

ORIGINAL ARTICLE

Contribution of the Nordic School of Public Health to the public mental health research field: a selection of research initiatives, 2007–2014

ANNA K. FORSMAN 1,2 , LARS FREDÉN 3 , RAFAEL LINDQVIST 4 & KRISTIAN WAHLBECK 5,6

¹Åbo Akademi University, Faculty of Education and Welfare Studies, Vaasa, Finland, ²National Institute for Health and Welfare (THL), Vaasa, Finland, ³NU-Akademin Väst, University West, Trollhättan, Sweden, ⁴Uppsala University, Department of Sociology, Uppsala, Sweden, ⁵The Finnish Association for Mental Health, Helsinki, Finland, and ⁶National Institute for Health and Welfare, Helsinki, Finland

Abstract

The field of public mental health has been defined by an expert group convened by the Nordic School of Public Health (NHV) as encompassing the experience, occurrence, distribution and trajectories of positive mental health and mental health problems and their determinants; mental health promotion and prevention of mental disorders; as well as mental health system policies, governance and organization. The mental health priorities of the Nordic Council of Ministers in 2010 signalled a mutual Nordic exchange of knowledge in the following thematic areas: child and adolescent mental health; working life and mental health; mental health in older people; strengthening the role of primary care in mental health service provision; stronger involvement of users and carers; and reduction of use of coercion in psychiatric care. Efforts to realize these priorities included commissioning the Nordic Research Academy for Mental Health, an NHV-based network of research institutions with a common interest in mental health research across the Nordic countries, to develop, organize and follow-up projects on public mental health. The research initiatives included mental health policy analysis, register-based research and research focused on the users' perspective in a Nordic context, as well as EU-level research policy analysis. The public mental health research conducted at the NHV highlighted the complexity of mental health and emphasized that the broad determinants of mental health need to be increasingly addressed in both public health research and practice. For example, health promotion actions, improved access to health care, a healthy alcohol policy and prevention of suicides and violence are all needed to reduce the life expectancy gap – a red flag indicator of public health inequalities. By exchanging knowledge and best practice, the collaboration between the Nordic countries contributes to the welfare of the region. The expertise and traditions developed at the NHV are of significant importance in this work.

Key Words: Public Mental Health, Nordic countries, policy analysis, register studies, systematic mapping

Introduction

According to the World Health Organization (WHO), mental health is not just the absence of illness, but rather it is conceptualized as a state of wellbeing in which the individual realizes his or her own potential can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community [1]. Consequently, public mental health is not just about the occurrence

and prevention of mental disorders in the population, but also includes the promotion of mental health and wellbeing [2]. An expert group convened by the NHV defined the field of public mental health as encompassing the experience, occurrence, distribution and trajectories of positive mental health and mental health problems and their determinants; mental health promotion and prevention of mental

Correspondence: A.K. Forsman, Åbo Akademi University, Faculty of Education and Welfare Studies, Study Programme in Social Sciences, Developmental Psychology, P.B. 311, 65101 Vaasa, Finland. E-mail: anna.k.forsman@abo.fi

(Accepted 24 December 2014)

© 2015 the Nordic Societies of Public Health DOI: 10.1177/1403494814568599

disorders; as well as mental health system policies, governance and organization [3].

Mental health is an indivisible part of public health, and has a significant impact on mental, social and economic capital [4]. The burden of disease is increasingly dominated by mental health problems [5], many of which are associated with social inequalities [6] and discrimination [7]. However, most of the societal burden of mental disorders is not a result of treatment costs, but reduced human capital and decreased productivity [8]. According to the Organisation for Economic Co-operation and Development (OECD) [9], the employment rate of persons with a common mental disorder is 10-15% lower than for people with no mental disorder, and half of the people with severe mental disorders receive a disability benefit. A paradigm shift towards mentally as well as physically healthy life-years is necessary in the context of current population-level challenges common to the European countries, such as the economic crisis, the need for public service sector reforms and reorganizations, as well as the rapid growth of the ageing population.

