

Obesity and metabolic syndrome: from clinical to public health perspectives: results from population-based studies of the Dutch and Indonesian populations
Sigit, F.S.

#### Citation

Sigit, F. S. (2022, March 29). Obesity and metabolic syndrome: from clinical to public health perspectives: results from population-based studies of the Dutch and Indonesian populations. Retrieved from https://hdl.handle.net/1887/3281238

Version: Publisher's Version

Licence agreement concerning inclusion of doctoral

License: thesis in the Institutional Repository of the University

of Leiden

Downloaded from: <a href="https://hdl.handle.net/1887/3281238">https://hdl.handle.net/1887/3281238</a>

**Note:** To cite this publication please use the final published version (if applicable).

5

## **Acknowledgements**

This thesis would not exist without the enormous help and guidance from my supervisors: *Dr. Renée de Mutsert* and *Dr. Stella Trompet*. Their understanding, support, and expertise inspire me how mothers with children can achieve many things in life. To my promotor, *Prof. dr. Frits R. Rosendaal*, thank you for every insight, critical thought, and encouragement that you always provide.

To the wonderful people in the NEO Study (*Pat van Beelen, Ingeborg de Jonge, Petra Noordijk, Vibeke Schmidt*), the SUGARSPIN Study (*Prof. dr. Maria Yazdanbakhsh, Dr. Dicky Tahapary, Dr. Erliyani Sartono*), and the Indonesian National Health Surveys (the Data Management Team of NIHRD, Indonesia Ministry of Health), thank you for all the help and it has been an honour and pleasure to work with you. I would like to also express my gratitude to all individuals who participated in the three studies, as these studies would not exist without their invaluable contribution and participation.

To my colleagues at the Department of Clinical Epidemiology, LUMC, thank you for always turning each day into one full of optimism and cheers. Special mentions to my roommates in C7-82 (*Myrthe Toorop, Edouard Fu, Huijie Wang,* and *Anouk Haine*), *Inge Verkouter* and *Esther Winters-van Eekelen*, who helped me navigate things in the NEO study, and *Tahani Alshehri*, who always supported me in my ups and downs.

To my lovely friends, especially those from the Leiden Indonesian Community and the Leiden Mamas Community, thank you for making my 4-year stay in the Netherlands memorable. Special mentions to *Teh Wina* and *Kang Bilal, Mba Indri* and *Kang Erick, Larissa* and *Anton*; thank you for helping me and my husband navigate first-time parenthood as foreigners.

To my parents, *Bapak Sigit Wijanarko* and *Ibu Nanik Minarni*, thank you for raising me into an independent, open-minded, and curious individual, and teaching me that perseverance is key in life. To my sisters, *Kartika Nurhayati* and *Fajar Sulistyaningsih*, thank you for always being there and being the best, life-long friends anyone could ask for.

Lastly, to my dear husband, *Ayunda Aulia Valencia*, thank you for all the love and endless support. Being new parents far away from families and with little support, while both of us are doing our PhD is challenging. Nevertheless, I am grateful we made it to the end in one piece. To my daughter, *Aisha*, and the little one inside my belly, thank you for always being my constant source of motivation and making everything worthwhile.

### **Curriculum vitae**

Fathimah Sulistyowati Sigit was born in Solo, Indonesia, on 6 June 1992. She was trained as a medical doctor at the University of Indonesia (Jakarta), Faculty of Medicine, during 2010-2015. In 2015, she was granted a full-time scholarship from the Indonesia Endowment Fund for Education (LPDP) to pursue her Master's degree at Imperial College London, United Kingdom. Her Master of Research was with a specialisation in Diabetes and Obesity. In 2016, she graduated from her Master's programme with distinction.

