

Willingness to Engage in Smoking Cessation Intervention Among Participants in a Population-Based Lung Cancer Screening Pilot

Annemiek Snoeckx^{1,2}, Charlotte Theuns², Kaat Ramaekers³, Amber Gerris²,
Guido Van Hal², Jan De Lepeleire⁴, Jan P. Van Meerbeeck^{1,2}

¹ Antwerp University Hospital, Antwerp/BE ² University of Antwerp, Antwerp/BE ³ Respiratoire Gezondheid, Leuven/BE ⁴ KU Leuven, Leuven/BE

BACKGROUND / RATIONALE



Lung cancer is the leading cause of cancer-related death worldwide and in Belgium.



Annual low-dose CT screening reduces lung cancer mortality in high-risk populations and it offers an important opportunity to address tobacco dependence.



TAMIRO-STOP evaluates engagement with smoking cessation support within a real-world, population-based lung cancer screening pilot (ZORALCS).

STUDY DESIGN & SETTING



Embedded within ZORALCS (risk-based assessment + low-dose CT screening)



Eligible for TAMIRO-STOP: people between 55-74 years old who currently smoke or who quit within the past year.



Invitation and enrollment through the screening platform around the time of baseline low-dose CT.



Prospective, **randomised controlled trial**

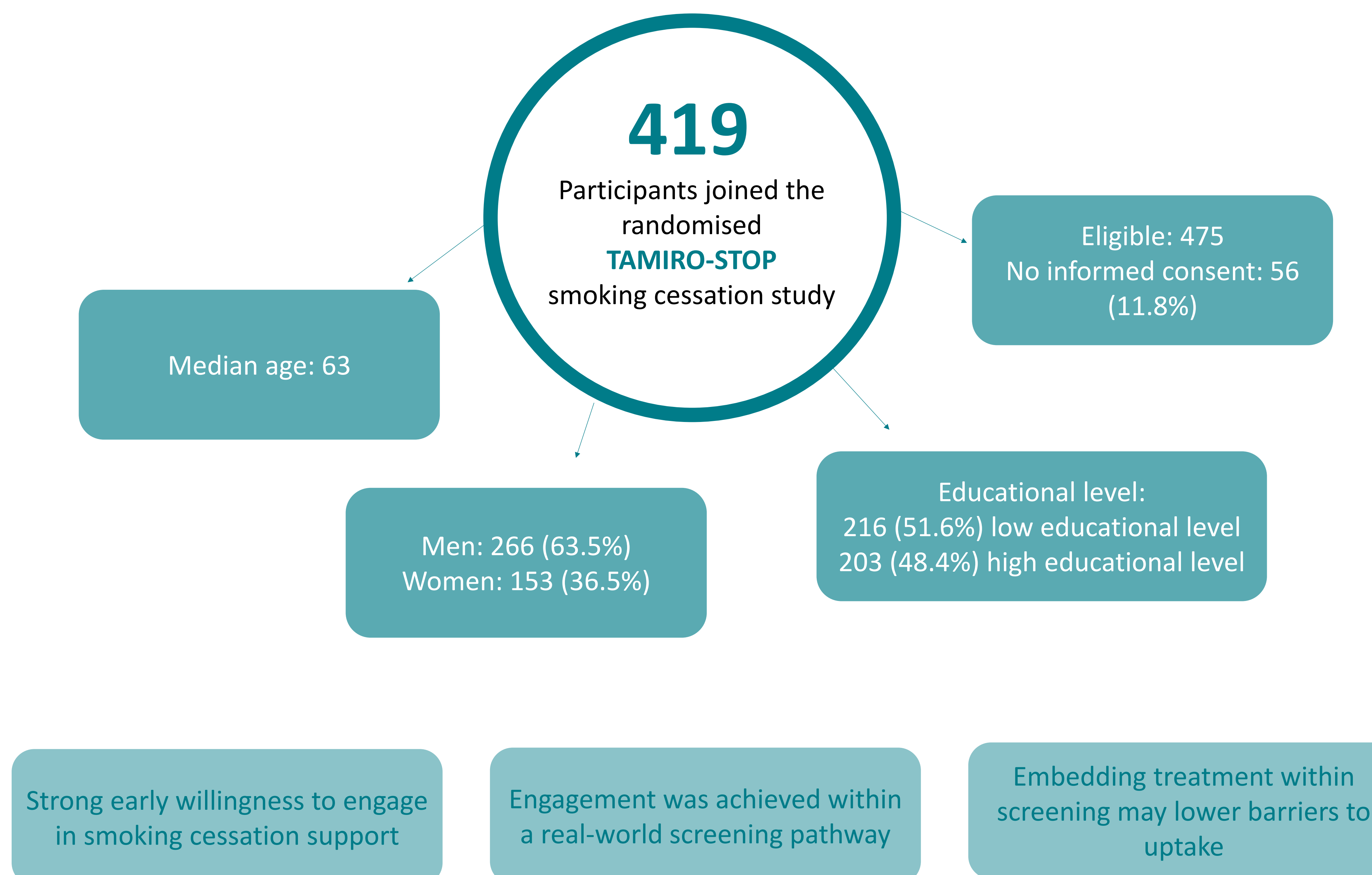
MINIMAL intervention (control group)

Brief motivational interview prior to low-dose CT + written referral to a quitline or healthcare professional of their own choice

INTENSIVE intervention (intervention group)

Minimal intervention + 8 counseling sessions with a smoking cessation expert + nicotine replacement therapy – free of charge

RESULTS



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Control group:
209/419 participants (49.9%)



Intervention group:
210/419 participants (50.1%)



Engagement with the structured intervention was high: 149/210 (71.0%) participants in the intervention arm attended their first counseling session, and 83/149 (55.7%) initiated nicotine replacement therapy within the early phase of follow-up.

KEY MESSAGES

FEASIBLE APPROACH

A structured smoking cessation intervention within a population-based lung cancer screening programme is feasible.

HIGH WILLINGNESS

There is a high willingness to participate.

TEACHABLE MOMENT

Screening may act as a teachable moment for behaviour change. It is important to repeat the minimal intervention every screening round.

FUTURE

NEXT STEPS

Ongoing follow-up will evaluate quit rates, continued participation and relapse prevention.

DEFINITIVE CLINICAL OUTCOMES

The final results are expected in 2027.