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Use of Scientific Research and Clinical Practice Guidelines: A Survey of Experienced Life Care Planners

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Abstract

The field of life care planning continues to evolve and life care planners are becoming increasingly required to provide strong evidence to support their recommendations. Additionally, the decision of the U.S. Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) implicated the need for life care planners to scientifically validate of their approach to establishing future care and associated costs for individuals with disabilities. To substantiate their recommendations, life care planners should maintain their ability to access and utilize peer-reviewed scientific literature. In this study, life care planners (n=116) were asked to electronically provide demographic information and respond to questions regarding the use of scientific research and clinical practice guidelines in the development of life care plans. As indicated by the results of this study, there was variability in the knowledge and application of research by life care planners. This variability appears to be due to differences in obtained research education. The concern that life care planners have regarding the identification of scientific evidence for depositions and trials implies the need for educational opportunities in scientific research. .

Introduction

Life care planners have the opportunity to "stand on the shoulders of giants," by identifying scientific research and clinical practice guidelines when developing their life care

plans. Furthermore life care planners place their credibility at risk when making unsupported recommendations. Such risk can be abated by incorporating valid and reliable scientific evidence to support life care planning recommendations. Furthermore, scientific research can improve the process and raise the standards of life care planning (Deutsch, Allison, & Kendall, 2004). Within this article, scientific research refers to an evidence-based inquiry by a qualified expert or scientist who implements an accepted scientific methodology to test a hypothesis. Clinical practice guidelines, as described by McCollom and Allison (2004), are statements systematically developed to assist practitioners and patients regarding decisions about appropriate health care for certain clinical diagnoses. Such guidelines typically include standardized specifications for care of individuals in a typical situation and are developed through a formal process that incorporates the best scientific evidence of effectiveness with expert opinion. Both scientific research and clinical practice guidelines can provide a foundation for life care planning recommendations.

As pointed out by McDaniel (2006), many instances exist when a qualified physician or other member of the treatment team is not available to provide foundation for life care planning recommendations. Additionally, certain life care planning components may represent subject matter that is outside the life care planner's area of expertise. To meet such challenges, the life care planner has the ability to access peer-reviewed scientific literature which represents a body of knowledge. Peer reviewed journals accept submissions based upon a "blind" critique of the contributor's article which is reviewed by experts ("peers") in a specified field of practice charged with the responsibility of evaluating the scientific merit of a paper or research study (Deutsch, et al., 2004). Relying on peer-reviewed scientific research articles, increases the ability of life care planners to adhere to the standards of life care planning. As described by Reavis (2002), research is an essential component of the standards of practice for life care planners. Reavis chaired the International Academy of Life Care Planners (IALCP) standards committee, consisting of experienced life care planners who, over a two year time period, developed the standards of practice. The objectives relating to research, as initially outlined in the original Standards of Practice (Reavis, 2002), and maintained in the revised Standards of Practice (IALCP, 2006), are:

- "The Life Care Planner will strive to identify and participate in research independently or in collaboration with others, utilizing research tools and activities that will promote quality outcomes.
- The Life Care Planner will critique literature for application to life care planning.
- The Life Care Planner will use appropriate research findings in the development of Life Care Plans." (p. 129)

The following are examples of how life care planners may rely on peer-reviewed literature while developing their life care plans. The first example involves a life care planner recommending an annual flu shot for an individual with a spinal cord injury as part of routine medical care. This recommendation may be supported by a study by Trautner, Atmar, Hulstrom and Darouiche (2004) of individuals with spinal cord injuries (SCI), concluding that the incidence of death from pneumonia and influenza is higher among individuals with SCI than in the general population; thus providing a rationale for the recommendation.

A second example of the utilization of research could occur when evaluating the effect of a recommended treatment. For example, a life care planner who includes in the life care plan an intrathecal drug delivery system for the management of chronic pain may want to explore outcomes studies to determine if the recommendation will be effective. The life care planner could refer to a study by Deer, Chapple, Classen, Javery, Stoker and Tonder (2004) who

evaluated the long-term outcomes for 154 patients with chronic low back pain who received an intrathecal drug delivery system. The authors concluded that a majority of the patients experienced reduction in back and leg pain and reported high satisfaction with the drug therapy.

A third example of utilization of the scientific literature refers to the use of clinical practice guidelines. A life care planner retained by the defense may be questioning the amount of attendant care recommended by a life care planner retained by the plaintiff in a personal injury case. Consider that the plaintiff life care planner is recommending 24 hours per day of personal attendant care for an individual with an incomplete C7 spinal cord injury. When reviewing all the records pertaining to the case, the defense-retained life care planner determines that the hours appear excessive for the client's level of injury and functional abilities as reported in the records. The defense-retained life care planner could rely on clinical practice guidelines established by the Consortium for Spinal Cord Medicine Outcomes Following Traumatic Spinal Cord Injury (1999) to support his/her opinion. According to these clinical practice guidelines, individuals with a C7 spinal cord injury should be able to maintain a certain level of independence with activities such as bladder/bowel management, eating, and communication. Such guidelines may need to be adjusted on a case by case basis; however, the literature provides additional foundation for an expert's opinion. Life care planners exploring the research literature must maintain an adequate understanding of techniques to recognize and implement strong scientific support based on the individual needs of the client.