During 2016-2017, Fathimah worked at Muhammadiyah Hospital and Karanganyar Community Health Center in Pekalongan regency, Central Java, where her interest in rural and populational health grew. In 2018, with her excellent performance in her Master's degree, she obtained a scholarship extension from LPDP to pursue her PhD at the Leiden University Medical Center (LUMC), The Netherlands. She performed her PhD at the Department of Clinical Epidemiology, under the guidance of Prof. dr. Frits Rosendaal, Dr. Renée de Mutsert, and Dr. Stella Trompet. Her research focused on ethnic differences in adiposity and metabolic profiles. During her PhD, she had the opportunity to analyse data from population-based studies in Indonesia and the Netherlands (the Indonesian National Health Surveys, the SUGARSPIN study, and the NEO study) and visit several conferences to present her work.

After completing her PhD, Fathimah will be affiliated to the Metabolic Disorder, Cardiovascular, and Aging Cluster, at the Indonesian Medical Education and Research Institute (IMERI), University of Indonesia. She plans to combine her future research career with clinical care, as she also plans to become a medical specialist.

### **List of Publications in this Thesis**

Sigit FS, Tahapary DL, Trompet S, Sartono E, Willems van Dijk K, Rosendaal FR, de Mutsert R. The prevalence of metabolic syndrome and its association with body fat distribution in middle-aged individuals from Indonesia and the Netherlands: a cross-sectional analysis of two population-based studies. Diabetol Metab Syndr. 2020; 12: 2. doi: 10.1186/s13098-019-0503-1. PMID: 31921359; PMCID: PMC6947940.

Sigit FS, Trompet S, Tahapary DL, Sartono E, Willems van Dijk K, Yazdanbakhsh M, Supali T, Smit JWA, Rosendaal FR, de Mutsert R. The associations of leptin and adiponectin with the metabolic syndrome in an Indonesian and a Dutch population. Nutr Metab Cardiovasc Dis. 2021;31:2426-2435. doi: 10.1016/j.numecd.2021.05.012. Epub 2021 May 27. PMID: 34154890.

Sigit FS, de Mutsert R, Lamb HJ, Meuleman Y, Kaptein AA. Illness perceptions and health-related quality of life in individuals with overweight and obesity. Int J Obes (Lond). 2022;46:417-426. doi: 10.1038/s41366-021-01014-x. Epub 2021 Nov 6. PMID: 34743178.

Sigit FS, Trompet S, Tahapary DL, Harbuwono DS, le Cessie S, Rosendaal FR, de Mutsert R. Adherence to the healthy lifestyle guideline in relation to the metabolic syndrome: Analyses from the 2013 and 2018 Indonesian National Health Surveys (Submitted)

Sigit FS, et al. Visceral fat and liver fat in relation to the incidence of type 2 diabetes and cardiovascular diseases in middle-aged men and women in ten years of follow-up: the NEO study (In Preparation)

