A Structured Health Intervention For Truckers (SHIFT)

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Purpose

Lorry drivers are an underserved workforce who are at increased risk of chronic disease due to

work environment constraints, culture and job demands.

SHIFT aims

Figure 1: Components of the SHIFT intervention.



- To help prevent illness in lorry drivers and reduce the associated NHS, individual and societal costs
- To be sustainable in the workplace following study completion

Methods

Observational and pilot studies have been undertaken. A cluster randomised controlled trial is now underway with collaboration between the NHS, Universities and a major logistics company.

The intervention: SHIFT consists of various interactive components specifically designed to promote healthy lifestyle behaviours surrounding physical activity and diet in lorry drivers (see Figures 1-6).

Results

- Our previous observational data showed 84% of lorry drivers were overweight/obese, 87% were physically inactive and 35% were hypertensive. Pilot testing of SHIFT showed significant positive changes in fasting blood glucose (-0.6mmol/l), total cholesterol (-0.7mmol/l), waist circumference (-2.5cm) (all p<.01) and a 12% reduction of participants with a >10% risk of a cardiovascular event within 10 years (p<.05)¹.
- 25 depots have agreed to participate in the cluster-randomised controlled trial. Baseline health assessments have now been completed in all depots (June 2019) and 16 facilitators have been trained (July 2019) to deliver the SHIFT workshops.
- Table 1 highlights some measures that have been put in place to facilitate progress of the study and overcome emerging difficulties.

Figure 2: The SHIFT Workshop is split into 8 sessions, with time for 2 breaks, as illustrated below:

Α.	Welcome and Introduction	10 minutes		
В.	Driver Story	30 minutes		
C.	Risks and Health Problems	45 minutes		
	Break	15 minutes		
D.	Depression, Sleeping, Smoking	30 minutes		
E.	Physical Activity	90 minutes		
	Break	30 minutes		
F.	Food Choices	90 minutes		
G.	Self-management plan	15 minutes		
Η.	Next Steps	5 minutes		
Total		6 hours		

Figure 3: Examples of worksheets participants complete during the SHIFT workshop.

lesterol	Less than 4.0 mmol/l	4.0 4.5	5.0 5.5	6.0 7.0	More than 7.0 mmol/l	
1	More than 1.0 mmol/l	1.0 0.9	0.8 0.7 0.6	0.5 0.4	Less than 0.4 mmol/l	
1	Less than 2.0 mmol/l	2.5	3.0 3.5	4.0	More than 4.0 mmol/l	
lic	Less than 120 mmHg		160 mmHg		More than 180 mmHg	
lic	Less than 80 mmHg		90 mmHg		More than 100 mmHg	
	Less than 25		30		More than 40	
cumference	MY RISK FACTO	RS				
	Risk Factor	My Risk Factor (✔or ¥)	Can I change this risk factor? (✔or ¥)	Risk Factor	My Risk Factor (✔or ¥)	Can I change this rist factor? (✔or ¥)
on	Ethnicity			Stress		
nced	Family history of diabetes and/or heart disease			Unhealthy food/drink (high fat/ sugar/salt)		
	Getting older			Prolonged sitting		
-	Being overweight/ weight around the middle			Inactivity		
	High blood pressure			Smoking		
	High blood cholesterol			Depression		
	High blood			Warking		

RUNNING TIME:

Figure 4: Workshop group activity - the sugar cube game



Table 1: Barriers identified throughout the research process and associated facilitators to the study

Barriers	Facilitators
Conflicting collaborator priorities	 Regular meetings Adapting communication to academic, health or logistics industry specific terminology Engaging managers by delivering SHIFT for them Promoting SHIFT as a potential Continued Professional Competence (CPC) module
2 unpredicted events (e.g. fire)	 Adapting timelines Communicating to funder Being flexible
Lorry driver shift patterns	 Training more research personnel Recruiting to cluster size

Conclusions

- Health needs exist within this workforce and promising results were found in the pilot study.
- SHIFT may provide a workplace strategy to encourage healthy lifestyles.
- Unforeseen difficulties emerged throughout the current study but the study has now gained momentum.

Implications

Ensuring workforce health is a company priority, good communication (including using industryspecific terminology), adaptations to management processes and implementing SHIFT within lorry drivers' compulsory Continued Professional Competence training are important enablers to consider. Workplace physiotherapists could be trained as facilitators and their skills utilised as part of SHIFT.

Figure 6: Example exercise from the Cab workout



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1. Varela Mato, V. et al. (2018) The Impact of a Novel Structured Health Intervention for Truckers (SHIFT) on Physical Activity and Cardiometabolic Risk Factors Journal of Occupational and Environmental Medicine 60 (4) 368-376



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