Evaluation of smoking cessation services in disadvantaged areas of the Netherlands
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Contributing authors
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SUMMARY

Evaluation of smoking cessation services in disadvantaged areas of the Netherlands

One in two long term smokers will die of illnesses which result from their cigarette use. There is a socioeconomic gradient in both smoking prevalence and cessation, such that those of low socioeconomic status (SES) smoke more and make less successful quit attempts than their high SES peers. Thus those of low SES shoulder a greater burden of smoking-related illness. For this reason it is important that smokers of low SES use evidence-based smoking cessation measures to enhance their chance of quit success. One such measure is smoking cessation behavioural therapy (SCBT), used with or without pharmacotherapy. In England, such therapy is offered nationally in disadvantaged areas, without financial barriers. When the Dutch government decided to reimburse the use of pharmacotherapy in 2011, the financial barrier was removed, and thus a pilot study of this approach could be trialled in disadvantaged areas in the Netherlands.

Part 1 of this thesis aimed to evaluate the effect, optimal method of recruitment, and reasons for attendance of smoking cessation interventions in disadvantaged areas. There are many forms of SCBT available. Research from the UK indicates that rolling group therapy is the most effective therapy in most disadvantaged groups, however, evidence comparing therapy types from other countries is scarce. Chapter 2 examines the success of four different types of SCBT offered by four services in disadvantaged areas of the Netherlands. These are individual face-to-face or telephone counselling, and rolling (where participants can join at any time and the sessions are regularly repeated) or fixed (where all participants begin at the start of the course and no new participants are able to join) group therapy. The SCBT was offered in three different settings: hospital, primary care and community settings. Data for this study was collected by repeated surveys (two services) and by medical record research (two services). We calculated self-reported 12 month quit rate for each intervention. All interventions had higher quit rates than the background quit rate. When interventions were compared, rolling group therapy and individual face-to-face therapy had the highest 12 month quit rates, whereas fixed group counselling and telephone counselling had significantly lower quit success. On the basis of an analysis of the different types of counselling in different settings, we concluded that that SCBT offered in a community or primary care setting was significantly less successful than that offered in a hospital setting. However, when we compared different counselling types in a hospital setting, we found that there was no significant difference in the success of these therapy types in a hospital setting. Thus we concluded that rolling group therapy and individual face-to-face therapy had potential in disadvantaged areas in the Netherlands, however, due to the lower costs of rolling group therapy, this should be the area of focus.

Reach and recruitment of smokers in disadvantaged areas, often including ethnic minority groups, is a significant challenge for interventionists offering SCBT. Because of this known difficulty, multiple reach and recruitment strategies are often enacted in a single area to ensure the greatest number of participants with the greatest mix of characteristics. Chapter 3 examines how participants heard about and were referred to SCBT offered in two disadvantaged areas of
the Netherlands. A range of methods were used to reach and recruit participants in these areas, including GP, community organisations, word of mouth, other health professionals and media, such as posters, flyers and local newspapers. We found that in both the total participants and those of low SES, the GP was the most common way to recruit and refer participants to the SCBT. Attendance appeared not to be affected by this referral route, such that those who were reached and recruited through the GP attended a similar number of sessions as those who came through other routes.

Attendance of SCBT sessions affects the success of a quit attempt, such that those who attend more sessions are more likely to quit successfully. Participants from low SES groups attend less sessions than their high SES peers. In-depth understanding of the reasons for different attendance patterns in smokers of low SES is required to allow interventionists to better address this issue. In Chapter 4 we examine the motivations, barriers and social support with regard to attendance in smokers attending SCBT in a disadvantaged area. We completed semi-structured in-depth qualitative interviews, which were recorded, transcribed, coded and analysed. We analysed motivations and social support with regard to the Self-Determination Theory. Participants fell into two groups: frequent (missing up to 2 sessions) and infrequent attenders (missing more than 2 sessions). Frequent attenders more often had intrinsic motivation to attend (i.e. attending because it was enjoyable in and of itself) and named more self-determined motivations to attend (e.g. commitment to attendance and wanting to quit) than infrequent attenders. Frequent attenders mentioned no organisational barriers to attendance, such as not being contacted by organisers as expected. While all participants experienced negativity from their social environment with regard to either their quitting or their SCBT attendance, frequent attenders had more social support than infrequent attenders. This chapter concludes with recommendations to increase motivation to attend sessions, as this may increase the number of sessions attended by smokers in disadvantaged areas.

