OP-0060 – Perceived barriers to leisure time physical activity in adults with type 2 diabetes attending primary health care in Oman: a cross-sectional survey

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Background

Physical activity (PA) is fundamental in diabetes management for good metabolic control¹. However, PA and diabetes are highly prevalent in the countries of the Gulf Cooperation Council². This study aimed to identify barriers to performing leisure time PA and explore differences based on sociodemographic characteristics and perceived stages of change in PA in adults with type 2 diabetes (T2D) in Oman.

Methods

- Study design:** A cross-sectional study using an Arabic version of the “Barriers to Being Active” 27 item questionnaire³ in 17 primary health centres randomly selected in Muscat.
- Population:** Individuals >18 years with T2D, attending diabetes clinic for > 2 years and with no contraindications to performing PA.
- Recruitment:** All eligible patients attending their routine diabetes clinics during April and May 2015 were invited to participate.
- Ethics:** Informed consent was obtained from participants.
- Information collected :**
 - ❑ Socio-demographic data.
 - ❑ Perceptions on stage of change in PA⁴.
 - ❑ Barriers to leisure PA. Participants rated on a scale of 0-9 how far factors under the following categories influenced their PA: fear of injury (FOI), lack of time (LOT), social support (LOSS), energy (LOE), willpower (LOW), skills (LOS), resources (LOR), religion (REL) and environment (ENV). Barriers were considered important if scored ≥ 5 .
- Analysis:** Chi-square analysis (corrected for multiple analyses) was carried out to identify the distribution of the high barrier scores (≥ 5) across the studied variables.

Table 1: P-values (>0.05)* for distribution of high barrier scores (≥ 5) to leisure physical activity across sociodemographic variables and self-reported stages of change in physical activity (n=305)

LOT	LOSS	LOE	LOW	FOI	LOS	LOR	REL	ENV
Gender: Male (42.6) vs Female (57.4)								
0.020*	0.008*	0.278	0.270	0.843	0.003*	0.640	0.981	0.508
Age: ≤ 57 (50.8) vs > 57 (49.2)								
0.002*	0.347	0.232	1.0	0.008*	0.025*	0.292	1.0	0.942
Marital status: Unmarried (21.3) vs Married (78.7)								
0.047*	0.277	0.875	0.753	0.356	0.626	0.026*	0.231	0.720
Employment: Unemployed(76.6) vs Employed (23.3)								
$<0.001^*$	0.120	0.003*	0.437	0.007*	0.004*	0.527	0.740	0.960
Education: Uneducated (48.9) vs Educated (51.1)								
$<0.001^*$	0.129	0.042*	1.0	$<0.001^*$	0.010*	0.816	0.162	0.700
Income: <500 (39.3) vs ≥ 500 (60.7)								
0.257	0.516	0.294	0.021*	0.163	0.663	0.005*	0.422	0.183
Self-reported stages of PA: Not active (67.9) vs Active (32.1)								
0.276	0.808	0.873	0.012*	$<0.001^*$	0.161	0.667	1.0	0.244

Results

- ❑ The response rate was 98% (305/312).
- ❑ Most (96%) reported at least one barrier to leisure time PA.
- ❑ Lack of willpower (45.6%), lack of resources (30.5%), lack of social support (29.2%) and fear of injury (25.6%) were the most frequently reported barriers (Figure 1).
- ❑ Factors that differed by the studied variables:
 - Lack of willpower was reported significantly more often by individuals with low vs high income (54.2% vs 40%, $P=0.002$) and in those reporting inactive vs active stages of change for PA (50.7% vs 34.7%, $P=0.029$).
 - Lack of resources was reported significantly more often by those with low vs high income (40% vs 24.3%, $P=0.004$) and married vs unmarried (33.8% vs 18.5%, $P=0.018$).
 - Lack of social support was reported significantly more often by females vs males (35.4% vs 20.8%, $P=0.005$) (Table 1).

Figure 1: Percentage of population who reported high barrier scores (≥ 5)

Conclusion

These findings suggest that physical activity interventions should be cost neutral and target psycho-social factors including self-efficacy and social support.

References

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