Methods

The purpose of this study was to assess experienced life care planners' knowledge and practice regarding the use of scientific research and clinical practice guidelines while developing their life care plans. The University of Florida Institutional Review Board (IRB-02) approved this study prior to survey administration. Life care planners ($n=116$) responded from an email request to approximately 650 life care planners who have completed the University of Florida Life Care Planning Certificate Program. Approximately 300 emails were returned due to incorrect email addresses or email blocking software programs, yielding a 33% response rate from those life care planners with whom a valid email address was used. Participants were asked to provide demographic information and respond to a survey of seven questions regarding the use of scientific research and clinical practice guidelines in the development of life care plans (Appendix A). The authors used the online survey company, *surveymonkey* (www.surveymonkey.com), to develop, administer, collect, and analyze the survey. This software was selected since it allowed for straightforward administration and data collection. Additionally, the software allowed the researchers to obtain accurate information on a secure server.

Results

Demographic Information

Table 1 represents the demographic characteristics of the sample. As Table 1 indicates, the sample represents a heterogeneous group of individuals from different professions with 88.64 percent having acquired a national certification for life care planning (i.e., Certified Life Care Planner/CLCP). The age of the participants ranged from 32 to 74 (Mean 53.17, S.D. 7.85) and experience of the participants ranged from 1 to 32 years (Mean 9.98, S.D. 6.78). Females were a higher representation than males in this sample and this proportion is consistent with

the higher percentage of females than males who are certified life care planners (V. May, personal communication, June 2, 2006).

Table 1 Demographic Information of the Sample Life Care Planners (n=116)

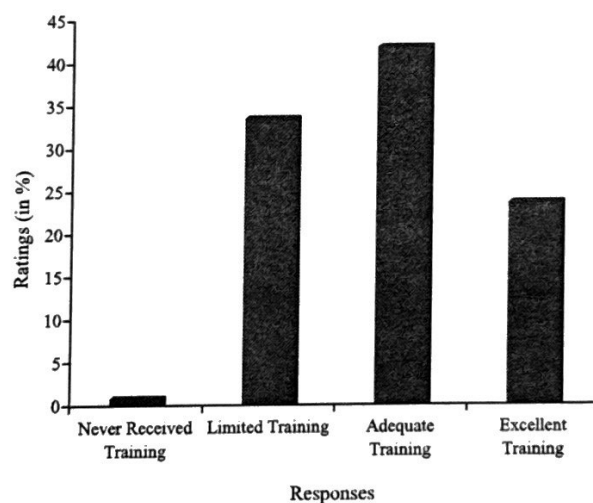
Variable	Mean
Age 7.85	53.17 (32-74) S.D.
Experience (years) 6.78	9.98 (1-32) S.D.
Variable	Percentage
Gender	
Male	12.88%
Female	87.12%
Highest Level of Schooling	
High School	0.76%
Bachelor's Degree	25.19%
Master's Degree	41.98%
Ph.D.	6.11%
Ed.D.	0.90%
J.D.	0.90%
M.D.	1.53%
Technical	0.76%
Other: Associate's Degree, Nursing Degree	23.66%
Credentials	
CRC	31.06%
CCM	44.70%
CLCP	88.64%
CVE	4.55%
CNA	0.76%
LPN	0.90%
CRRN	9.09%
LMHC	0.90%
LPC	6.82%
RN	52.27%
SLP	3.83%
OT	4.55%
PT	1.52%
CLNC	6.06%
LNCC	9.85%
Other: MSW, MSOC, CNLCP	44.70%
University Affiliation	
Yes	11.54%
No	88.46%
Population(s) Served	
TBI	88.64%
SCI	87.12%
Burns	45.45%

Amputations	73.48%
Chronic Disease	40.91%
Other: Chronic Pain, Orthopedic	40.15%
Age Range of Client	
Adults (18+ years)	43.08%
Pediatric	0.00%
Both	56.92%
# of LCP Per Year	
0 – 10	46.15%
11 – 20	30.00%
21 – 30	12.31%
31 – 40	0.77%
Over 40	10.77%

Research Education

Figure 1 represents the amount of research education reported by the participants. As indicated by the Figure, over a third of the sample had received *limited* or *no education* on the use of scientific research to support life care planning recommendations. Conversely, over two-thirds of the sample indicated having adequate or excellent research education.

Figure 1. Research education obtained.



Supporting the Life Care Plan with Scientific Research and Clinical Practice Guidelines

As indicated in Figure 2, approximately 29% of the sample *always* supports their life care plans with scientific research, while 30% of the sample *often* supports their life care plans with scientific research. Additionally, approximately 38% *sometimes* supports their life care plans with scientific research, and less than 5% of the sample never utilizes scientific support. Although 87% of the sample at least *sometimes* relies on research to support their life care plan recommendations, 95% of the sample reports that research support is important (Figure 3). A

greater number of participants (95%); however, indicated that they rely on clinical practice guidelines when developing their life care plans (Figure 4).

Figure 2. Scientific research to support life care plans.