Part 2 of this thesis aimed to explore the influence of the prevailing economic conditions and social norms on inequalities in smoking cessation. Smoking cessation, while done on an individual level, is influenced by macro-level factors. The prevailing socioeconomic conditions and social norms are two such factors which can influence smoking cessation. In 2008 the global economy went into recession, dramatically changing the economic conditions in Europe and elsewhere. People of low SES disproportionately experience the effects of economic downturns. Chapter 5 is a population-based study which examines socioeconomic inequalities in current smoking and smoking cessation in The Netherlands before and during the Global Financial Crisis (GFC). Data from the Health Survey (2004-2011), a repeated cross-sectional survey, was used. Pre-GFC was defined as 2004 – end third quarter 2008 and during-GFC was defined as fourth quarter 2008 – end 2011. SES was measured by income, educational level and neighbourhood disadvantage. Current smoking rates and smoking cessation ratios were calculated. All SES indicators showed higher levels of current smoking and lower levels of smoking cessation in participants of low SES compared with participants of high SES. This occurred in both periods.
Inequalities in current smoking increased significantly in poorly educated adults of 45-64 years of age, compared with their highly educated peers. Inequalities in smoking cessation increased in low income 18-30 year olds compared with their high income peers. This chapter concludes by stating that overall socioeconomic inequalities in current smoking and smoking cessation were unchanged by the GFC, however, current smoking inequalities by education and smoking cessation inequalities by income increased in specific age groups.

As we have seen, SCBT with pharmacotherapy is an evidence-based smoking cessation intervention. A financial barrier to use of this therapy can prevent those of low SES making use of such interventions. While SCBT was available as part of the basic health insurance in the Netherlands, pharmacotherapy was not included. This changed in 2011, when the Dutch government began to reimburse this therapy. This reimbursement was removed in the subsequent year, thus providing two natural experiments for the study of the effects of such reimbursement on inequalities in pharmacotherapy use in quit attempts. As a previous study had shown no changes in inequalities due to this measure, this study also considered if injunctive norm might play a role in this. Social norms toward smoking can influence quitting behaviour. Social norms can differ between countries, but also between socioeconomic groups within a country.

Chapter 6 is a population-based study which examines the effect of reimbursement of smoking cessation pharmacotherapy on inequalities in their use in quit attempts, and, considers the role of injunctive norm in this use. We used data from the DHSSC, which is continuous cross-sectional data, weighted to reflect the Dutch population. We defined SES by income and educational level. Smokers who had made a most recent quit attempt in 2009-2012 were considered. The years considered were 2011 (reimbursement available) and all other years (2009, 2010, 2012) (reimbursement not available). Injunctive norm was determined by perceived social acceptability of smoking in the vicinity of others in Dutch society. This was divided into those who found it mostly acceptable, were neutral or found it mostly unacceptable. This study found that use of pharmacotherapy by smokers in low SES groups did not increase in 2011 more than in those of high SES groups. A smaller proportion smokers of low SES found smoking mostly unacceptable than smokers of either middle or high SES, or than non-smokers of all SES levels. Low SES participants with a mostly acceptable injunctive norm were significantly less likely to use pharmacotherapy. This chapter concludes that reimbursement did not increase the proportion of smokers of low SES attempting to quit using pharmacotherapy to a greater extent than in smokers of high SES. The significantly lower use of pharmacotherapy in quit attempts of smokers of low SES with a positive injunctive norm toward smoking may partially underlie this.

