

The Result of Health-related Physical Fitness Test in Hospital Staff — the Experience of Cardinal Tien Hospital Yung Ho Branch

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INTRODUCTION

- Hospital staff/employees generally have better knowledge about diet control and understand the importance of regular exercise.
- But longer working hours and too much family work are the common reasons to refuse exercise.
- Good health-related physical fitness is very important for life and work. So we would like to know the condition of health-related physical fitness in our staff.

METHOD

- **Health-related physical fitness tests :**
 - Body Mass Index (body composition)
 - Back Scratch Test (upper limb flexibility)
 - Sit-and-reach test (lower limb flexibility)
 - Standing Balance Test
 - 1-minute Sit Up Test (core muscle strength)
 - Handgrip Strength Test (muscle strength)
 - 3-minute Step Test (with preset cadence)
- Analysis was done by using the SPSS 12.0 statistical software.
- ****515 employees (35.79 ± 9.95 yr.) participated, and participation rate was 84.8%.**

RESULT

Items	Back scratch test	Sit-and-reach test	Eye-opened stand on single foot	One-minute sit up test	Handgrip test	Three-minute step test
Function	Upper limb flexibility N=514	Lower limb flexibility N=500	Balance N=515	Core muscle strength N=487	Grasp strength N=515	Aerobic endurance N=488
Level	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
1 (Worse)	35 (6.8)	127 (25.4)	101 (19.6)	102 (21.0)	107 (20.8)	108 (22.1)
2 (Bad)	0 (0.0)	125 (25.0)	0 (0.0)	96 (19.7)	0 (0.0)	94 (19.3)
3 (Standard)	7 (1.4)	112 (22.4)	0 (0.0)	114 (23.4)	108 (21.0)	110 (22.5)
4 (Good)	0 (0.0)	75 (15.0)	0 (0.0)	95 (19.5)	0 (0.0)	104 (21.3)
5 (Excellent)	472 (91.8)	61 (12.2)	414 (80.4)	80 (16.4)	300 (58.2)	72 (14.8)

- Fitness outcomes with **poor and worse grade** in different departments.

	Medical department N=146	Nursing department N=258	Administrative department N=111	Totally N=515
	N (%)	N (%)	N (%)	N (%)
Upper limb flexibility	15 (10.3)	9 (3.5)	11 (9.9)	35 (6.8)
Lower limb flexibility	71 (48.6)	130 (50.4)	51 (45.9)	252 (50.4)
Balance	28 (19.2)	55 (21.3)	18 (16.2)	101 (19.6)
Abdominal strength	53 (36.3)	102 (39.5)	43 (38.7)	198 (40.7)
Grasp strength	26 (17.8)	44 (17.1)	<u>37 (33.3)</u>	107 (20.8)
Aerobic endurance	51 (34.9)	101 (39.1)	<u>50 (45.0)</u>	202 (41.4)

CONCLUSION

- After this study, our staff should improve their condition of physical fitness, especially in lower extremity flexibility, aerobic endurance, and abdominal strength (core muscle endurance).



Thank you for your attention !!