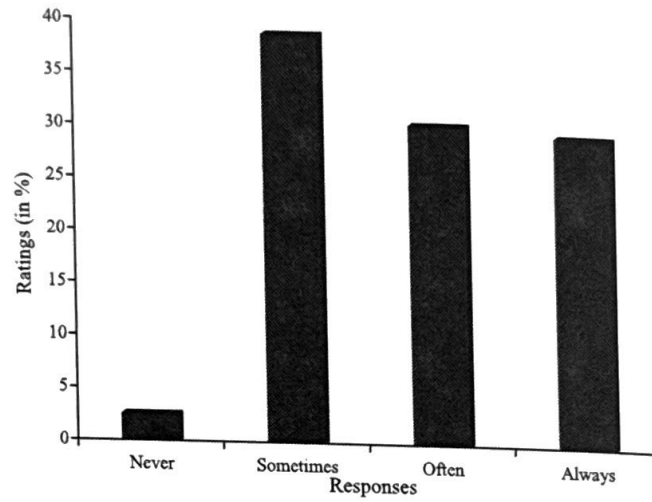


Figure 3. Importance of supporting the life care plan with scientific research.

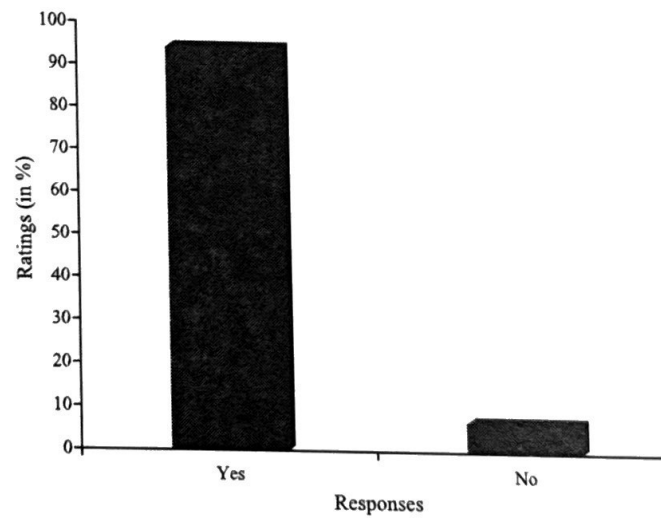
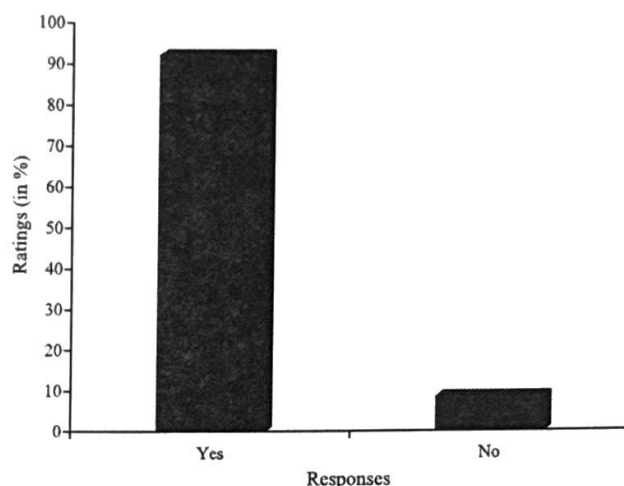


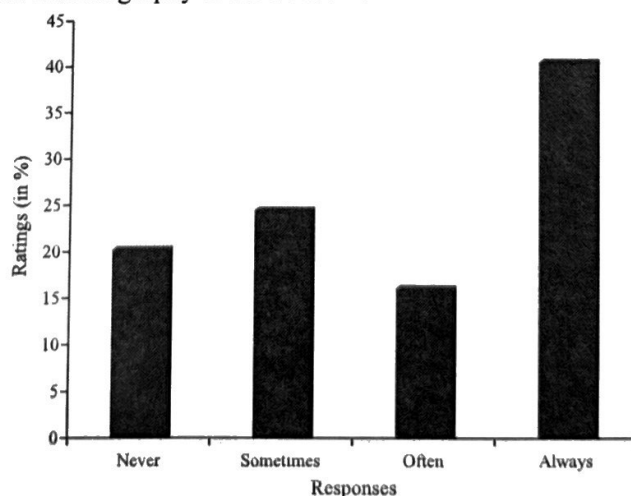
Figure 4. Clinical practice guidelines to support the life care plan.



Including a Bibliography

The use of a bibliography may often be an indication of the utilization of research by life care planners. This process is consistent with the development of research studies, articles, presentations, etc. Published research articles most often include a reference list of works cited. This includes a listing of authors and name and year of the publication in which the article was published. A bibliography provides reviewers of an article with the ability to explore studies that have been cited by the authors of the article under review. In addition, the bibliography substantiates information that is presented in an article. For purposes of the life care plan, a bibliography can include published research studies, clinical practice guidelines, books, the Internet or any published material that has been relied upon for the development of a life care plan. Figure 5 demonstrates the inconsistency of the inclusion of bibliographies in life care plans. Based on Figure 5, less than one-half of the participants either *sometimes* or *never* include a bibliography within their life care plans, while a little over one-half the participants either *often* or *always* include a bibliography within their life care plans.