Population health in the Nordic countries in general is good and life expectancy is high even by European standards [10,11]. In a global perspective, only the populations of Japan, Australia, the northern Mediterranean region and Canada have longer average life spans than the Nordic countries, where average life expectancy ranges from 79 years (Denmark) to 82 years (Iceland) [12]. Notwithstanding the positive development of physical health and related increased life expectancy, no similar trend can be observed in mental health, and mental health problems are a widespread cause of disability and productivity loss across the Nordic countries [13].

Work to improve public health has long been a priority within the Nordic welfare state arena. The present economic downshift has prompted the Nordic countries to step up efforts to develop new health system practices so as to ensure a sustainable development of public health. Here, the focus needs to be on supporting the population in achieving and maintaining mental health and wellbeing.

Nordic Research Academy for Mental Health

The WHO European Ministerial Conference on Mental Health held in Helsinki, Finland, in 2005 and the resultant Action Plan [14] that was approved by the conference triggered a multitude of public mental health actions across Europe, not least in the Nordic countries. At the annual meeting of the Nordic Council of Ministers for Health and Social Affairs in 2008, mental health was chosen as the

priority area for projects in the years 2009-2010. To identify priority areas for exchange of knowledge and experience in the mental health field, an expert group comprising participants from all the Nordic countries outlined thematic areas with a clear Nordic added value [15]. The priorities chosen signalled strong support for the WHO action plan, as well as mutual exchange of knowledge and experience in the following thematic areas: child and adolescent mental health; working life and mental health; mental health in older people; strengthening the role of primary care in mental health service provision; stronger involvement of users and carers; and reduction of use of coercion in psychiatric care. The recommendations of the expert group were approved by the Nordic Council of Ministers for Health and Social Affairs in 2010.

Several Nordic institutions and networks contributed to the concerted actions outlined by the expert group. The information basis for the work had already been prepared by the Nordic Medico Statistical Committee (NOMESCO) report on mental health in the Nordic countries [16]. The Nordic Council of Ministers [17] published an overview and recommendation for quality indicators in mental health care. In parallel, the Nordic Research Academy for Mental Health at the NHV was initiated in 2006 by Associate Professor Lars Fredén (Vice Dean at NHV at the time) to support implementation of the expert group recommendations. The Nordic Research Academy for Mental Health was commissioned to develop, organize and follow-up projects within an action plan established by the Nordic Committee on Health & Social Affairs (AK-S). The Academy was a network of research institutions with a common interest in mental health research across the Nordic countries. Several research projects and related activities were conducted by the Academy during 2007-2014, with financial support from Nordforsk, the Joint Committee for Nordic Research Councils in the Humanities and Social Sciences (NOS-HS) and the Nordic Council of Ministers.

Mental health policy analysis

The work of the Nordic Research Academy for Mental Health began with an overview of mental health policy in the Nordic countries except Iceland [18]. The report identified common mental health policy goals in the four participating Nordic countries: universal access to decentralized care, reduction of hospital-based and coercive care, investment in prevention, and empowerment of service users. These goals have been implemented differently in each country because of differences in history, legislation,

healthcare governance and resource allocation. Crucial in this context are reform initiatives to develop community mental health services (CMHSs) that can provide generic health and social services, psychiatric rehabilitation, and work and recovery-oriented measures to persons with mental health problems. In light of the deinstitutionalization process, reforms within the field of mental health care in the Nordic countries have, with varying success, aimed to transfer resources to the local levels to develop CMHSs [18]. The Mental Health Action Plan in Norway (Opptrappningsplanen, 1998–2008), the Community Mental Health Care reform in Sweden (Psykiatrireformen, from 1995 onwards), reform initiatives in Denmark to launch a biopsychosocial model of mental health, and initiatives in Finland to promote mental health for the entire population are illustrative examples.

