# Patterns of physical activity in Australian children with haemophilia.



Carolyn R Broderick<sup>1,2</sup>, Robert D Herbert<sup>3,4</sup>, Jane Latimer<sup>3,4</sup>, Nancy van Doorn<sup>1,2</sup>

1. School of Medical Sciences, University of NSW. 2.Children's Hospital Institute of Sports Medicine, Westmead. 3. The George Institute for Global Health, Sydney, Australia. 4. Sydney Medical School, University of Sydney.





## Background

Children with haemophilia have often been restricted in their sports participation due to concern about the risk of bleeding into joints. In countries where there is little access to prophylaxis, sports participation remains low compared to countries where prophylaxis is readily available<sup>1</sup>. The health benefits of physical activity are well recognized but in Australia it remains unclear how much children with haemophilia are participating in physical activity.

#### Aim

The aim of this study was to determine (i) the amount of time spent in physical activity by children with haemophilia and (ii) whether these children met Australian guidelines for recommended levels of physical activity, and small screen time.

#### Methods

The data reported here were obtained from a case-crossover study nested in a prospective cohort study of 104 boys with moderate and severe haemophilia followed for one year<sup>2</sup>. Each child's physical activity was assessed using a modifiable physical activity questionnaire (Kriska's MAQ<sup>3</sup>) administered at baseline, and a one week prospective activity diary completed at a randomly determined time. Activities were classified as low, medium or high risk using a modification of the American National Hemophilia Foundation ratings<sup>4</sup>

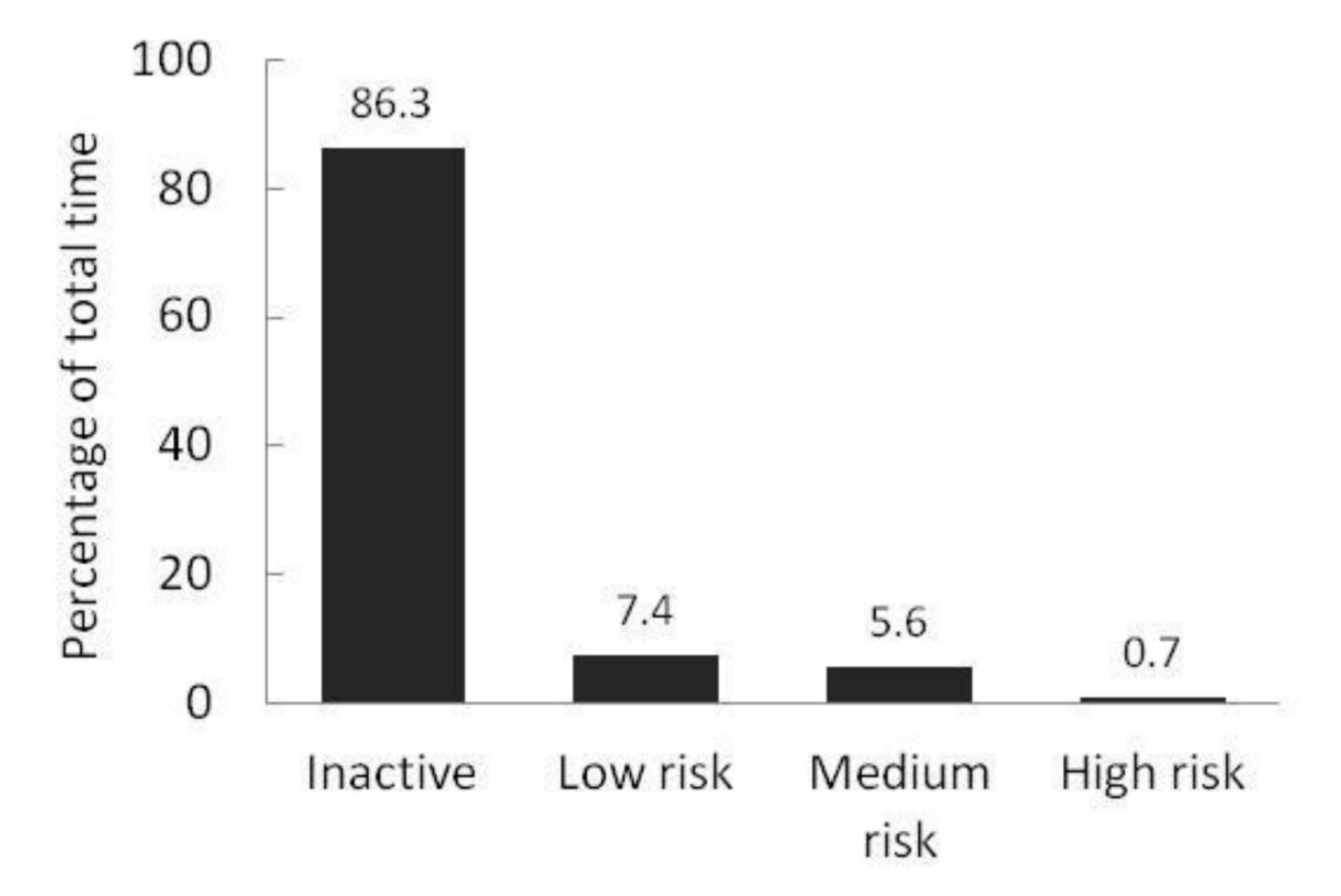


Figure 1. Proportion of time spent participating in each of the physical activity categories

# References

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adolescents with haemophilia. Haemophilia 2011; 17: e906-e12.

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Activity	Category	Proportion of time (%)
riding activities (low risk)	2	32.3
mod-low contact sports	2	22.9
park/playground activities	2	12.4
hard ball games/training	2	9.9
rough play	3	6.8
running games/jumping	2	6.1
martial arts	3	2.6
water activities (mod risk)	2	2.1
contact/collision sports	3	1.9
gymnastics	2	1.5
racquet sports	2	0.6
wilderness	2	0.4
snow sports	3	0.3
riding activities (mod risk)	3	0.2
Total		100

**Table 1:** Proportion of time spent in specific category 2 (moderate risk) and category 3 (high risk) physical activities.

## Results

The median time spent in sport or leisure-time physical activity in the preceding year was 7.9 hours/week (IQR 4.6 to 12.9). The median time spent in vigorous physical activity (>6 METS) was 3.8 hours/week (IQR 1.6 to 6.4) and in moderate and vigorous physical activity 6.4 hours/week (IQR 3.7 to 10.0). Figure 1 shows the percentage of time spent in physical activity risk categories. Table 1 shows time spent in specific physical activities.

The median small screen time was 2.5 hours/day (IQR 0.5 to 2.5). Forty five per cent of all children and 61% of children over the age of 10 years played at least one competitive sport. Averaged across one week, 43% of all children met the Australian government physical activity guidelines for children and 36% met the guidelines for small screen time.

#### Conclusions

This study provides the first data regarding leisure time physical activity in children with haemophilia living in Australia. The majority of Australian children with haemophilia are not meeting the national physical activity and small screen time guidelines.



