Alberta College of Occupational Therapists
Adhoc Task Force

ACOT Commentary

Commentary on

l'Ordre des ergothérapeutes du Québec's Position Statement on Use of Weighted Covers

December 2009

The Alberta College of Occupational Therapists applauds l'Ordre des ergothérapeutes du Québec (OEQ) for publishing the Position Statement on Use of Weighted Covers (OEQ, 2008). In December 2008, the OEQ released the position statement in response to a judicial recommendation that clear instructions on the use of weighted covers (blankets) be communicated to the members of OEQ. This recommendation arose from a judicial fatality review on the death of a child who died of suffocation under a weighted blanket.

The OEQ's position statement was translated to English with permission of the OEQ by the Alberta College of Occupational Therapists in partnership with the College of Occupational Therapists of British Columbia and the College of Occupational Therapists of Ontario. The Alberta College of Occupational Therapists (ACOT) circulated a copy of the position statement in April 2009 to its membership. In July 2009 an adhoc ACOT task force (the task force) of expert pediatric occupational therapists met to discuss the recommendations contained within the position statement. A draft commentary on the position statement was developed and distributed to clinical experts in the occupational therapy community for their critique. This report summarizes the conclusions and recommendations of the adhoc ACOT task force.

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Background

Pediatric occupational therapists practice from a wholistic orientation and are leaders in the assessment of the impact of sensory processing difficulties on daily function and in providing intervention recommendations (Crepeau, Cohn & Schell, 2003). Occupational therapy intervention with children with sensory processing disorders can involve environmental modifications, provision

of equipment for home and school (including weighted items), parental and teacher education, cognitive-behavioural strategies and direct motor skills intervention. A growing body of knowledge supports the efficacy of occupational therapy interventions with clients with sensory processing disorders (see www.spdfoundation.net/treatment.html). The evidence guiding all types of occupational therapy interventions in the pediatric population is limited but is advancing through systematic clinical research.

applying weight has an impact on a child's nervous system, helping it to process and modulate sensory input more effectively

The use of weighted blankets is but one modality used by pediatric occupational therapists. Weighted blankets are usually recommended as a strategy to assist children to calm and settle so they can return to activities that require focus or they can settle for bed. These blankets are used within school settings as well as home and community settings.

It is understood theoretically that applying weight has an impact on a child's nervous system, helping it to process and modulate sensory input more effectively (Baranek, 2002). The body of literature in the use of weight is almost exclusively focused on the use of weighted vests. In a critical literature review Stephenson and Carter (2009) noted that evidence is limited and is methodologically weak. They concluded that weighted vests are ineffective in remediating problems of attention, hyperactivity, behavior dysfunction and clumsiness. It is reasonable to extrapolate Stephenson and Carter's conclusions about the use of weighted vests to the use of weighted blankets.

Issues associated with the use of weighted blankets

Evidence in Sensory Processing Approaches

There is an expanding, but still limited amount of clinical efficacy research in sensory processing (Baranek, 2002; Mailloux et.al., 2007) and therefore occupational therapists justifiably rely on their own previous experiences and experiences of peers and mentors. While this is an important component of evidence, the field still lacks clinically relevant, systematic research. An unfortunate consequence of limited evidence is that clinicians may accept guidelines without being aware that there is limited scientific rationale for the guidelines.

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An illustration is the "20-minute rule" that is often applied when establishing the duration of a weighted blanket intervention. The OEQ recommends that, except under exceptional (and unspecified) circumstances, that a child should not be under a weighted blanket for more than 20 consecutive minutes. This

recommendation is offered without clinical evidence. The task force does not accept the OEQ's guideline of 20-minute maximum exposure. Both the tolerance of the child to the weighted blanket and the benefit of the weighted blanket must be considered when determining the length of time the weighted blanket should be applied. In the absence of evidence, the occupational therapist must ensure that the child is tolerating the weighted blanket well throughout his/her exposure to the weighted blanket. Benefit from the use of weighted blankets may be dependent on length of usage, and individual children will have individual response patterns. The task force concurs with the OEQ statement that a child must never be left unattended when a weighted blanket is being used.

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Safety with Weighted Blankets

The task force agreed with OEQ's statement that breathing and cardiac problems, epilepsy, serious hypertonia, skin problems, allergies, and circulatory problems are contraindications for the use of the weighted blanket within an occupational therapy treatment plan. Additionally, occupational therapists should note extreme hypotonia and/or weakness as an additional contraindication. The occupational therapist must ensure that all individuals who will be supervising the use of the weighted blanket are familiar with the recommended procedures for its use as well as the signs of distress that a child may exhibit. Appropriate written resources and an intervention check-list are recommended.

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The task force agreed with the OEQ statements that a weighted blanket must never be used as a restraint, that the child's head and neck must be free at all times, that the child must possess sufficient cognitive and physical capabilities to be able to free him/herself from the weighted blanket at any time and that the child must not demonstrate opposition to the use of the weighted blanket (verbal or nonverbal). The task force additionally recommends that the child demonstrate agreement and compliance with the weighted blanket intervention through developmentally-appropriate behavior or verbalizations. The task force cautions against the use of weighted blankets with infants and toddlers.