Especially in Finland [19] and Sweden [20], service production has been fragmented by introduction of 'new public management' thinking, which has led to a strong interest, from private companies, in supported housing, rehabilitation activities and even treatment provision. Fragmentation of mental health service provision is a challenge in all four countries, and better coordination is needed. As a response to such challenges, Finland has developed joined-up service centres (run by social services and public employment authorities) for people out of work. Similarly, Norway has developed an integrated work and welfare organization (NAV) in its municipalities. Sweden and Denmark are still struggling to develop inter-organizational models that could facilitate cooperation across organizational boundaries [18]. Furthermore, a classic model of care dominates mental health services in the Nordic countries, at the expense of the recovery-oriented model. This has led to segregation at the expense of integration – and to a focus on disabilities, care protection, and compensatory measures, at the expense of focus on the individual's resources, functional capacities, potential for recovery and participation in the community.

Register studies

The Nordic countries have a long tradition of highly comprehensive population registers, which are based on unique individual identifiers. The universal coverage of these registers makes it possible to follow the entire population. Studies combining health register data from several Nordic countries have been the most productive research activity of the NHV-based Nordic Academy for Research on Mental Health. The work started off with a comparative report on

mental health data from existing health registers in Denmark, Finland and Sweden [21].

From a public health perspective it is not only the average life expectancy of a country's general population that is of interest, but also the figures for different population groups in a society, with significant differences in expected life span acting as a red flag indicator of potential health inequalities. Five register-based published reports from the Nordic Research Academy [22–26] have demonstrated considerable physical health inequalities between people with mental disorders and the general population. Cases of severe mental disorders included were identified from discharge diagnoses recorded in the nationwide hospital discharge registers in Denmark, Finland and Sweden.

The results showed that in all three countries studied, people admitted to hospital for a mental disorder had a two- to threefold higher mortality than the general population. This gap in life expectancy was more pronounced for men than for women. The gap decreased between 1987 and 2006, especially for women. The notable exception was Swedish men with mental disorders [22]. Despite the positive general Nordic trend, men and women with mental disorders still live 20 and 15 years, respectively, less compared with the general population, a trend that applies even to individuals with recent-onset disorders [23]. The life expectancy gap was especially wide (24–28 years) for people who had been admitted for an alcohol use disorder (AUD) [26]. The finding that from 1987 to 2006, the difference in life expectancy between patients with AUD and the general population increased in men in all three countries (Denmark: 1.8 years; Finland: 2.6 years; Sweden: 1.0 years) is troubling (Figure 1). The increase in the life expectancy gap was smaller in Sweden than in Denmark or Finland, which lends support to the restrictive alcohol policy in Sweden. Sweden has a somewhat lower total consumption of alcohol compared with the other two countries.

An analysis of cardiovascular mortality among people hospitalized for bipolar disorder or schizophrenia has shown that standardized mortality in these preventable diseases was approximately two times higher in both sexes and all countries included [24]. Another analysis, of birth cohorts of people admitted to hospital for a mental disorder in Denmark and Finland, indicated that the mortality gap decreased for each successive birth cohort, with the exception of Finnish men born in 1963–1987 and Danish and Finnish women born in 1933–1957. The Finnish recession in the early 1990s may have adversely affected mortality of adolescent and young adult men with mental disorders. Among women born 1933–1957, the lack of

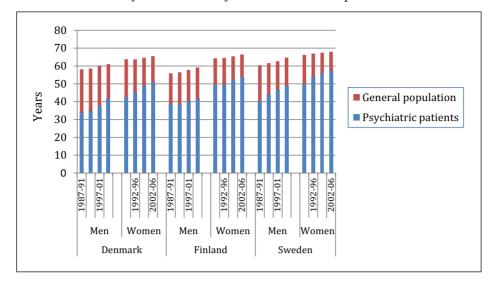


Figure 1. Total life expectancy among psychiatric patients and the general population in Denmark, Finland and Sweden, 1987–2006, at 15 years of age.