The general discussion, Chapter 7, summarises the findings of each chapter, considers the overarching limitations of the studies, considers reflections on the studies and provides recommendations for practice and future research. Two counselling types in particular had high quit rates at 12 months when compared with the other counselling types in the study. They also performed well compared with the background quit rate and the results found in similar populations in other studies. The participants of low SES can be reached and recruited in disadvantaged
areas through the GP, however, with the caveat that overall a low number of participants were recruited. It is possible that attendance may be increased by a focus on making the course more enjoyable. This gives reason for optimism, however, must be considered in the larger smoking cessation context, where most smokers quit without help. Also, smokers of low SES face considerable barriers when attempting to quit, such as unsupportive social environment and negative social norms. Thus, it is recommended that these larger issues be addressed on a national scale, before or while attempting to implement this strategy nationally. Also, GPs in disadvantaged areas need to be equipped with the knowledge of where evidence-based SCBT is provided in their local area and encouraged to refer participants to these providers. Without such actions, it is unlikely that national implementation of smoking cessation services in disadvantaged areas offering free treatment would attract sufficient participants. Both local and national government have a role to play, but this should be done in conjunction for the best results. Future research would be aided by use of medical register data and this would be further aided by national guidelines on the collection of data by smoking cessation clinics.
SAMENVATTING

Evaluatie van stoppen met roken programma’s in achterstandsgebieden van Nederland

Een op de twee lange termijn rokers sterft aan een ziekte die ontstaan is als gevolg van roken. Er is ook een sociaaleconomische gradiënt in roken en stoppen met roken: mensen van lage sociaaleconomische status (SES) roken meer en hun stoppogingen zijn minder succesvol dan rokers van hogere SES groepen. Daarom hebben mensen van lage SES groepen meer rook-gerelateerde ziektes. Voor deze reden is het van belang dat rokers uit lage SES groepen bewezen effectieve hulpmiddelen gebruiken bij het stoppen met roken om hun slaagkans te vergroten. Een van deze hulpmiddelen is stoppen met roken gedragstherapie (smoking cessation behavioural therapy of SCBT) met of zonder farmacotherapie. In Engeland wordt deze therapie landelijk aangeboden in achterstandswijken, zonder financiële barrières. Toen de Nederlandse overheid in 2011 besloot om farmacotherapie te vergoeden, verdween de financiële barrière, en kon er een pilot studie van deze aanpak uitgevoerd worden in achterstandsgebieden in Nederland.

Deel 1 van dit proefschrift heeft tot doel om stoppen met roken interventies in achterstandswijken te evalueren op hun effect, optimale manier van werving en redenen om deel te nemen. Er zijn veel vormen van SCBT mogelijk. Onderzoek uit het Verenigd Koninkrijk (VK) geeft aan dat “rolling” groepstherapie de meest effectieve therapie is voor de meeste mensen uit lage SES groepen, maar er is weinig bewijs over vergelijkingen van SCBT typen uit andere landen.

Hoofdstuk 2 gaat in op het succes van vier verschillende SCBT types die worden aangeboden in achterstandsgebieden in Nederland. Deze zijn: individuele face-to-face en telefonische counseling of rolling (waar nieuwe mensen mogen gewoon instromen) en fixed groepstherapie (waar het cursus begint met een aantal deelnemers en niemand nieuw mag daarnaar instromen). De SCBT werd aangeboden in drie verschillende settings: het ziekenhuis, eerstelijnszorg en buurthuiswerk. De data voor deze studie werd verzameld via herhaalde vragenlijsten of via medisch dossieronderzoek. Voor elke interventie hebben we een zelf-gerapporteerde 12 maanden stopscore (gestopt met roken) berekend. Alle interventies hadden hogere stopscores dan de stopscore voor de algemene bevolking. Bij het vergelijken van de interventies hadden rolling groepstherapie en individuele face-to-face therapie de hoogste stopscores na 12 maanden, terwijl fixed groepstherapie en telefonische counseling significant minder succes bij het stoppen met roken lieten zien. Op basis van een analyse van de verschillende typen therapie in verschillende settings, constateerden we dat SCBT in een buurt of eerstelijnszorg setting significant minder succesvol waren dan in een ziekenhuis setting. We hebben qua succes echter geen significante verschillen gevonden tussen de verschillende soorten counseling in een ziekenhuis setting. Daarom hebben we geconcludeerd dat vooral rolling groepstherapie en individuele face-to-face therapie potentie hebben in achterstandsgebieden in Nederland, met rolling groepstherapie als belangrijkste focusgebied, vanwege de lagere kosten.

