

# Wheelchair Usage and Checkout Survey of Long-term Disabled Clients

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**Purposes:** To survey the current usage of wheelchair in the long-term disabled in Taiwan. **Methods:** A checkout evaluation form of wheelchair was designed based on expert meetings and pilot trials. The clients in this survey was a convenience sample recruited from subjects in the National Survey of The Usage of Assistive Devices. A total of 143 checkout evaluation forms were completed by 58 physical therapists and 18 occupational therapists. **Results:** The long-term disabled clients has age of 75±10.5 years, were mostly women (58.2%), and physically disabled (76.4%). Approximately 86% of the wheelchairs were purchased by the clients themselves, only 14.1% had been consulted before purchasing. Seventy-nine percent of the wheelchairs were standard type and 21% were custom-made. Twenty-three percent of the clients had some complications, such as spinal deformities (78.1%) and pressure sore (28.1%). Furthermore, about 51.1% clients were found to have anterior or posterior tilted pelvis, and 53.6% had poor sitting balance. Some problems with the wheelchair brakes (15.0%), deflated or badly deteriorated tires (14.7%), damaged foot rests (7.0%), inappropriately fitted arm rests or foot rests (10%) were found in the survey. The accessories that therapists most recommended were such as back pads (8.4%), seating cushions (7.7%), and pelvic belts (7.7%). Regarding the difficulties in the environment domain, 62.6% of the clients did not know how to maintain their wheelchairs, which were significantly different between the users of standard type users (67.0%) and the custom-made ones (46.7%). Other major problems the user reported were difficulties in taking personal or public transportations (59%), and difficulties with indoor mobility (54.7%). **Conclusions:** This survey revealed high prevalence of wheelchair users with complications and poor postures in the long-term disabled. Damages to the wheelchairs and poor accessibility indoors or outdoors were also found. A small portion of the wheelchair users may benefit from regular check ups, minor fixing, and of the accessory prescription. This survey demonstrated the importance of follow-up service from professionals for long-term wheelchair users to identify user or device problems. Furthermore, the awareness of environmental barriers should be promoted to increase accessibility of wheelchair users in the society. (FJPT 2006;31(2):98-111)

**Key Words:** Assistive devices, Disability, Wheelchair

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