Source: Wahlbeck et al., 2011 [22].

improvement may reflect adverse effects of the era of extensive hospitalization of people with mental disorders in both countries [25].

Health promotion actions, improved access to health care, a healthy alcohol policy and prevention of suicides and violence are needed to further reduce the life expectancy gap.

Research focusing on the user perspective

The Nordic Academy for Research on Mental Health at the NHV has been supporting PhD candidates applying a multidisciplinary perspective in the research field of public mental health [e.g. 27-29]. A couple of theses have focused on the users' experiences. One of these draws attention to the field of e-mental health. It shows how mental health is presented on Internet-based mental health services in Norway and Sweden and discusses the challenges, from a public health perspective, for community mental health services in this technology-based context. This study suggests that online services may contribute to individualizing questions about mental health [27]. Another PhD thesis [29] uses the everincreasing sales of antidepressant drugs (Figure 2) as a starting point and analyses experiences of antidepressant treatment described in adverse drug reaction (ADR) reports from users ('consumers' reports'). The author concludes that there seems to be a potential problem with how patients are diagnosed with depression and prescribed antidepressant medication in the medical encounter [30]. The thesis [29] adds to the theoretical discussion on issues such as the

concept of medicalization, by looking at broad societal changes and by analysing the consequences of mental ill health as a significant public health problem.

Research policy

With the aim to improve and enhance the prerequisites for future public health research in the mental health field, the Public Health Work Package of the Roadmap for Mental Health Research in Europe (ROAMER) project (2011-2014) has identified research priorities and future directions for public mental health research. The ROAMER project [31] was designed to develop a consensus-based roadmap to promote and integrate mental health research in Europe, covering various areas and disciplines in the field (including psychological research [32], biomedical research [33], research on social and economic aspects [34], wellbeing research [35], as well as public health research [3,36]). All information obtained within the project will be translated into roadmaps covering infrastructures, capacity building and funding strategies for scientific areas relevant to mental health and wellbeing. The roadmap is meant to provide a coordinated research action plan outlining the research needed to establish an EU mental health strategy.

The public mental health section of ROAMER was coordinated by the NHV in 2011–2014. The aim was to map European public mental health research and examine the current state of the art. The methodologies used for the research activities were systematic mapping [36], as well as Delphi methodology,

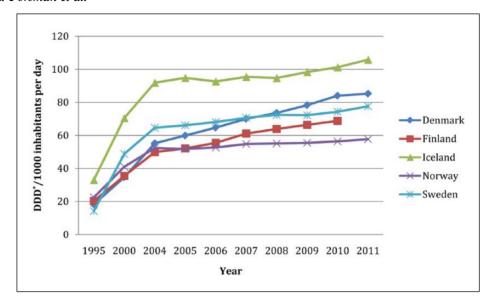


Figure 2. Sales of antidepressant drugs, in defined daily doses (*DDD)/1000 population, in the Nordic countries, 1995–2011. Source: Vilhelmsson 2013 [30].

conducted both through organized workshops and via web-based surveys [3].

Research and key findings of the Roadmap for Mental Health Research in Europe project

The aims of the systematic mapping conducted by ROAMER were to review the current state of public health research in Europe regarding mental health, covering five research areas: epidemiology, health services research, promotion, prevention, and policy analysis. Five electronic databases (CINAHL, Health Management, Medline, PsycINFO, Social Services Abstracts) were used to identify public mental health research articles published between January 2007 and April 2012. The number of publications for each European country in the five research domains in focus were analysed by population size and gross domestic product (GDP). Further, mean impact factors were compared with study quality aspects of the publications included in the analyses.

