Table 3: Table of Evidence

| Country, Author, Year | Population Description | Study Type/Data Collection Method | Relevant Outcomes Regarding Available AT and Other Findings |
|--|---|---|---|
| Brazil | | | |
| Assis et al, 2003 ⁹ | N/A | Product development and intervention, and Product evaluation | Development of low-cost "Geriatric" software and equipment (activity board, calendar, routine organizer). Software and equipment were found useful and applicable to programmes for individuals with cognitive impairment. Post intervention showed improvement in cognitive functioning and daily activities at home. |
| De Cruz et al, 2013 ³ | N=91, Mean Age=62.2 | Research Cross-Sectional | Most reported assistive resources were those to assist mobility (46%) (Predominately canes), and ADLs (29%). No direct association between AT and independence (only mild dependency). |
| Mello MAF, 1999 ¹⁷ | N=84, Age range=73-102 | Research (Doctoral Thesis) N/A | 74% of participants used some type of AT. Canes were the most used type of AT (45%). 4% of the participants had all the assistive devices and home modifications they needed. 35.5% of users were satisfied with the use of these technologies. 2/3 of the AT were purchased by the user, a relative, or friend. |
| Schüler, et al, 2013 ⁵ | N/A | Product development | Produced low-cost AT such as cane tips to detect puddles, Android application for social media websites (i.e. Twitter), capacitive touch switches, home automation systems with web interface, AAC, and digitally creating video audio descriptions for a lower cost. |
| Cambodia | | | |
| Jones et al, 2003 ⁷ | N=100 (Disabled, non-disabled adults, and disabled children). Results only focused on older adults. | Research Qualitative study (In-depth field work Semi-structured interviews and observation) | Most had access to AT for bathing, drinking, toilet use, and transporting water from the source. Majority of solutions were low or no cost, made with locally available material and designs. AT benefited disabled individuals in terms of increased self-reliance, ability to contribute to the family or community, improved social status, reduced work-load, well-being, economic situation, and high self-esteem. |
| Egypt | | | |
| Salah et al., 2011 ¹⁰ | N/A | Product development | Development of the EJAD, low cost AT to help older adults walk and complete sit-to stand activities. |
| India | | | |

| Jefferds et al., 2010 ⁶ | PART survey age range=19- 67,WST/QUEST age range=21-60 | Research Quantitative Study (Survey Questionnaire) | Custom-fitted wheelchairs provided by the Department of AT improved wheelchair skill scores and technology satisfaction among participants. |
|--|---|---|---|
| Kumar et al, 2009 ¹² | N=100, Age=60- 85 years, Mean Age=N/A | Research Qualitative Study (Survey Questionnaire) | Inadequate availability of AT in India has been partially due to the lack of awareness among the users as well as among the professionals. Although respondents lacked awareness of the devices, they were willing to use them, provided these are made available at affordable costs. 27% had difficulty in the kitchen gadgets and appliances, 26% in recreation/entertainment, 21% in home elements, 19% with mobility and 18% with ADLs. Highest awareness was in communication devices, home elements, ADL mobility, and least was in high-tech AT. |
| Langdon et al., 2013 ⁸ | N=19, Age range=25-84 | Research Qualitative Study (Semi-structured Interview) | Participants with impairments were enthusiastic to use new technical devices, but emphasized on need of training. Many users did not have access to assistive devices and interaction techniques. |
| Manogna S et al., 2010 ¹³ | N/A | Product Development | Development of head movement based assist system to serve people with quadriplegia. The assist system has proven to be of simple implementation and of low cost. The system was easily handled by the patients. |
| Shore, 2008 ¹⁴ | N=100 (from India), Mean Age=50±25 Age range=3-93 | Research Quantitative Study (Survey) | Use of wheelchair resulted in significant shift towards independent function. The impact on health and quality of life was generally viewed as positive (56.2%). |
| Shore S et al, 2012 ¹⁵ | N=206, Mean Age=54, Age range=4-102 | Research Quantitative Study Survey | Receiving a simple and durable wheelchair improved the reported health, quality of life, and function of recipients following 12 months of use. 78% had not owned a wheelchair before, largely due to lack of money. Increase in independence associated with the use of wheelchair (independence score changed from 3.9 to 5.0 over 12 months). |
| Zipfel, et al., 2007 ⁴ | N/A | Product Development | Developed a manual folding cross-brace design with several points of adjustability, and higher grade bolts. The new chair design has so far proven to be more durable and comfortable than existing wheelchairs. |
| Turkey | | | |

| Bengisu, 2010 ² | N=80, Mean Age=35 ± 9 Age range =18-61 | Research Qualitative Study (Phone interview) Product evaluation | Three most used AT were computer screen readers (46%), talking watches (26%), and screen readers for cellular phones (21%). Most desired AT were cellular phones with screen reading capability. Most frequently requested AT were devices for warning about barriers, reading printed documents and signs. Screen readers for computers were rated the highest (4.7/5) and 76% of the participants rated them very useful and 0 participants rated the product not useful. Screen readers for cellular phones were rated 4.6/5 and 72% of the participants rated them very useful and only 1% rated it not useful. |
|------------------------------------|--|---|--|
| Simsek et al., 2012 ¹⁶ | N=163, Mean age=73.18 ±6.62, Age range =58- 105 | Research Quantitative and qualitative Study (mixed methods) | The most frequently used device to maintain mobility was a walking stick. A positive relationship was found between AT usage and mobility state, and AT usage and mobility activities required for developing basic life functions (P<0.05). AT usage was greater in women (39%) than in men (19%). |
| Ucsular et al., 2011 ¹¹ | N=24, Age range=13-65 | Research Randomized Control Trial | The Wheelchair Skill performance scores increased significantly in the training group (P=0.034) compared to control group (P=0.01). A significant improvement in safety scores in the training group compared with the control group. |
| Zimbabwe | | | |
| Edie et al, 2003 ¹ | N=3901 households, Mean Age (Disability)=43.2 Age range=0-98 Matabeleland, Manicaland and Midlands (44% of the total population). | Research Qualitative Study (Survey | Of those who used AT, 41.7% were among ≥61. Of those who used AT, 80% used personal mobility devices, 19% used AT for communication and information, 2.2% of the users had AT for personal care & protection. 31.2% of the devices were provided by private sources, 27.4% from government health services, 8.3% from NGOs, 3.2% from other government services and 28.8% from other sources. 63.1 % received guidance on using the devices, 36.9% had not received any instructions. Significantly fewer disabled in rural areas had received guidance; 57% versus 73% in urban areas. 36.3% were responsible themselves for maintenance and repair, 14% had government assistance, 21 % relied on families and 14 % had devices not maintained or repaired. Zimbabwe had the smallest gap in AT/services compared to 3 other African countries (Malawi, Namibia, and Zambia). 35.1% urban Zimbabweans had access to AT compared to 22.2% rural populations. |

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