Figure 5. Inclusion of a bibliography or reference list.



Knowledge and Understanding of How to Utilize Scientific Research

Figures 6 and 7 represent responses to questions regarding the understanding and knowledge that life care planners have to utilize scientific research when developing their life care plans. As depicted in Figure 6, approximately 75% of the sample indicated that they had a *good to excellent* understanding of scientific research. These responses are consistent with the participant's self-report of ability to utilize research within the life care plan (see Figure 7).

Figure 6. Understanding of scientific research.

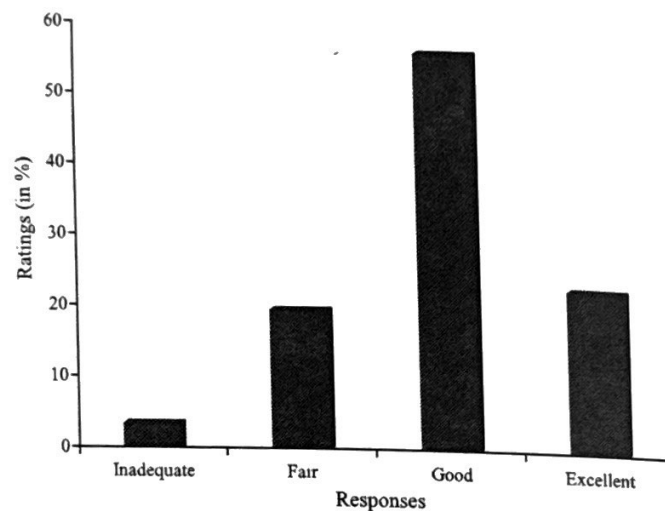
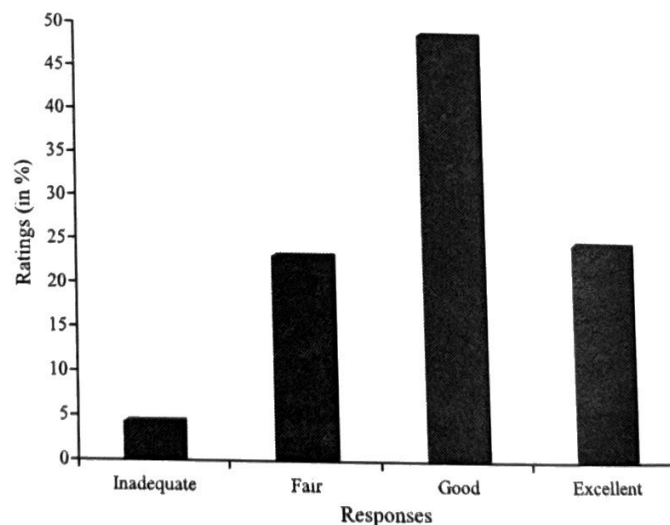


Figure 7. Ability to utilize research articles within a life care plan.



Access to Research

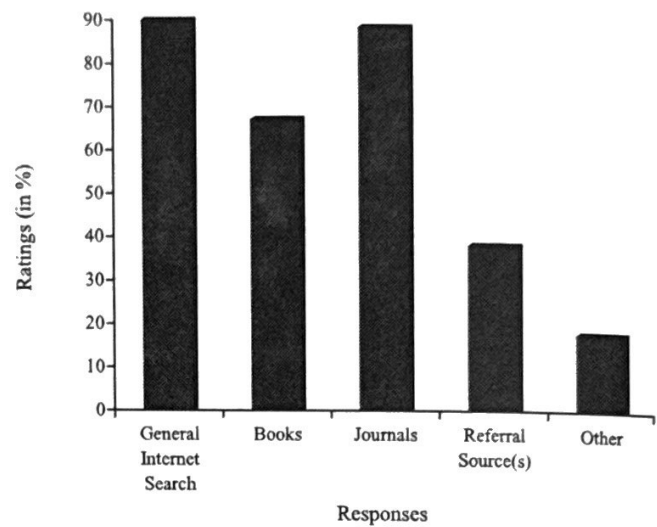
Participants were asked questions related to their accessibility of scientific research. Table 2 summarizes the life care planners' responses regarding the most frequently selected journals. Participants were also asked to report the sources they selected to access current research. Not

surprisingly, the most frequently cited sources for accessing research included journals and general Internet searches (Figure 8). This could be partially due to the increasing accessibility to surf the Net, making it easier to obtain practice guidelines, research literature, and other sources of information.

