# Lecture 3: Compliance with, and barriers to achieving exercise guidelines in people with a history of polio under the age of 65 years

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## Study on:

- a) To identify self-reported adherence with physical activity guidelines
- b) Better understand the barriers and enablers of physical activity

## Demographics of 65 and under for PSV

- Australia, NZ and PNG: 35.1%
- Asia (south-east, sub-continent, north): 31.1%
- Europe: 17.6%Middle-East: 9.5%
- Africa: 5.4%
- South and Central America: 1.4%

## **Results: Meeting Guidelines**

- Aerobic Activity- 49%
- Strengthening Activity- 19%

## **Doing some Activity**

- Aerobic Activity- 72%
- Strengthening Activity- 26%
- The most common duration of activity was
  - o 30 60 mins (34.5%);
  - o 15 30 mins (23.6%);
  - o less than 15mins (20%);
  - o 60 90 mins and greater than 90 mins (each were 10.9%)

#### Impact of Age and Gender

- No significant differences between the younger age group (21 49 years) and the older group (50 – 65 years) for engaging in physical activity
- The older age group were more likely to meet the aerobic activity guidelines then the younger group. They were met by 57% of the population compared to 32% of the younger group
- No significant differences were noted between groups for strengthening guidelines
- No gender difference was identified

#### **PSV Clinical Implications**

- Disease specific information is wanted among this population
- Greater access to exercise specialists at acceptable costs may facilitate engagement
- Physical activity consultation is of interest to this population
- Longstanding beliefs around exercise are likely to have to be challenged
- Promotion of guidelines for physical activity for polio survivors may improve adherence to health professionals to prescribe exercises

#### Discussion

The group were not broken up by diagnosis (i.e. PPS) or the degree of disability (i.e paresis of both lower limbs; 1 lower limb etc; use of Assistive Technology) which may have influenced rates of PA more than age or gender.

It is interesting to note these results in the context of other disability groups as there are often participation restrictions and activity limitations for people with disabilities to meet activity guidelines as easily as those without disability.

The Australian Bureau of Statistics data break up participation rates in physical activity over the last 12 months (again by self-report, similar to how Polio Service Victoria collected their data) and found 71% of people who do not have restriction with their disability participate in recreational activity; 65% of mild restriction and 61% of moderate restriction participate in physical activity.

The Australian Institute of Health and Welfare recently found 54% of women and 51% of men were inactive or insufficiently inactive. This is quite similar to what PSV found which is surprising for a group with disability (although it is hard to know the level of disability of those who were included). Regardless of this limitation, PSV did discuss significant challenges regarding health literacy and language with a migrant population mainly from sub-continent and African countries. The results indicate despite these challenges, Polio Survivors under 65 years of age, and particularly those over the age of 50 years were remaining physically active.

It would have been interesting to find out the perceptions toward physical activity among their sample. PSV mentioned they needed to correct perceptions regarding physical activity, and there was a need particularly outside of this research sample (i.e. older Australian Polio Survivors). It would be interesting to explore with those Polio Survivors who were challenging or who were not sure on the appropriateness of physical activity guidelines, the level of physical activity they were doing, and the rationale for this. There are interesting studies that have been released recently regarding older adults and those with a history of stroke, that we perhaps need to alter the recommended guidelines- to decrease the volume, and although this was done, studies showed in these populations, benefits may still be elicited. Given it may be hard to recruit the number of Polio Survivors into groups of similar disability, diagnosis and time points from initial infection to determine prescription and adaptation, perhaps trials with similar protocols of reduced volumes of exercise may be interesting to track to determine whether this is more tolerable (and achievable) in a Polio Survivor population.