The OEQ statement recommended a 10% ratio of weighted blanket weight to the child's body weight. This clinical recommendation is considerably less than the ratio coming from a recent study of weighted blankets in adults, which safely used 30-pound weighted blanket on healthy adults with a mean weight of 165 pounds (Mullen, Champagne, Krishnamurty, Dickson, Gao, 2008). While weights exceeding 10% of body weight have been used safely with adults, in the absence of clear data on the use of weighted blankets with children, the task force

recommends that the occupational therapist takes a systematic and case-by-case approach to setting weight for the weighted blankets.

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Lay Use of Weighted Blankets

Weighted blankets are readily available to families and teachers, most often via the internet. The OEQ recommends that (a) the occupational therapist must make sure that anyone using a weighted cover will be able to do so while respecting the safety instructions and the child's treatment plan; (b) the forms of communication for feedback on the child should be defined before the care is begun (written or verbal feedback, observation grid, frequency of communication, etc.); and (c) written documentation should be given to the various users of the weighted cover involved in applying the treatment plan. The documentation may be of two types: 1) general: for example, a protocol explaining the customary rules for using a weighted cover, and 2) specific: specific instructions associated with the application of a child's treatment plan.

The task force concurs with the OEQ's statements about the use of weighted blankets by third parties as part of an occupational therapy plan. However, the OEQ does not discuss the situation of the occupational therapist not being involved in the decision to purchase the weighted blanket, but being asked for advice on its use by teachers or family. The task force identifies that this type of situation presents the occupational therapist with a number of questions: *What goals are being sought through use of this blanket? Is a weighted blanket appropriate for this child? Is the weight appropriate for this child? Who will supervise its use? What monitoring will the parent/teacher be willing to do? What are the risks to the child associated with the use of the weighted blanket for this child? What is the source of the weight (e.g.: lead) in the blanket?*

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The ideal situation is for occupational therapists to be involved in the assessment, goal setting and treatment planning with children and their families. When the occupational therapist is involved later in the process, the occupational therapist must still apply the same systematic approach. If the occupational therapy plan involves the use of weighted blankets, then the occupational therapist will offer detailed education to appropriate individuals about the appropriate use of weighted blankets. If the occupational therapist's assessment does not support the use of weighted blankets, the occupational therapist must communicate his/her findings, recommendations and his/her assessment of risk to the child.

The occupational therapist should engage in problem-solving with the parents and teachers in order to maximize the therapeutic benefit of any intervention and to minimize risk. For example, some parents may wish to use the weighted blanket to help their child sleep through the night. The task force agrees with the OEQ that children must always be supervised when a weighted blanket is being used. The occupational therapist in this case should caution against the use of weighted blankets during the night (because of the lack of supervision) but may suggest the use of weighted blankets in pre-bedtime activities such as family reading time. As noted above, written materials should clearly outline the appropriate use of the weighted blanket as well as the risks associated with its use.

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Occupational therapists should develop pro-active succession plans for their clients. Occupational therapists have reported anecdotally that schools have refused to allow the use of a weighted vest if the child was not actively receiving occupational therapy services. Prior to discharge or termination of occupational therapy services, the occupational therapist should identify strategies and engage key stakeholders for the continuation of modalities that are beneficial to the client.

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Expectations of Results

It is common for therapists and lay people alike to look for "quick fixes" but this should be discouraged. The occupational therapist must work with the teachers/families to assist them to adopt a systematic process of evaluating the benefits of the use of weighted blankets. The occupational therapist should monitor the impact of the weighted blankets against the treatment goals. The task force concurs with the OEQ that either direct monitoring by the occupational therapist or monitoring by the parent/teacher on an observation grid or other form of documentation will contribute to the rigor of the assessment of therapeutic benefit.

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Training in Sensory Processing Approaches

Those occupational therapists considering using specific sensory modalities such as weighted blankets are encouraged to take advantage of workshops, graduate courses or certificate programs offered throughout North America. Occupational therapists should strive to develop an integrated knowledge base, inclusive of basic pathophysiology, assessment and intervention strategies.

Recommendations

The task force recommends that:

- Individual occupational therapists review this document and other related documents and engage in reflective practice regarding the use of weighted blankets and other similar interventions in their practice

- A pediatric occupational therapy special interest task force in Alberta engage in a dialogue based on the OEQ Position Statement and the ACOT Commentary

- The College examine the broader issue of the role of occupational therapists in equipment provision, including the role of vendors and occupational therapy planning for equipment use after the termination of occupational therapy services

- The College examine the broader issue of standards within pediatric occupational therapy practice in Alberta

- The College, in partnership with SAOT, identify learning needs for pediatric occupational therapists and develop an action plan to address those needs

Acknowledgements

On behalf of the membership of the Alberta College of Occupational Therapists, we extend our gratitude to l'Ordre des ergothérapeutes du Québec for contributing to improvements in client care through their thoughtful work entitled "Position Statement on Use of Weighted Covers". Their permission to translate the document is acknowledged with thanks.

The Alberta College of Occupational Therapists also proudly acknowledges the contributions of members of the Albertan occupational therapy community for their role in reviewing the OEQ document, developing responses and recommendations and looking to the future with well-crafted recommendations. Specific thanks go to Sandra Hodgetts, Shamala Manilall, Mary Culshaw, Laura Rogers, Tracey Urquhart and Kathy Mulka.

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