Obesity and Cardiovascular Risk factor analysis of Adults and Older Adults in an Inner London Borough

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**Introduction**

- Diabetes risk increasing due to lack of physical activity and obesity.
- NHS “slow to act” (BBC, 2016)
- £5.5bn a year for 16+
- 5% increase annually
Introduction to Haringey

- Haringey - 4th most deprived borough in London & 13th most deprived local authority area in England (out of 326).
- Polarisation - deprivation of East v West
- Life expectancy
  - 7.7 years lower for men
  - 3.4 years lower for women
Why Tottenham Hotspur?

- Large proportion of non GP registered population compared to London.
- Uptake of NHS Health Checks in the East of the borough was very low compared to West and London.
- Haringey council teamed up with THF to offer Health checks at local community hubs/facilities via the community nurse.
Aim and Method

• To Identify and analyse obesity related risk factors in Haringey.
• 3000 health checks (N=2254) were carried out between March 2014 and July 2015
• 23.4% females (N=529) and 76.6% males (N=1729).
• The mean age for males was 49.4 ± 8.0 years and 50.2 ± 8.0 years for females.
• Health checks carried out by the THF community nurse
• 25 locations in the east of the Borough at supermarkets, public libraries, cultural centres and post offices.
• Target males aged 40-75
Physical Activity and BMI (kg/m²)

* Males p<0.001; Females p<0.01
Physical Activity & HbA1c score

Males p<0.001
Qrisk & Physical Activity

Males p<0.001
* Males & Females p<0.01
Blood sugar & BMI

* Males & Females p<0.01
BMI & alcohol units

* Males p<0.001
Total cholesterol & BMI

* Males & Females p<0.01
Qrisk & BMI

* Males p<0.01
Discussion: UK Comparisons

- 11% ↑ females classed as OW/OB
- 4% ↑ males classed as OW/OB
- 34% ↓ females meet the PA guidelines
- 36% ↓ males meet the PA guidelines

(HSCIC, PHE, 2015)
Discussion: Supports prior research that suggests that:

- ↑ Blood sugar
- ↑ Blood pressure
- ↑ Cardiac risk
- ↑ Total cholesterol

(Mokdad et al., 2003; Sullivan et al., 2005)
• Weight loss over time in older adults is a sign of malnutrition (Beck and Ovesen 1998)

• Poor nutritional status was associated with the prevalence of type 2 diabetes (Castaneda et al., 2000)

• Low dietary magnesium was associated with risk of type 2 diabetes (Lopez-Ridaura et al., 2004).

• Normal BMI had lower blood sugar than underweight BMI group
Discussion – ethnicity analysis needed

- Mixed Race: 0.9%
- south Asian: 6.2%
- Other: 4.7%
- White British: 3.9%
- European White: 11.8%
- Black: 33.4%
- Asian: 39.2%
Limitations and Conclusion

- Interventions must be sought to address obesity and activity in Haringey particularly in the 40-60 year old age group.
- Females should not be overlooked in NHS or other initiatives.
- Over \( \frac{3}{4} \) of the sample were male.
References

- Castaneda C, Bermudez OI, Tucker KL: Protein nutritional status and function are associated with type 2 diabetes in Hispanic elders. Am J Clin Nutr 72:89–95, 2000
Thank you

- Tottenham Hotspur Foundation
  - Katrina Heal
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