In addition to the systematic research mapping activities conducted by ROAMER, two scientific workshops were organized by Work Package 7 and the NHV in the spring of 2012 and 2013, respectively; these were followed by a three-wave Delphi survey process. The aim of this part of the project was to get an overview of the needs and priorities for public mental health research during the next 10 years. Nearly 60 mental health research experts from across Europe were engaged in the process of establishing a list of 20 top priorities within the

research field. Further details on the methodology used and the work process have been published elsewhere [3,36].

The key findings from the mapping exercise were that epidemiology research dominates public mental health research, while promotion, prevention and policy research are scarce. Nevertheless, it should be noted that mental health promotion is the fastest growing research area. Research targeting older adults is underrepresented and should be supported to meet the needs of the growing older adult population in Europe. Based on the analyses from the systematic literature mapping, it could also be seen that publications per capita were highest in north-western Europe, and similar trends were found also when adjusting the number of publications by GDP per capita. The most widely cited research originated from Italy, Switzerland, the UK, the Nordic countries, the Netherlands, Greece and France.

Twenty priorities for public mental health research were identified through the consensus process within the Public Mental Health work package of ROAMER. The research priorities were divided into summary principles – encompassing overall recommendations for future public mental health research in Europe – and thematic research priorities, including top priorities on research areas and methods used within the field. The priorities represent three overarching goals mirroring societal challenges, that is to identify causes, risk and protective factors for mental health across the lifespan; to advance the implementation of effective public mental health interventions; and to reduce disparities in mental health.

Based on the consensus reached among the group of public mental health research experts, positive mental health and wellbeing and related protective factors should be increasingly addressed in public mental health research to achieve a better understanding of the complexity of mental health and its broader determinants. Furthermore, the importance of strengthening research on the implementation, dissemination and sustainability of promotion and prevention interventions in the mental health field should be emphasized. Here, the focus should be on the important and modifiable risk and protective factors of mental health and wellbeing.

Concluding remarks

Nordic collaboration in social and health issues is based on the collective values that underpin the Nordic welfare model. By exchanging knowledge, working towards shared goals and making common efforts to improve public health and reduce health inequalities, the collaboration between the Nordic countries contributes to the wellbeing of individuals and the welfare of the population. The Nordic countries need to collaborate and invest their common resources to meet the current public health challenges related to mental health. Joint efforts are needed to increase awareness and alleviate the stigma of mental health problems. Effective collaboration in mental health affairs across the Nordic countries will further enable shared knowledge and best practice in the implementation of promotion and prevention initiatives and the delivery of services - and include mental health on the agenda of all policy makers. The expertise and traditions developed at the NHV are of significant importance in this work.

Acknowledgements

The authors wish to acknowledge their colleagues involved in the research projects mentioned in the article.

Conflict of interest

None declared.

Funding

The research within the ROAMER project leading to the presented results has received funding from the European Union Seventh Framework Program (FP7/2007-2013) under grant agreement no. 282586.

References

[1] WHO. The European mental health action plan. Geneva: WHO, 2013. http://www.euro.who.int/__data/assets/pdf_file/0004/194107/63wd11e_MentalHealth-3.pdf

