Comparing characteristics and outcomes of individuals who participated in a trial versus those that did not

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BACKGROUND

- Participants in trials may differ from non-participants
- This may bias the estimate of treatment effects

AIM

To compare participants in a randomised controlled trial (RCT) with non-participants at screening and at outcome

METHODS

RCT of telephone-delivered cognitive behavioural therapy (tCBT) for preventing chronic widespread pain in those at high-risk

- Screening questionnaires sent to GP Scotland
- Eligibility Criteria: Pain + at least 2 of 3 risk factors behaviour, somatic symptoms, problems)
- 4,435 high-risk individuals eligible for trial identified; 996 of these recruited to the trial
- Participants allocated tCBT or usual care (UC)
- tCBT Intervention: Assessment, six weekly-sessions, 3 & 6 month boosters
- Followed up at 12 months

RESULTS

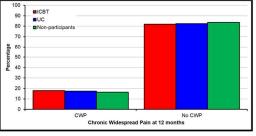
Non-participants differed from participants at screening

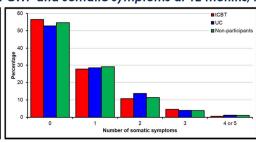
	ranicipants	Non-participants	
	n=996	n=3,439	
Age (median)	59.1 years	54.8 years	
Difference (95% CI)	4.2 (2.7-5.6)		
% Female	41.5%	35.8%	
Difference (95% CI)	5.7% (2.2-9.2%)		
Risk Factors			
Illness behaviour	9.83	8.34	
Difference (95% CI)	1.49 (1.26-1.72)		
Somatic symptoms (2-5)	19.4%	16.1%	
Difference (95% CI)	3.2% (0.5-6.0%)		
Sleep Problems	10.18	9.70	
Difference (95% CI)	0.48 (0.15-0.81)		

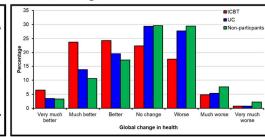
No differences in illness behaviour at 12 months: sleep improved in tCBT group only

	†CBT	UC	Non-participants	
	n=384	n=441	n=827	
Illness behaviour				
Mean score	8.21	8.96	8.16	
Mean diff. (UC vs NP)1	0.34 (-0.18 – 0.87)			
Mean diff (tCBT vs NP)1	-0.47 (-1.21 – 0.26)			
Sleep problems				
Mean score	8.20	9.20	9.31	
Mean diff. (UC vs NP)1	-0.17 (-0.75 – 0.41)			
Mean diff (tCBT vs NP)1	-1.13 (-1.83 – -0.42)			
¹ Adjusted for age, gender, number of risk factors at baseline, and outcome at baseline				

No differences in percentages of CWP and somatic symptoms at 12 months; however, change in health differs







DISCUSSION

- Limited to individuals consenting to future study
- Low response rates at follow-up, particularly in nonparticipants
- tCBT improves sleep and global health in high-risk
- Findings support use of tCBT in at-risk populations

CONCLUSIONS

- Participants differed from non-participants in age &
- Using non-participant comparison group confirms tCBT as effective for some pain risk factors

- patients: therapists: project assistants: Centre for Healthcare Randomised Trials
- Arthritis Research UK (now Versus Arthritis) grant number: 20748
- Intervention costs: NHS Grampian, NHS Greater Glasgow and Clyde, and NHS Highland Poster produced with help of Open Al's large language model Chat-GPT-4