Rokers bereiken en werven in achterstandsgebieden, vaak met etnische minderheden, is een grote uitdaging voor zorgverleners die SCBT aanbieden. Vanwege dit bekende probleem worden er vaak verschillende strategieën voor bereik en werving in een gebied gebruikt om
zo veel mogelijk deelnemers te krijgen met een zo groot mogelijk diversiteit. **Hoofdstuk 3** kijkt naar hoe respondenten hebben gehoord over of zijn doorverwezen naar SCBT in twee achterstandswijken in Nederland. Er zijn in deze gebieden een aantal manieren om rokers te bereiken en werven gebruikt, zoals door de huisarts, door maatschappelijke organisaties, door mond tot mond reclame en door andere zorgverleners en media, zoals posters, flyers en lokale kranten. Wij hebben gevonden dat voor alle respondenten, ook voor lage SES respondenten, de huisarts de vaakst voorkomende manier was om patiënten te werven en doorverwijzen naar de SCBT. Route had geen effect op deelname, dus degene die door de huisarts kwamen, hebben dezelfde hoeveelheid sessies bijgewoond als degene die door andere routes waren gekomen. Deelname aan SCBT sessies heeft invloed op de kans op succes van een stoppoging. Mensen die meerdere sessies bijwonen hebben een hogere slaagkans. Mensen uit lage SES groepen namen meer sessies dan mensen uit hogere SES groepen. Een beter begrip van de redenen voor verschillende patronen van deelname van rokers van lage SES groepen is van belang om dit punt aan te pakken. In **Hoofdstuk 4** kijken wij naar de motivatie, barrières en sociale ondersteuning voor deelname van rokers die deelnemen aan SCBT in achterstandswijken. Wij hebben semigestructureerde kwalitatieve diepte-interviews gedaan. Deze zijn opgenomen, uitgeschreven, gecodeerd en geanalyseerd. Wij hebben motivaties en sociale ondersteuning geanalyseerd met behulp van de *Self-Determnation Theory*. Participanten konden in twee groepen verdeeld worden: frequente deelnemers (tot twee sessies gemist) en infrequente deelnemers (meer dan twee sessies gemist). Frequent deelnemers hadden vaker intrinsieke motivatie tot deelname (zij kwamen omdat het leuk was om te doen) en zij noemden vaker zelf-bepaalde motivaties om te nemen (bijv. verbondenheid aan deelnemen en willen stoppen) dan infrequente deelnemers. Frequent deelnemers hebben geen organisatorische barrières benoemd, zoals niet gebeld worden door de aanbieders van SCBT zoals zij hadden verwacht. Terwijl alle deelnemers negatieve reacties hebben ervaren van hun sociale omgeving over stoppen met roken of deelnemen aan SCBT, kregen frequent deelnemers meer sociale ondersteuning dan infrequente deelnemers. Dit hoofdstuk sluit af met aanbevelingen om de motivatie tot deelnemen aan SCBT te verhogen, omdat dit de hoeveelheid sessies die rokers uit lage SES groepen bijwonen zou kunnen verhogen.