Table 2 Compiled List of Journal(s) Frequently Selected When Researching Life Care Planning Issues

Journal	Publisher	Website or Contact Information
<i>Archives of Physical Medicine and Rehabilitation</i>	American Congress of Rehabilitation Medicine	http://www.acrm.org/publications/APMandR.cfm
<i>Brain Injury</i>	Taylor and Francis	http://www.tandf.co.uk/journals/titles/02699052.asp
<i>Journal of Life Care Planning</i>	Elliott & Fitzpatrick	http://www.elliottfitzpatrick.com/jlcp.html
<i>Journal of Rehabilitation</i>	National Rehabilitation Association	http://www.nationalrehab.org/website/pubs/index.html
<i>New England Journal of Medicine</i>	Massachusetts Medical Society	http://content.nejm.org/
<i>Journal of the American Medical Association (JAMA)</i>	American Medical Association	http://jama.ama-assn.org/
<i>Rehabilitation Counseling Bulletin</i>	Pro-Ed	http://www.ingentaconnect.com/content/proedcw/rcb
<i>Topics in Spinal Cord Injury Rehabilitation</i>	Thomas Land Publishers Inc.	http://www.thomasland.com/
<i>Spinal Cord</i>	International Spinal Cord Injury Society	http://www.nature.com/sc/index.html
<i>Journal of Head Trauma Rehabilitation</i>	Lippincott Williams & Wilkins	http://www.headtraumarehab.com/
<i>Journal of Legal Nurse Consulting</i>	American Association of Legal Nurse Consultants	http://www.aalnc.org/edupro/journal.cfm
<i>Journal of Rehabilitation Research and Development</i>	Department of Veterans Affairs	http://www.rehab.research.va.gov/jour/jourindx.html
<i>Journal of Social Work</i>	Sage Publications	http://jsw.sagepub.com/
<i>Journal of Speech and Hearing Research</i>	American Speech-Language-Hearing Association	http://jslhr.asha.org/
<i>Journal of Burn Care & Research</i>	Lippincott Williams & Wilkins	http://www.burncare rehab.com
<i>Rehabilitation Psychology</i>	American Psychological Association	http://www.apa.org/journals/rep/

Figure 8. Scientific research resources.



Scientific Support for Deposition and Trial

Participants were asked to respond to questions regarding the need to produce research support for deposition and trial. As Figure 9 indicates, approximately 35% of the sample had been asked during deposition or trial to identify their sources of research support. Although a large percentage of the sample had not been asked to identify their research support in deposition or trial (65%), clearly a majority of individuals (68%) reported that they are concerned about being asked to do so in the future as indicated in Figure 10.

Figure 9. Request for scientific literature to support life care plan recommendations during deposition or trial.

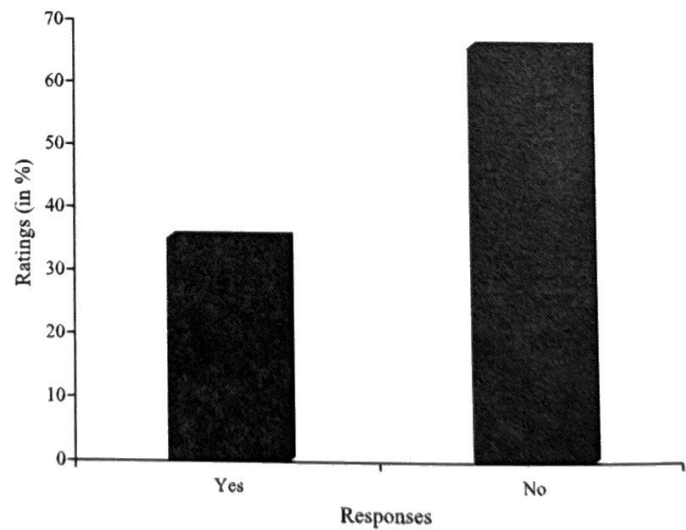
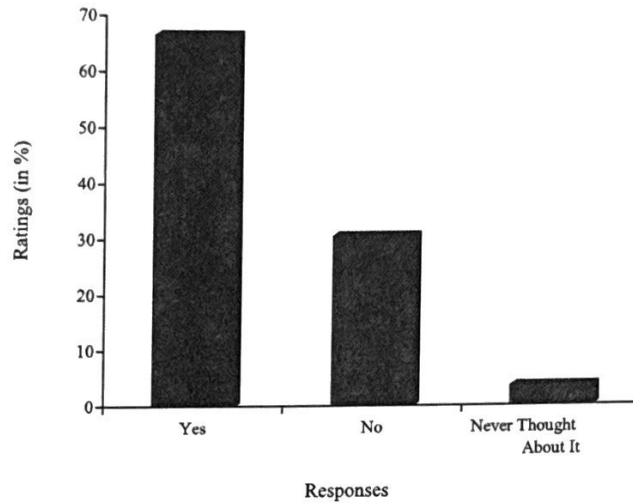


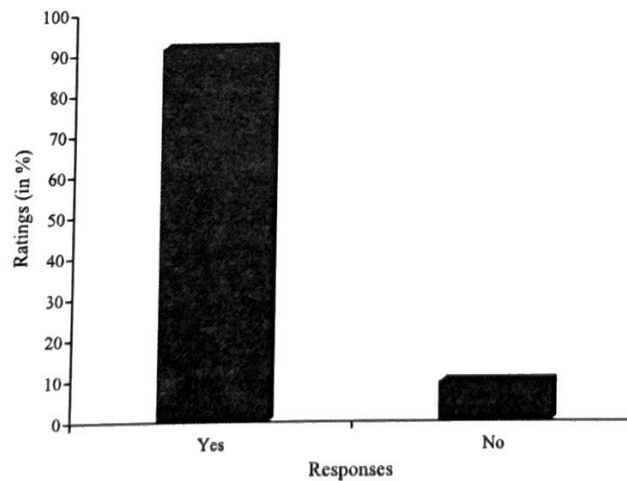
Figure 10. Concern regarding scientific support for a life care plan during deposition or trial.