1

2

3

4

5

6

7

8

204 Chapter 8 Chapter 8 205

# Portfolio

	Year	Credits
Oral and Poster Presentation		
The prevalence of metabolic syndrome and its association with body fat distribution in middle-aged individuals from Indonesia and the Netherlands: a cross-sectional analysis of two population-based studies. The 26 <sup>th</sup> European Congress on Obesity (ECO), Glasgow, United Kingdom.	2019	0,25
The prevalence of metabolic syndrome and its association with body fat distribution in middle-aged individuals from Indonesia and the Netherlands: a cross-sectional analysis of two population-based studies. The 87 <sup>th</sup> European Atherosclerosis Society (EAS) Congress, Maastricht, the Netherlands.	2019	0,25
The associations of leptin and adiponectin with the metabolic syndrome in an Indonesian and a Dutch population. The European and International Congress on Obesity (ECOICO), Dublin, Ireland.	2020	0,50
The associations of leptin and adiponectin with the metabolic syndrome in an Indonesian and a Dutch population. The Annual Dutch Diabetes Research Meeting (ADDRM), the Netherlands.	2020	0,25
Illness perceptions and health-related quality of life in individuals with overweight and obesity. The Netherlands Association for the Study of Obesity (NASO) Scientific Spring Meeting, the Netherlands.	2021	0,25
Congresses and Symposia		
The 26 <sup>th</sup> European Congress on Obesity (ECO), Glasgow, United Kingdom The 87 <sup>th</sup> European Atherosclerosis Society (EAS) Congress, Maastricht, the Netherlands	2019 2019	1,00 1,00
The Netherlands Association for the Study of Obesity (NASO) Scientific Spring Meeting, the Netherlands	2019	0,75
The European and International Congress on Obesity (ECOICO), Dublin, Ireland	2020	1,00
The Annual Dutch Diabetes Research Meeting (ADDRM), the Netherlands	2020	1,00
The Netherlands Association for the Study of Obesity (NASO) Scientific Spring Meeting, the Netherlands	2021	0,75
Courses, Seminars, and Master Classes Introduction to Clinical Epidemiology (Rothman), Department of Clinical Epidemiology, Leiden University Medical Center, the Netherlands	2018	2,00
Basic Methods and Reasoning in Biostatistics, Boerhaave Instituut, Leiden, the Netherlands	2018	1,50
Regression Analyses, Boerhaave Instituut, Leiden, the Netherlands	2018	1,50
Survival Analyses, Boerhaave Instituut, Leiden, the Netherlands	2018	1,50
Clinical Epidemiology (Grobbee), Department of Clinical Epidemiology, Leiden University Medical Center, the Netherlands	2018	3,00
Repeated Measurements, Boerhaave Instituut, Leiden, the Netherlands	2019	1,50

#### Portfolio (continued)

	Year	Credits
Statistical Aspects of Clinical Trials, Boerhaave Instituut, Leiden, the Netherlands	2019	1,00
Clinical Epidemiology [CE02], Netherlands Institute for Health Sciences (NIHES)/Erasmus MC, Rotterdam, the Netherlands	2020	3,70
Causal Inference (Hernan), Department of Clinical Epidemiology, Leiden University Medical Center, the Netherlands	2020	3,00
Systematic Reviews and Meta-Analyses, Boerhaave Instituut, Leiden, the Netherlands	2021	1,00
WMO Good Clinical Practice Course	2021	0,25
Weekly Research Lunch, Department of Clinical Epidemiology, Leiden University Medical Center, the Netherlands	2018-2022	3,00
Weekly Capita Selecta, Department of Clinical Epidemiology, Leiden University Medical Center, the Netherlands	2018-2022	3,00
Bi-weekly Journal Club of the NEO study, Department of Clinical Epidemiology, Leiden University Medical Center, the Netherlands	2018-2022	3,00
Student Monitoring and Teaching		
Supervision of Critical Appraisal of a Topic (CAT) Project, Bachelor of Medicine Student (Ophelie Thijm)	2021	1,00
Tutoring Working Groups of Courses for Bachelor Students [Frontiers of Science, Academische en Wetenschappelijk Vorming (AWV)-II, Design and Analysis of Biomedical Studies (DABS)]	2019-2022	5,00
Generic and Transferable Skills Training by the Graduate School of Leiden University	Year	Workload Hours
PhD Introductory Meeting	2018	4

Generic and Transferable Skills Training by the Graduate School of Leiden University	f Year	Workload Hours
PhD Introductory Meeting	2018	4
Academic Writing	2018	60
Planning & Managing PhD Project	2018	42
Effective Communication for PhDs	2018	6
Scientific Conduct for PhDs	2018	5
Open Interview & Qualitative Data Analysis	2018	30
Academics and Social Media	2018	4
Time- and Self-Management	2018	13
Mind Mapping for PhDs	2018	14

Other Activities	Year
Reviewing scientific epidemiological publications	2021-2022
Organiser of the World Headline Presentations, Weekly Department	2020-2021
Meeting, Department of Clinical Epidemiology, Leiden University Medical Center, the Netherlands	

206 Chapter 8 Chapter 8