; financial support to attend conferences. Four significant associations were found ($P<0.00016$). Firstly, those who previously had been an author or co-author of a peer reviewed journal article had higher journal usage within the past month, and secondly the authors group felt the access factor was less prohibitive than the non-authors group. Thirdly, clinicians at larger facilities (number of clinicians employed) consulted with their colleagues more so in the past month than clinicians at smaller facilities. Finally, clinicians who worked in private practices felt the financial factor was less prohibitive than those in public facilities.

Conclusion

Our research suggests that clinicians who are involved in the production or research are greater consumers of research and thus clinicians should be further encouraged to participate in its production. Public facilities may want to re-examine their level of financial commitment to sending their clinicians to conferences.

Relevance

This research was the first of its kind in the P&O fields. It has exposed important details about evidence based practice that are specific to the P&O fields.

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James Christensen graduated with a B.Sc. (honours) degree in Human Kinetics from the University of Guelph and a post-degree diploma in Clinical Methods in Prosthetics and Orthotics from George Brown College. He is currently employed at Kawartha Regional Orthopedic Specialists where he is in his second year of a two year Orthotic residency. James recently received the Clifford Chaderton award, which is designated for Canadian prosthetic and orthotic research, for his contributions toward researching evidence based practice within the prosthetic and orthotic fields.