- [2] Jané-Llopis E, Anderson P, Stewart-Brown S, et al. Reducing the silent burden of impaired mental health. J Health Comm 2011;16(Suppl 2):59-74.
- [3] Forsman AK, Wahlbeck K, Aarø LE, et al. Research priorities for public mental health in Europe: recommendations of the ROAMER project. *Eur J Public Health* (submitted).
- [4] Wahlbeck K and Taipale V. Europe's mental health strategy. BM7 2006;333:210.
- [5] Murray CJL, Vos T, Lozano R, et al. Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 2012;380:2197–223.
- [6] Pickett K and Wilkinson R. Inequality: an underacknowledged source of mental illness and distress. Br J Psychiatry 2010;197:426–8.
- [7] Thornicroft G, Brohan E, Rose D, et al., for the INDIGO Study Group. Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey *Lancet* 2009;373:408–15.
- [8] Wittchen HU, Jacobi F, Rehm J, et al. The size and burden of mental disorders and other disorders of the brain in Europe 2010. *Eur Neuropsychopharmacol* 2011;21:668–9.
- [9] OECD. Sick on the job? Myths and realities about mental health and work. OECD Publishing 2012. http://dx.doi. org/10.1787/9789264124523-en.
- [10] Eurostat. Key figures on Europe. 2014 edition. Luxem-bourg: Eurostat Pocketbooks Publications Office of The European Union, 2014. http://ec.europa.eu/eurostat/documents/3930297/6309576/KS-EI-14-001-EN-N. pdf/4797faef-6250-4c65-b897-01c210c3242a
- [11] Nordic Council of Ministers. Nordic Statistical Yearbook 2014. Copenhagen: Nordic Council of Ministers, 2014. http://norden.diva-portal.org/smash/get/diva2:763002/ FULLTEXT07.pdf
- [12] WHO. Life expectancy. 2014. http://www.who.int/gho/mortality_burden_disease/life_tables/en/
- [13] Tuori T, Gissler M and Wahlbeck K. Mental health in the Nordic countries. In: NOMESCO. Health Statistics in the Nordic Countries 2005. Copenhagen: NOMESCO, 2007.
- [14] WHO. Mental health action plan for Europe. Facing the challenges, building solutions. Geneva: WHO, 2005. http://www.euro.who.int/__data/assets/pdf_file/0013/100822/edoc07.pdf
- [15] Nordic Expert Group on Mental Health. Strengthening mental health in the Norden – suggestions for initiatives for promotion of the exchange of knowledge and experience. TemaNord 2011:513. Report by the Nordic Expert Group on Mental Health, 2009–2010. Copenhagen: Nordic Council of Ministers, 2011.
- [16] NOMESCO. Health Statistics in the Nordic Countries 2005. Copenhagen: NOMESCO, 2007.
- [17] Nordic Council of Ministers. Kvalitetsmåling i psykiatrien i de nordiske lande [Measuring quality in the psychiatric services in the Nordic countries]. TemaNord 2011:542. Copenhagen: Nordic Council of Ministers, 2011.
- [18] Lindqvist R, Bengtsson S, Fredén L, et al. Från reformintention till praxis. Hur reformer inom psykiatri och socialtjänst översatts till konkret stöd i Norden. [From reform intention to practice. How reforms in mental health care and social services were translated into specific support in the Nordic countries.] NHV report 2011: 4:4 R. Gothenburg: Nordic School of Public Health NHV, 2011. http://www.nhv.se/upload/Biblioteket/Fr%C3%A5n%20reformintention%20 till%20praxis.pdf
- [19] Karlsson N and Wahlbeck K. Från reformintention till praxis: Mentalvårdens utveckling i Finland efter år 1990. [From reform intentions to practice: developments in Finnish mental health care since 1990.] Report 24–2010. Helsinki: THL, 2010. http://julkari.fi/bitstream/handle/10024/79925/ d0d504f0-d878-4a19-97b3-e3b060f9b09a.pdf?sequence=1