Future Research Education

The survey included a question designed to explore the desire of life care planners to receive additional education on incorporating research within the life care plan. Although most life care planning certificate programs include a research component within their education curriculum, approximately 90% (Figure 11) of the sample indicated they would take advantage of additional education regarding incorporating research into a life care plan.

Figure 11. Opportunity to learn more about scientific research.



Areas of Relevance to the Life Care Plan

Participants were asked two questions that surveyed specific areas within the life care plan that life care planners believe warranted or necessitated the need for scientific research support and/or clinical practice guidelines. Table 3 combines both questions and lists all life care plan

content areas with the corresponding percentage of responses. The participants identified *potential complications* as the component that warrants the most scientific research support (83.04%). In addition, *projected therapeutic modalities* was identified by the participants as needing the most clinical practice guidelines support (83.18%). The area that was reported to warrant the least support from research and clinical practice guidelines appears to be *transportation* (27.68 and 22.43%, respectively).

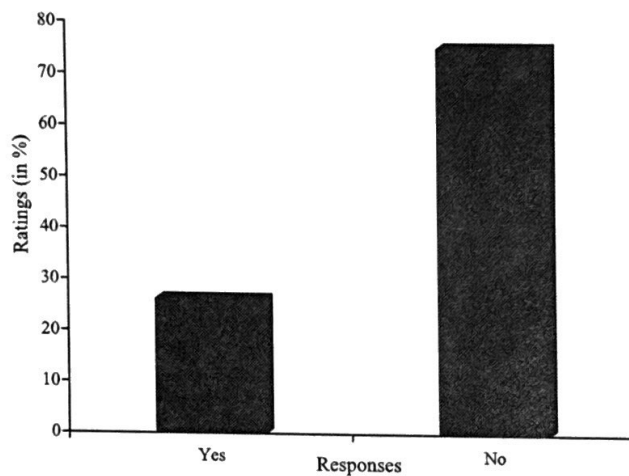
Table 3 *Specific Areas within a Life Care Plan That Warrant Scientific Research Support or Clinical Practice Guidelines*

Areas in a Life Care Plan	Scientific Research (%)	Clinical Practice Guidelines (%)
Projected Evaluations	65.18	79.44
Projected Therapeutic Modalities	69.64	83.18
Diagnostic Testing/Educational Assessment	57.14	67.29
Wheelchair		
Needs	39.29	42.06
Accessories and Maintenance	31.25	31.78
Orthopedic Equipment Needs	31.25	41.12
Orthotics/Prosthetics	42.86	48.60
Aids for Independent Function	41.96	36.45
Home Furnishing and Accessories	41.96	30.84
Drug/Supply Needs	50.00	63.55
Home/Facility Care	68.75	58.88
Future Medical Care		
Routine	65.18	79.44
Surgical Intervention or Aggressive Treatment Plan	75.89	81.31
Potential Complications	83.04	63.55
Transportation	27.68	22.43
Architectural Renovations	41.96	25.23
Leisure Time and/or Recreation Equipment	38.39	28.97
Vocational/Educational Plan	49.11	36.45

Assistance with Research

A majority of the sample (approximately 75%) indicated that they have not contracted with other individuals, organizations, or agencies to assist in obtaining scientific research to support their life care plans (Figure 12). Conversely, approximately 25% of the participants have contracted with other individuals when seeking research support for their life care plans. As indicated earlier, over two-thirds of the sample reported that they had received either adequate or excellent training regarding research education. This suggests that life care planners who have received the necessary education to obtain research support would not necessarily need to contract with other individuals or organizations for assistance in this area.

Figure 12. Contracting with other individuals, organizations, or agencies to assist in obtaining scientific research.



Selected Clinical Practice Guidelines

According to Deutsch, et al. (2004), individuals with various disabilities present a unique set of circumstances and the practice guidelines that are relied upon will depend upon the specific needs of that individual. Participants were asked to list specific clinical practice guidelines they rely upon when developing their life care plans. Unfortunately, participants were very general in their responses and did not provide the sources for specific guidelines. Table 4 summarizes the responses submitted by the participants. For more specific information regarding clinical practice guidelines, we recommend referring to McDaniel's article published in the *Journal of Life Care Planning*, entitled "Life care planning tools, websites, and resources: Summary of relevant presentations at the 2006 International Conference on Life Care Planning, Atlanta Georgia (2006)."