**Deel 2** van dit proefschrift heeft tot doel om te verkennen wat de invloed is van het heersende economische klimaat en sociale normen op ongelijkheid in stoppen met roken. Hoewel stoppen met roken op individueel niveau wordt gedaan, wordt het beïnvloed door factoren op macroniveau. Het heersende sociaaleconomische klimaat en sociale normen zijn twee factoren die van invloed kunnen zijn op stoppen met roken. In 2008 ging de wereldwijde economie in recessie en dit heeft het economische klimaat in Europa en daarbuiten dramatisch veranderd. Mensen uit lage SES groepen ervaren onevenredig sterk de effecten van economische crises. **Hoofdstuk 5** is een populatie-gebaseerde studie die kijkt naar sociaaleconomische ongelijkheden in roken en stoppen met roken in Nederland voor en tijdens de crisis (GFC). Daarvoor gebruikten we data van de *Permanent Onderzoek Leefomstandigheden* (POLS) (2004-2011), een herhaald cross-sectionele
survey. Pre-GFC is gedefinieerd als 2004 tot eind derde kwartaal 2008 en tijdens-GFC is gedefinieerd als vierde kwartaal 2008 tot eind 2011. Sociaaleconomische status is gemeten door inkomen, opleidingsniveau en type wijk (achterstandswijk of niet). De prevalentie van roken en ratio’s van stoppen met roken zijn berekend. Bij alle indicatoren van SES zien we een hoger niveau van roken en lager niveau van stoppen met roken bij respondenten uit lage SES groepen, vergeleken met hoge SES groepen. Dit geldt voor in beide periodes. Ongelijkheid in roken bij volwassenen tussen 45 en 64 jaar werd significant sterker tussen mensen met een laag en mensen met een hoog opleidingsniveau. Ook de ongelijkheid tussen mensen van 18 tot 30 jaar met een laag en met een hoog inkomen werd groter. Dit hoofdstuk concludeert dat over het algemeen sociaaleconomische verschillen in roken en stoppen met roken niet veranderd zijn door de GFC. Echter, in bepaalde leeftijdscategorieën zijn ongelijkheden in roken door naar achteren mening nog toegenomen. Zoals wij hebben gezien is SCBT met farmacotherapie een bewezen effectieve interventie voor stoppen met roken. Een financiële barrière tot gebruik van deze therapie kan ervoor zorgen dat mensen van lage SES groepen minder gebruik maken van deze interventie. SCBT viel al langer onder het basispakket van de zorgverzekering in Nederland, maar farmacotherapie was niet daarbij niet inbegrepen. Dit veranderde in 2011, toen de Nederlandse overheid begon met het vergoeden van deze therapie. Deze vergoeding werd het volgende jaar weer afgeschaft. Dus waren er twee natuurlijke experimenten voor de studie naar de effecten van vergoeding op ongelijkheden in farmacotherapie gebruik bij stoppen in roken. Een eerdere studie al had laten zien dat er geen veranderingen waren in ongelijkheden door deze maatregel, onze studie keek ook of de heersende sociale norm een rol zou kunnen spelen. Een sociale norm die negatief staat tegenover roken, kan stoppen met roken bevorderen. De sociale norm kan verschillen tussen landen, maar ook tussen sociaaleconomische groepen binnen een land. Hoofdstuk 6 is een populatie-gebaseerde studie die kijkt naar de effecten van vergoeding van het gebruik van farmacotherapie voor stoppen met roken op ongelijkheden in het gebruik tijdens stoppen, waarbij ook de rol van de heersende sociale norm in dit gebruik bekeken wordt. Wij hebben data van het Continu Onderzoek Rookgewonten (COR) gebruikt. Wij hebben SES gedefinieerd op basis van inkomen en opleidingsniveau. Rokers die hun meest recente stoppoging hebben gedaan in 2009-2012 werden meegenomen. De jaren 2011 (wel vergoeding) en 2009, 2010 en 2012 (geen vergoeding) zijn onderzocht. De heersende sociale norm is gemeten als de perceptie van de sociale aanvaardbaarheid van roken in de nabije tijdens verschillende leeftijdscategorieën. Dit werd verdeeld in drie categorieën, respondenten die het overwegend acceptabel, neutraal of overwegend onacceptabel vonden. Deze studie heeft laten zien dat gebruik van farmacotherapie in 2011 door rokers in lage SES groepen niet meer veranderd is dan in hoge SES groepen. Een kleiner deel van de rokers uit lage SES groepen vond roken overwegend onacceptabel dan rokers uit middel of hoge SES groepen of niet rokers van alle SES groepen. Lage SES respondenten met een sociale norm waarin roken overwegend geaccepteerd werd maakten significant minder gebruik van farmacotherapie. Dit
Samenvatting

Hoeftuk concludeert dat het invoeren van vergoeding van farmacotherapie het percentage lage SES rokers dat een stoppoging deed met farmacotherapie niet is verhoogd in vergelijking met hoge SES. Het significant lagere gebruik van farmacotherapie bij stoppogingen door rokers van lage SES met een positieve sociale norm over roken kan hier misschien aan ten grondslag liggen.

