

## Assessing children's fitness for scuba diving

Robyn M Walker

### To the Editor, Medical Journal of Australia:

The South Pacific Underwater Medicine Society (SPUMS) recommends that, before starting scuba-diving activities, all candidates undertake a medical assessment by a doctor trained in diving medicine. SPUMS recommends a minimum age of 14 years for all entry-level scuba activities, as does Australian Standard 4005.1.<sup>1</sup> This recommendation is based on the belief that younger children do not have the emotional maturity and confidence to safely manage underwater emergencies. Such emergencies, which may include running out of air, being separated from your buddy, being caught in a strong current, and equipment malfunction, can all result in panic.<sup>2,3</sup> A diver who panics will typically make a rapid ascent to the surface, risking life-threatening pulmonary barotrauma and decompression illness.<sup>2</sup>

Commercial scuba diving instructor agencies are introducing a number of introductory activities for children as young as eight years.

SPUMS urges caution in assessing young children as fit to dive. Medical practitioners making these assessments should clearly understand the nature of the activity to be undertaken, the equipment to be used and the nature of the environment in which the training is to occur. They should also understand the nature of the certification to be awarded. The presence of at least one legal guardian during this assessment is desirable to ensure that the risks are fully understood and to ensure the desire for the child to undertake the activity is not that of the parents alone.

An individual may meet the criteria laid down in a standard or understand and accept the risks of an aquatic sport. However, it is not clear that a young child is mature enough

to make this informed choice.<sup>4</sup> Clearly, some 14-year-olds also lack sufficient maturity, and an experienced diving physician will advise them to delay their open-water certification course until greater maturity is demonstrated. Alternatively, some children younger than 14 years may be completely safe in undertaking a highly structured, one-on-one, supervised scuba experience in a swimming pool. However, it should be understood that trialling scuba equipment in a swimming pool has resulted in significant morbidity.

SPUMS continues to recommend a minimum age of 14 years for all entry-level scuba activities involving open-water dives, and recommends caution in assessing younger children for all other scuba experiences.

### References

- 1 Training and certification of recreational divers - minimum entry-level SCUBA diving (AS 4005.1-1992). Sydney: Standards Australia, 1992.
- 2 Walker D. Provisional report on Australian diving-related deaths in 1998. *SPUMS J* 2001; 31: 122-131.
- 3 Cresp R, Grove C, Lalor E, Valinsky L, Langton P. Health status of recreational scuba divers in Western Australia. *SPUMS J* 2000; 30: 226-231.
- 4 Edmonds C, Lowry C, Pennefather J, Walker R. Age and diving. In: *Diving and subaquatic medicine*, 4th Edition. London: Arnold Publications, 2002

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## ERRATUM

In SPUMS Journal Volume 33 Number 1, March 2003, page 46, Dr Robyn Walker's surname was incorrectly printed. The correct reference for this case report is:

Davis M, **Walker R.** Decompression illness in a tropical resort. *SPUMS J* 2003; 33: 46-48

The Editor apologises for this error.

## SPUMS Members' News

Drew Richardson, a full member of the Society by election, was recently awarded Doctor of Education of the Nova Southeastern University. His dissertation is entitled:

*"Development of a web-based distance education course for scuba divers with an implementation and evaluation plan"*