Table 4 Clinical Practice Guidelines Relied Upon For Life Care Plan Development

Treatment Manual for Physicians and Therapists
Centers for Disease Control and Prevention
National Institutes of Health
Spinal Cord Injury Consortium
American Medical Association

Guidelines for specific conditions such as RSD, TBI, and SCI
 Veterans' Affairs published guidelines
 Nursing Guidelines (per state)
 Standards of Care for Children with Cerebral Palsy
 Standards of Care and Outcome Measures for Children with Cerebral Palsy
 Outcomes Following Traumatic Spinal Cord Injury: A Clinical Practice Guideline for Health Care Professionals
 National Clearinghouse Guidelines
 Paralyzed Veterans Association/Federal Government Guidelines
 American Occupational Therapy Association Practice Guidelines

Survey Comments

There were many written comments from participants at the conclusion of this survey and Table 5 is a compiled list of the most cited comments. Based on some of the responses, it appears that some life care planners are apprehensive to utilize scientific research support and/or clinical practice guidelines due to the potential for misinterpreting the literature and expressed lack of education specific to this area. Life care planners who have limited research education could gain confidence and expertise in identifying and analyzing scientific evidence to be incorporated into their plans with the availability of educational opportunities through existing life care planning training programs or continuing educational opportunities.

Table 5 Survey Comments

Frequently Made Comments
Inappropriately citing research within a life care plan
Misinterpreting results within a research article
Lack of consistency among life care planners
Some life care planners do not consult in this area and have a narrow perspective
Want more education (webcasts, online resources)
Education needed on smoothly integrating research into the LCP.
Incorporating research articles into the life care plans makes an expert more credible.

Discussion

As cited in Weed (2004), the life care plan is defined as a dynamic document based upon published standards of practice, comprehensive assessments, data analysis, and research. Based on this study, it appears that the utilization of research as depicted in the definition of life care planning, although important, is often underutilized by life care planners. Furthermore, as demonstrated by this study, there is variability in the knowledge and utilization of research by life care planners. This variability appears to be due, in part, to limited research education. Finally, the concern that life care planners have regarding the need to produce scientific evidence for depositions and trials implies the need for increased educational opportunities in the area of scientific research support.

The results of this study were consistent with the responses to certain questions from the 2001 life care plan survey published by Neulicht, Riddick-Grisham, Constantini, Thomas and Goodrich (2002). The authors concluded that if life care planners were unable to consult with

physicians or other health care providers then they were more likely to choose clinical practice guidelines and relevant literature for evidence based support. Furthermore, the study concluded that 58% of life care planners utilize clinical practice or standard of care guidelines over half the time and 63% of the respondents reported that they perform and utilize literature searches over 50% of the time (Neulicht, et al., 2002).

Based on this study and previous studies, life care planners appear not to be taking full advantage of scientific evidence that could be used to meet some of the standards outlined in the original Standards of Practice for Life Care Planners (Reavis, 2002) and revised Standards (IALCP, 2006). Although a substantial percentage of respondents from this and previous studies reported utilizing the scientific literature, the standards of practice for life care planners state that "the life care planner will use appropriate research findings in the development of Life Care Plans" (IALCP, 2006, p. 129). Furthermore, one could presume that attorneys and other parties to a case may be becoming more knowledgeable in exploring the scientific literature, not only to support the needs of individuals with injuries and disabilities, but also to be able to dispute expert testimony made by life care planners (P. Deutsch, personal communication, November 1, 2007). These challenges, as well as the decision of the U.S. Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), further implicate the need for life care planners to scientifically validate their approach to establishing future care and associated costs for individuals with disabilities (Pomeranz & Shaw, 2006).

Study Limitations

There were limitations within this study that may have affected the reliability and validity of responses. First, the 18% response rate (n=116 life care planners) represents a small percentage of existing life care planners. Second, the authors only conducted a descriptive analysis of the data obtained for this study. Future analysis could be conducted to determine if significant differences exist regarding the utilization of research and clinical practice guidelines between life care planners with different demographic characteristics such as occupational specialty, experience, and age. A third limitation of this study relates to the lack of presentation of a description of terms to participants. This includes not only a definition of scientific research and clinical practice guidelines, but also a definition of response choices. For example, participants were asked to respond to how often they included scientific research to support their recommendations within a life care plan. The response choices included: Never, Sometimes, Often, and Always. A definition of each response category may help ensure a consistency of understanding of responses among participants.

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Appendix A

Life Care Planning

1. Demographic Information

1. How long have you been a Life Care Planner (in years)?

2. What is your gender?

- ☐ Male
☐ Female

3. What is your age (in years)?

4. Credentials: (Check all that apply)

- | | | |
|-------------------------------|-------------------------------|-------------------------------|
| ☐ CRC | ☐ LPN | ☐ SLP |
| ☐ CCM | ☐ CRRN | ☐ OT |
| ☐ CLCP | ☐ LMHC | ☐ PT |
| ☐ CDMS | ☐ LPC | ☐ CLNC |
| ☐ CVE | ☐ CDMS | ☐ LNCC |
| ☐ CNA | ☐ RN | Other (please specify) |

5. Highest level of schooling:

- | | |
|--|------------------------------------|
| ☐ High School | ☐ Ed D |
| ☐ Bachelor's Degree | ☐ Technical |
| ☐ Master's Degree | Other (please specify) |
| ☐ Ph D | <input type="text"/> |

6. Are you affiliated with a university?

- ☐ Yes
☐ No

7. Typically, what is the age range of your clients.

- ☐ Adults (18 yrs +)

Life Care Planning

- ☐ Pediatric
☐ My caseload includes both adult and pediatric cases

8. What population(s) do you work with when developing a life care planing (check all tha apply)?

- ☐ Traumatic Brain Injury
☐ Spinal Cord Injury
☐ Burns
☐ Amputations
☐ Chronic Disease
Other (please specify)

9. On average, how many life care plans do you complete per year?

- ☐ 0-10
☐ 11-20
☐ 21-30
☐ 31-40
☐ >40

10. How would you rate your previous training regarding the use of scientific research to support your life care plan recommendations?