De algemene discussie, hoofdstuk 7, vat de bevindingen uit elk hoofdstuk samen, beschouwt de algemene beperkingen van de studies, kijkt naar reflecties over de studies en geeft aanbevelingen voor de praktijk en toekomstig onderzoek. Twee therapie types hadden hoge stopscores bij 12 maanden in vergelijking met andere therapie typen in de studie. Deze deden het ook goed in vergelijking met de stopscore voor de algemene bevolking en met de resultaten in vergelijkbare populaties in andere studies. De participanten met een lage SES in een achterstandswijk kunnen worden bereikt en geworven door de huisarts, echter het waren wel kleine aantallen die werden geworven. Het is mogelijk dat deelnemen aan SCBT sessies kan worden gestimuleerd door de cursus leuker te maken. Dit geeft grond voor optimisme, maar moet wel beschouwd worden in het grotere verband van stoppen met roken, omdat de meeste rokers stoppen zonder hulp. Verder ervaren rokers van lage SES groepen aanzienlijke barrières bij het doen van stoppoging, zoals negatieve sociale omgeving en sociale normen. Daarom is het aan te bevelen dat deze grotere kwesties worden aangepakt op een nationaal niveau, voor of terwijl men poogt dit landelijk te implementeren. Ook moeten huisartsen in achterstandswijken de kennis hebben over waar bewezen effectieve SCBT beschikbaar is in hun lokale omgeving en aangemoedigd worden om patiënten door te verwijzen naar deze SCBT. Zonder zulke acties is het onwaarschijnlijk dat nationale implementatie van SCBT in achterstandswijken zonder financiële barrières genoeg participanten zou aantrekken. Zowel de lokale als nationale overheid heeft hierin een rol te spelen, maar als maatregelen tegelijkertijd genomen worden zou dit de beste resultaten opleveren. Toekomstig onderzoek zou geholpen worden door gebruik van medische registratie data en het zou nog makkelijker gemaakt kunnen worden door nationale richtlijnen over het verzamelen van data van stoppen met roken klinieken.
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AUTHOR CONTRIBUTIONS

Chapter 2 - Effects of different types of smoking cessation behavioural therapy in disadvantaged areas in the Netherlands: an observational study.

Fiona E. Benson, Vera Nierkens, Marc C. Willemsen, & Karien Stronks.

All authors conceived the study. All authors designed the study. FB prepared and analysed the data. All authors contributed to the interpretation of the data. FB drafted the article. All authors contributed to critical revision of the manuscript. All authors approved the final version of the manuscript.

Chapter 3 - Smoking cessation behavioural therapy in disadvantaged neighbourhoods: an explorative analysis of recruitment channels.

Fiona E. Benson, Vera Nierkens, Marc C. Willemsen, Karien Stronks.

FB, KS and MW conceived the study. All authors designed the study. FB prepared and analysed the data. All authors contributed to the interpretation of the data. FB drafted the article. All authors contributed to critical revision of the manuscript.

Chapter 4 - Wanting to attend isn’t just wanting to quit: Why do some disadvantaged smokers regularly attend smoking cessation therapy while others do not? A qualitative study.

Fiona E. Benson, Karien Stronks, Marc C. Willemsen, Nina M.M. Bogaerts, Vera Nierkens.

FB participated in study design, data acquisition, analysis and interpretation of data, and drafting the paper. KS contributed to data interpretation and drafting. MW contributed to data interpretation and drafting. NB contributed to data acquisition, analysis and interpretation. VN conceived of the study, participated in its design, contributed to data interpretation and drafting of the manuscript. All authors received and approved the final manuscript.