- [20] Lindqvist R and Rosenberg D. Från reformintention till praxis hur reformer inom psykiatri och socialtjänst översatts till konkret stöd 1990 2010. [From reform intention to practice. How reforms in mental health care and social services were translated into specific support 1990–2010.] In: Lindqvist R, Bengtsson S, Fredén L, et al. Från reforminterntion till praxis. Hur reformer inom psykiatri och socialtjänst översatts till konkret stöd i Norden. [From reform intention to practice. How reforms in mental health care and social services were translated into specific support in the Nordic countries.] NHV report 2011:4:4 R. Gothenburg: Nordic School of Public Health NHV, 2011.
- [21] Munk Laursen T, Nordentoft M, Gissler M, Westman J and Wahlbeck K. Psykiatrisk registerforskning i Norden. En beskrivelse af forskningsmuligheder i psykiatri-relevante registre i Danmark, Sverige og Finland 2010 [Psychiatric register-based research in the Nordic countries. A description of research possibilities in psychiatric-relevant registers in Denmark, Sweden and Finland 2010.] NHV report 2010:11R. Gothenburg: Nordic School of Public Health NHV, 2010. http://www.nhv.se/upload/dokument/ forskning/Publikationer/NHV-Rapport/Rapport_2010_11R_Psykiatrisk_registerforskning_i_Norden_nov_2010.pdf
- [22] Wahlbeck K, Westman J, Nordentoft M, et al. Outcomes of Nordic mental health systems: life expectancy of patients with mental disorders in Denmark, Finland and Sweden 1987–2006. Br 7 Psychiatry 2011;199:453–58.
- [23] Nordentoft M, Wahlbeck K, Hällgren J, et al. Excess mortality, causes of death and life expectancy in 270,770 patients with recent onset of mental disorders in Denmark, Finland and Sweden. *PLoS ONE* 2013;8:e55176.
- [24] Munk Laursen TM, Wahlbeck K, Hällgren J, et al. Life expectancy and death by diseases of the circulatory system in patients with bipolar disorder or schizophrenia in the Nordic countries. PLoS ONE 2013;8:e67133.
- [25] Gissler M, Laursen TM, Ösby U, et al. Patterns in Mortality among people with severe mental disorders across birth cohorts: A register-based study of Denmark and Finland in 1982–2006. BMC Public Health 2013;13:834.

- [26] Westman J, Wahlbeck K, Laursen TM, et al. Mortality and life expectancy in persons with alcohol use disorders in Denmark, Finland and Sweden. *Acta Psych Scand* 2014 Sep 20; doi: 10.1111/acps.12330. [Epub ahead of print]
- [27] Andersen AJW. I all fortrolighet. En undersökelse av meldinger om psykisk helse på internett i Norge og Sverige. [In confidence. A study of messages about mental health on the Internet in Norway and Sweden.] Doctoral thesis, Nordic School of Public Health NHV, 2012.
- [28] Forsman AK. The importance of social capital in later life. Mental health promotion and mental disorder prevention among older adults. Doctoral thesis, Nordic School of Public Health NHV, 2012.
- [29] Vilhelmsson A. A Pill for the Ill? Depression, Medicalization and Public Health. Doctoral thesis, Lund University, 2014.
- [30] Vilhelmsson A. Depression and antidepressants; a Nordic perspective. Front Public Health 2013;1:30.
- [31] Haro JM, Ayso-Mateos JL, Bitter I, et al. ROAMER: a European roadmap for mental health research. Int J Meth Psychiatr Res 2014;23(Suppl. 1):1–13.
- [32] Wittchen HU, Knappe S, Andersson G, et al. The need for a behavioral science focus in research on mental health and mental disorders. *Int J Meth Psychiatr Res* 2014;23(Suppl. 1):29–37.
- [33] Schumann G, Binder EB, Holte A, et al. Stratified medicine for mental disorders. Eur Neuropsychopharmacol 2014;24: 5-50.
- [34] Evans-Lacko S, Courtin E, Fiorillo A, et al. The state of the art in European research on reducing social exclusion and stigma related to mental health: a systematic mapping of the literature. *Eur Psychiatry* 2014;29:381–9.
- [35] Miret M, Marchena C, Caballero FF, et al. The state of the art in European research on well-being within the area of mental health or mental disorders: a systematic mapping of the literature. Submitted.
- [36] Forsman AK, Ventus DBJ, Van der Feltz-Cornelis CM and Wahlbeck K, on behalf of the ROAMER project. Public mental health research in Europe: a systematic mapping for the ROAMER Project. Eur J Public Health 2014;24:955–60.