- ☐ Never received any training in this area
☐ Limited training
☐ Adequate training
☐ Excellent training

2. Research

☐ Never ☐ Often

☐ Sometimes ☐ Always

☐ Yes

☐ No

☐ Never ☐ Often
☐ Sometimes ☐ Always

☐ Inadequate ☐ Good

☐ Fair ☐ Excellent

☐ Inadequate ☐ Good

☐ Fair ☐ Excellent

--

Life Care Planning**7. How do you access scientific research? (Check all that apply)**

- ☐ General internet search (Ex: Google)
- ☐ Books
- ☐ Journals (Ex: On-line or In-print)
- ☐ Referral source(s)
- Other (please specify)

8. Have you ever been asked to produce scientific literature to support your recommendations for deposition or trial?

- ☐ Yes
- ☐ No

9. If you had an opportunity to learn more on how to incorporate scientific research into your life care plans, would you take advantage of it?

- ☐ Yes
- ☐ No

10. What areas of a life care plan do you feel warrant more scientific support?

- | | |
|---|---|
| ☐ Projected evaluations | ☐ Drug/supply needs |
| ☐ Projected therapeutic modalities | ☐ Home/facility care |
| ☐ Diagnostic Testing/Educational Assessment | ☐ Future medical care - routine |
| ☐ Wheelchair needs | ☐ Future medical care surgical intervention or aggressive treatment plan |
| ☐ Wheelchair accessories and maintenance | ☐ Potential complications |
| ☐ Orthopedic equipment needs | ☐ Transportation |
| ☐ Orthotics/prosthetics | ☐ Architectural renovations |
| ☐ Aids for independent function | ☐ Leisure time and/or recreational equipment |
| ☐ Home furnishings and accessories (Durable medical items) | ☐ Vocational/educational plan |

11. Have you ever contracted out to other organizations or agencies to assist in obtaining research to support your life care plan?

- ☐ Yes
- ☐ No

Life Care Planning**12. Do you rely upon clinical practice guidelines to support recommendations in a life care plan?**

- ☐ Yes
☐ No

13. What areas of a life care plan do you feel warrant more scientific support?

- | | |
|---|---|
| ☐ Projected evaluations | ☐ Drug/supply needs |
| ☐ Projected therapeutic modalities | ☐ Home/facility care |
| ☐ Diagnostic Testing/Educational Assessment | ☐ Future medical care - routine |
| ☐ Wheelchair needs | ☐ Future medical care surgical intervention or aggressive treatment plan |
| ☐ Wheelchair accessories and maintenance | ☐ Potential complications |
| ☐ Orthopedic equipment needs | ☐ Transportation |
| ☐ Orthotics/prosthetics | ☐ Architectural renovations |
| ☐ Aids for independent function | ☐ Leisure time and/or recreational equipment |
| ☐ Home furnishings and accessories (Durable medical items) | ☐ Vocational/educational plan |

14. What areas of a life care plan do you feel warrant more scientific support?

- | | |
|---|---|
| ☐ Projected evaluations | ☐ Drug/supply needs |
| ☐ Projected therapeutic modalities | ☐ Home/facility care |
| ☐ Diagnostic Testing/Educational Assessment | ☐ Future medical care - routine |
| ☐ Wheelchair needs | ☐ Future medical care surgical intervention or aggressive treatment plan |
| ☐ Wheelchair accessories and maintenance | ☐ Potential complications |
| ☐ Orthopedic equipment needs | ☐ Transportation |
| ☐ Orthotics/prosthetics | ☐ Architectural renovations |
| ☐ Aids for independent function | ☐ Leisure time and/or recreational equipment |
| ☐ Home furnishings and accessories (Durable medical items) | ☐ Vocational/educational plan |

15. Are there specific areas in a life care plan that warrant the use of clinical practice guidelines?

- | | |
|--|---|
| ☐ Projected evaluations | ☐ Drug/supply needs |
| ☐ Projected therapeutic modalities | ☐ Home/facility care |
| ☐ Diagnostic Testing/Educational Assessment | ☐ Future medical care - routine |
| ☐ Wheelchair needs | ☐ Future medical care surgical intervention or aggressive treatment plan |
| ☐ Wheelchair accessories and maintenance | ☐ Potential complications |
| ☐ Orthopedic equipment needs | ☐ Transportation |

Life Care Planning

- | | |
|---|---|
| ☐ Orthotics/prosthetics | ☐ Architectural renovations |
| ☐ Aids for independent function | ☐ Leisure time and/or recreational equipment |
| ☐ Home furnishings and accessories (Durable medical items) | ☐ Vocational/educational plan |

16. Please list specific clinical practice guidelines that you have relied upon.