Chapter 5 - Socioeconomic inequalities in smoking in The Netherlands before and during the Global Financial Crisis: a repeated cross-sectional study.

Fiona E. Benson, Mirte A.G. Kuipers, Vera Nierkens, Jan-Willem Bruggink, Karien Stronks, Anton E. Kunst

AK, KS and FB conceived the study. AK and MK designed the study. MK prepared and analysed the data. All authors contributed to the interpretation of the data. FB drafted the article. All authors contributed to critical revision of the manuscript.

Chapter 6 - Inequalities in the impact of national reimbursement of smoking cessation pharmacotherapy and the influence of injunctive norms. An explorative study.

Fiona E. Benson, Gera E. Nagelhout, Vera Nierkens, Marc C. Willemsen, Karien Stronks

FB, VN, MW and KS conceived the idea and participated in the design of the study. GN prepared the data. FB performed the statistical analysis and drafted the manuscript. All authors were involved in the critical revision of the manuscript. All authors read and approved the final manuscript.
## PhD Portfolio

**Name PhD student:** Fiona Benson  
**PhD period:** January 2011 – July 2015  
**PhD supervisors:** Prof. Dr. Karien Stronks,  
Prof. Dr. Marc Willemsen  
**PhD co-supervisor:** Dr. Vera Nierkens

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<th>Workload (ECTS)</th>
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### Courses

**AMC Graduate School, Academic Medical Centre, University of Amsterdam**

- **Project Management**  
  2012  0.06
- **Practical Biostatistics, AMC Graduate School**  
  2012  1.1
- **Advanced biostatistics (AMC Graduate School)**  
  2013  2.1
- **Educational skills training**  
  2014  0.4
- **Career development**  
  2014  0.8

**EPIDM, VU University**

- **Kwalitatief onderzoek in de praktijk van de gezondheidszorg (K78), EPIDM**  
  2011  1.0
- **Missing Data: Consequences and Solutions (WK81), EPIDM**  
  2013  0.5

### Seminars, Presentations, Project meetings

- **Seminars at AMC Dept. of Public health**  
  2011 - 2015  3  
  (2 oral presentations)
- **Presentation to the Department of Public Health and Primary Care, LUMC, Leiden**  
  2014  0.1
- **Meeting of all project partners, Den Haag**  
  2011  0.1
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<td>European Conference on Tobacco or Health? (ECTOH), Istanbul, Turkey (poster presentation)</td>
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<td>Nederlandse Vereniging voor Tropische Geneeskunde en Internationale Gezondheidszorg (NVTG) (oral presentation)</td>
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<th>Other</th>
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<td>Co-creative workshop, Gemeente Rotterdam, Rotterdam</td>
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<td>Monthly meetings of research group ‘Gezondheidsbevordering in achterstandsgroepen’ at Dept. of Public Health, AMC (3 oral presentations)</td>
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*ECTS = European Credit Transfer and Accumulation System; 1 ECTS credit = 28 hours
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ABOUT THE AUTHOR

Fiona Benson grew up in New Gisborne, Australia. She completed a medical degree at The University of Melbourne in 2000. After deciding not to continue with medical training, she did a number of jobs in the corporate and third sectors. Fiona met her future husband, Thomas, in an ecovillage in Scotland, shortly after moving to London. She moved to the Netherlands in 2008 to join him, where she did a Master of Health Sciences specialising in Prevention and Public Health at the VU University in Amsterdam and graduated cum laude in 2010. She did an internship for this degree at the Department of Public Health at the Academic Medical Centre, University of Amsterdam. In 2011, she began work on her PhD thesis at the same department, and completed this work in 2015.
Evaluation of smoking cessation services in disadvantaged areas of the Netherlands

Invitation to attend the public defence of my doctoral thesis Evaluation of smoking cessation services in disadvantaged areas of the Netherlands on Friday, 19 February, 2016, at 12.00 noon in the Agnietenkapel of the University of Amsterdam.

Agnietenkapel
Oudezijds Voorburgwal 229-231
1012 EZ Amsterdam

You are warmly invited to the reception which will follow the defence.

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